

CanCore Guidelines Version 2.0: Technical Category



History of Technical Category Document

Date	Version	Comment	Person
June 6, 2002	1.1	Based on IMS Learning Resource Meta-data 1.2.1	Sue Fisher
February 21, 2003	1.8.9	Based on IEEE 1484.12.1 LOM	Norm Friesen
July 25, 2003	1.9	Feedback incorporated; examples added	Norm Friesen
November 21, 2003	2.0	Final revisions incorporating feedback	Norm Friesen

Use of Technical Category Elements in Other Application Profiles

Element	CanCore	SCORM	Curriculum Online	TLF	Sing-CORE	UK LOM Core	Dublin Core
4:Technical	Y	M	M	M	Y	M	
4.1:Format	Y	M	O	M	Y	M	DC.Format
4.2:Size	Y	O	O	M	N	O	
4.3:Location	Y	M	O	N	Y	M	
4.4:Requirement	N	O	O	Y	N	O	
4.4.1:OrComposite	N	O	O	N	N	O	
4.4.1.1:Type	N	O	O	D	N	O	
4.4.1.2:Name	N	O	O	D	N	O	
4.4.1.3:Minimum Version	N	O	O	D	N	O	
4.4.1.4:Maximum Version	N	O	O	O	N	O	
4.5:Installation Remarks	N	O	O	O	Y	O	
4.6:Other Platform Requirements	Y	O	O	O	N	O	
4.7:Duration	Y	O	O	O	N	O	

Legend

- Y = Yes, Included in Subset
- O = Optional
- N = No, Not Included in Subset
- M = Mandatory
- D = Draft
- DC = Dublin Core

4:Technical

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
This category describes the technical requirements and characteristics of this learning object.	1	Unspecified	-	-
<p><i>The technical features described through this element category can assist in resource discovery, as well as indicate how the learning resource can be displayed, accessed, and otherwise technically supported.</i></p> <p>The LOM currently assumes a one-to-one correspondence between the metadata record and the resource it describes. The fact that there can be multiple formats of a single resource (e.g., using various video codecs or different image resolutions) can create challenges for record creators. CanCore recommends that multiple technical formats be dealt with by using the elements of the Relation category, and not by modifying the LOM datamodel. See the CanCore guidelines for 7:Relation and its sub-elements.</p> <p>The sub-elements in this category are:</p> <ul style="list-style-type: none"> 4.1:Format 4.2:Size 4.3:Location 4.4:Requirement <ul style="list-style-type: none"> 4.4.1:OrComposite <ul style="list-style-type: none"> 4.4.1.1:Type 4.4.1.2:Name 4.4.1.3:Minimum Version 4.4.1.4:Maximum Version 4.5:Installation Remarks 4.6:Other Platform Requirements 4.7:Duration <p>Elements listed in bold are included in the CanCore application profile.</p>				

Examples

- Technical:
 - Format: application/x-shockwave-flash
 - Size: 12288
 - Location:
 - <http://www.learnalberta.ca/Math/Math6/math6beta/math6shell.html>
 - Other Platform Requirements: Flash 5.0 or greater
 - Duration: 12 minutes 25 seconds
- Technical:
 - Format: application/msword
 - Size: 1222
 - Location: <http://www.cancore.ca/cancorepaper.doc>

- Requirement:
 orComposite:
 Type: operating system
 Name: ms-windows
 Minimum Version: 95
 Maximum Version: 2000
 Other Platform Requirements: MS Word 6.0/95 or higher
- Technical:
 Format: application/zip
 Format: image/gif
 Format: text/html
 Size: 58368
 Requirement:
 orComposite:
 Type: operating system
 Name: ms-windows
 orComposite:
 Type: operating system
 Name: macos
 Requirement:
 orComposite:
 Type: browser
 Name: netscape communicator
 Minimum Version: 6.0
 orComposite:
 Type: browser
 Name: ms-internet explorer
 Minimum Version: 5.5

XML Examples

```
<technical>
  <format>application/x-shockwave-flash</format>
  <size>12288</size>
  <location>http://www.learnalberta.ca/Math/Math6/math6beta/
    math6shell.html</location>
  <requirement/>
  <installationRemarks/>
  <otherPlatformRequirements>
    <string language="eng">Flash 5.0 or greater</string>
  </otherPlatformRequirements>
  <duration>
    <duration>PT12M25S</duration>
  </duration>
</technical>

<technical>
  <format>application/msword</format>
  <size>1222</size>
```

```

<location>http://www.cancore.ca/cancorepaper.doc</location>
<requirement>
  <orComposite>
    <type>
      <source>LOMv1.0</source>
      <value>operating system</value>
    </type>
    <name>
      <source>LOMv1.0</source>
      <value>ms-windows</value>
    </name>
    <minimumVersion>95</minimumVersion>
    <maximumVersion>2000</maximumVersion>
  </orComposite>
</requirement>
<installationRemarks/>
<otherPlatformRequirements>
  <string language="eng">MS Word 6.0/95 or higher</string>
</otherPlatformRequirements>
<duration/>
</technical>

```

```

<technical>
  <format>application/zip</format>
  <format>image/gif</format>
  <format>text/html</format>
  <size>58368</size>
  <requirement>
    <orComposite>
      <type>
        <source>LOMv1.0</source>
        <value>operating system</value>
      </type>
      <name>
        <source>LOMv1.0</source>
        <value>ms-windows</value>
      </name>
      <minimumVersion/>
      <maximumVersion/>
    </orComposite>
    <orComposite>
      <type>
        <source>LOMv1.0</source>
        <value>operating system</value>
      </type>
      <name>
        <source>LOMv1.0</source>
        <value>macos</value>
      </name>
      <minimumVersion/>
      <maximumVersion/>
    </orComposite>
  </requirement>

```

```
<requirement>
  <orComposite>
    <type>
      <source>LOMv1.0</source>
      <value>browser</value>
    </type>
    <name>
      <source>LOMv1.0</source>
      <value>netscape communicator</value>
    </name>
    <minimumVersion>6.0</minimumVersion>
    <maximumVersion/>
  </orComposite>
  <type>
    <source>LOMv1.0</source>
    <value>browser</value>
  </type>
  <name>
    <source>LOMv1.0</source>
    <value>ms-internet explorer</value>
  </name>
  <minimumVersion>5.5</minimumVersion>
  <maximumVersion/>
</orComposite>
</requirement>
<installationRemarks/>
<otherPlatformRequirements/>
<duration/>
</technical>
```

4.1:Format

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
<p>Technical datatype(s) of (all the components of) this learning object.</p> <p>This data element shall be used to identify the software needed to access the learning object.</p>	Smallest permitted maximum: 40 items	Unordered	MIME types based on IANA registration (see RFC2048:1996) or "non-digital"	Character-String (smallest permitted maximum: 500 char)
<p><i>For a digital resource, use a value from the IANA listing of MIME types (see http://www.isi.edu/in-notes/iana/assignments/media-types/media-types).</i></p> <ul style="list-style-type: none"> • If an resource comprises several MIME types (e.g., a Web page with GIF and JPEG images), repeat the 4.1:Format element to indicate each type. • Although the LOM notes the utility of using this element "to identify software" for the resource, it can also be used to indicate the resource medium (e.g., image, text, video) to end users. • Although the LOM mapping to unqualified Dublin Core shows this element to be equivalent to DC.Format, the LOM element is narrower in its application. Dublin Core's use of Format encompasses both technical and <i>physical</i> manifestations of a resource (e.g., its physical dimensions or material composition). In the LOM, this element refers only to the technical format (or more narrowly, the datatype or MIME type) of the resource. 				

Vocabulary Recommendations

The IANA listing recommended in the LOM and above was last updated October 16, 2001, and lacks many values in common use today (e.g., Flash, Director). It may often be necessary to construct values in the following manner: Use the convention "'type' x-'application name'", where 'type' equals a MIME category type and 'application name' equals the name of the format you need to describe. For example, "application x-director."

For non-digital resources, use only the value "non-digital."

Examples

- text/html
- application/zip
- image/tiff
- application/x-authorware
- non-digital

XML Examples

```
<format>text/html</format>  
<format>application/zip</format>  
<format>image/tiff</format>  
<format>application/x-authorware</format>  
<format>non-digital</format>
```

4.2:Size

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
<p>The size of the digital learning object in bytes (octets). The size is represented as a decimal value (radix10). Consequently, only digits "0" through "9" should be used. The unit is bytes, not megabytes, gigabytes, etc.</p> <p>This data element shall refer to the actual size of this learning object. If the learning object is compressed, then this data element shall refer to the uncompressed size.</p>	1	Unspecified		Character-String (smallest permitted maximum: 30 char)
<p><i>This element refers to the size of a digital resource in bytes. Do not use this element to describe the size or dimensions of a physical resource.</i></p> <ul style="list-style-type: none"> • One important function of this element is to indicate to users and systems the download time or bandwidth that the resource requires. • The LOM statement provided with this element makes it difficult for the element to accurately and consistently indicate download/bandwidth requirements: "If the learning resource is compressed, then this data element shall refer to the uncompressed size." This is difficult to apply to media formats that directly integrate compression techniques such as PDFs, streaming media, MP3 audio, or even JPEG images. As a result, CanCore interprets the LOM recommendation to "refer to the uncompressed size" in a narrow sense: Only where it will clearly assist the user (e.g., indicate hard drive space requirements for installed software) should the uncompressed size be indicated. • In the specific case of streaming media, the size should be identified as "0." The streaming rate(s) and the requirements they may impose should be indicated using 4.6:Other Platform Requirements, or 4.4:Requirement and its sub-elements. • Do not include any punctuation, spacing, or other non-numerical characters. 				

Technical Implementation Note

To avoid manual input, values for this element should be captured from or supplied by an electronic system whenever possible.

Examples

- 430024
- 22805

XML Examples

```
<size>430024</size>  
<size>22805</size>
```

4.3:Location

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
<p>A string that is used to access this learning object. It may be a location (e.g., Universal Resource Locator), or a method that resolves to a location (e.g., Universal Resource Identifier). The first element of this list shall be the preferable location.</p> <p>NOTE: This is where the learning object described by this metadata instance is physically located.</p>	Smallest permitted maximum: 10 items	Ordered		Character-String (smallest permitted maximum: 1000 char)
<p><i>Provide the Web address, URI, or other type of Internet address for the learning resource.</i></p> <ul style="list-style-type: none"> • Provide the URI or string that can be used to access the learning resource. This can be the URL of the resource, but it also can be strings that are used to resolve or point to the location of the resource (e.g., PURL, DOI). Include the full path, along with prefixes indicating transfer protocol such as http and ftp. • This value, as well as the identifier schema associated with it may also be provided in the 1.1:General.Identifier aggregate element. If the location is also the means by which the learning resource is uniquely identified, the same values should be indicated in 1.1:General.Identifier and 4.3:Location. • Locations listed should be stable or persistent in order to ensure the longevity and usefulness of the metadata record. If the resource is accessible from more than one Web address, list the main address first, or the address that is likely to have the greatest dependability and longevity (e.g., use an institutional address first, such as http://www.careo.org/11120, rather than a personal account address, such as http://members.aol.com/~jsmith003). 				

Technical Implementation Note

To avoid manual input, values for this element should be captured from or supplied by an electronic system whenever possible.

Examples

- <http://www.cancore.ca/elementset1.1.html>
- <ftp://ourServer.ca/LOfolder/LO123.gif>

XML Examples

```
<location>http://www.cancore.ca/elementset1.1.html</location>
<location>ftp://ourServer.ca/LOfolder/LO123.gif</location>
```

4.4:Requirement

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
The technical capabilities necessary for using this learning object. If there are multiple requirements, then all are required, i.e., the logical connector is AND.	Smallest permitted maximum: 40 items	Unordered	-	-
<p><i>This element (with its sub-elements) can be used to create formalized, machine-readable statements to describe the software needed for a learning resource.</i></p> <p><i>CanCore recommends that any technical requirements be expressed in human-readable form in 4.6:Other Platform Requirements.</i></p> <p>CanCore does not recommend the use of this aggregate element for the purposes of interoperation in distributed environments.</p> <ul style="list-style-type: none"> • The formalized statements that can be created with this element aggregate can specify the type, name, and permissible version numbers or number ranges for the required technology. This aggregate element also allows record creators to indicate whether <i>all</i> such requirements need to be satisfied (using the Boolean connector AND, and repeating element 4.4:Requirement), or whether only <i>one</i> of a group of requirements needs to be met (using the Boolean connector OR, and repeating element 4.4.1:OrComposite). • Such formulations may be useful for standard, default requirements expressions. • The implementation of this aggregate element may present challenges, and can be avoided by exploiting other LOM elements: <ul style="list-style-type: none"> ○ It may be difficult to establish and maintain vocabulary values for 4.4.1.2:Name. Browsers and operating systems are developing rapidly and proliferating, especially as they move into mobile devices and information appliances. The value of Netscape Communicator recommended by the LOM, for example, is already superannuated by other, differently named versions of Netscape. Maintaining an up-to-date list of such software is difficult (and testing requirements against such a list, likely prohibitive). ○ Requirement statements are likely describe conditions that cannot be accommodated in the formalized elements and permissible values. For example, this aggregate element lacks a qualifier to indicate that certain software is optimal or preferred. ○ The recommended vocabulary for 4.4.1.1:Type (consisting only of Operating System, and Browser) may be insufficient for expressing some technical requirements (e.g., those related to computer hardware or network capabilities). 				

- General software requirements information is in many cases already indicated economically in the MIME-type values supplied in 4.1:Format.
- As the LOM notes for element 4.6:Other Platform Requirements, "This element is intended for descriptions of requirements that cannot be expressed by data element 4.4:Technical.Requirement." Given the expressive limitations that apply to element 4.4, CanCore recommends the use of 4.6:Other Platform Requirements for the description of all technical requirements not already indicated by 4.1:Format.

Examples

- Requirement:
 - orComposite:
 - Type: operating system
 - Name: ms-windows
 - Minimum Version: 95
 - Maximum Version: 2000
- Requirement:
 - orComposite:
 - Type: browser
 - Name: netscape communicator
 - Minimum Version: 4.2
 - orComposite:
 - Type: browser
 - Name: ms-internet explorer
 - Minimum Version: 5.5

XML Examples

```

<requirement>
  <orComposite>
    <type>
      <source>LOMv1.0</source>
      <value>operating system</value>
    </type>
    <name>
      <source>LOMv1.0</source>
      <value>ms-windows</value>
    </name>
    <minimumVersion>95</minimumVersion>
    <maximumVersion>2000</maximumVersion>
  </orComposite>
</requirement>

```

```
<requirement>
  <orComposite>
    <type>
      <source>LOMv1.0</source>
      <value>browser</value>
    </type>
    <name>
      <source>LOMv1.0</source>
      <value>netscape communicator</value>
    </name>
    <minimumVersion>4.2</minimumVersion>
    <maximumVersion/>
  </orComposite>
  <orComposite>
    <type>
      <source>LOMv1.0</source>
      <value>browser</value>
    </type>
    <name>
      <source>LOMv1.0</source>
      <value>ms-internet explorer</value>
    </name>
    <minimumVersion>5.5</minimumVersion>
    <maximumVersion/>
  </orComposite>
</requirement>
```

4.4.1:OrComposite

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Grouping of multiple requirements. The composite requirement is satisfied when one of the composite requirements is satisfied; i.e., the logical connector is OR.	Smallest permitted maximum: 40 items	Unordered	-	-
<p><i>If a learning resource can be used with different browsers or operating systems, repeat this element to indicate the available options.</i></p> <p>For the reasons given in 4.4:Requirement, CanCore does not recommend the use of this element for the purposes of interoperation in distributed environments.</p> <ul style="list-style-type: none"> • If a learning resource requires a specific browser <i>and</i> operating system, repeat the element 4.4:Requirement 				

4.4.1.1:Type

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
The technology required to use this learning object, e.g., hardware, software, network.	1	Unspecified		Vocabulary (State)
<i>Indicate the kind of technology to which the requirement applies.</i>				
For the reasons given in 4.4:Requirement, CanCore does not recommend the use of this element for the purposes of interoperation in distributed environments.				

Vocabulary Recommendations

The LOM provides only two vocabulary values for this element. If this element and the other elements in the 4.4:Requirement aggregate are to be used, CanCore recommends that additional values be considered (e.g., codec, media player, browser plug-in). Only one of the values recommended in the LOM has a relevant definition in the second edition of the *Oxford English Dictionary* (1989):

operating system

An operating system is "a set of programs for organizing the resources and activities of a computer" (*OED*).

browser

According to the tenth edition of the *Concise Oxford English Dictionary*, a browser is "a program with an interface for displaying HTML files, used to navigate the World Wide Web" (*COED*, 2002).

Examples

- operating system
- browser

XML Examples

```
<type>
  <source>LOMv1.0</source>
  <value>operating system</value>
</type>
```

```
<type>
  <source>LOMv1.0</source>
  <value>browser</value>
</type>
```

4.4.1.2:Name

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
<p>Name of the required technology to use this learning object.</p> <p>NOTE 1: The value for this data element may be derived from 4.1:Technical.Format automatically, e.g., "video/mpeg" implies "multi-os."</p> <p>NOTE 2: This vocabulary includes most values in common use at the time that this Standard was approved.</p>	1	Unspecified		Vocabulary (State)
<p><i>Indicate the type of operating system or browser (or other technology) required to use the learning resource.</i></p> <p>For the reasons given in 4.4:Requirement, CanCore does not recommend the use of this element for the purposes of interoperation in distributed environments.</p> <ul style="list-style-type: none"> • Maintaining the vocabulary for this element that reflects the range of available options for operating systems and browsers may be a challenge. 				

Vocabulary Recommendations

Unlike most other LOM vocabularies, this one should be actively updated to reflect new systems to properly serve its intended purpose. New values should be expressed in a form consistent with those already supplied. Existing LOM values for this vocabulary are as follows:

- For **operating system**, use pc-dos, ms-windows, macos, unix, multi-os, or none.
- For **browser**, use any, netscape communicator, ms-internet, explorer, opera, or amaya.

Examples

- ms-windows
- netscape communicator

XML Examples

```

<name>
  <source>LOMv1.0</source>
  <value>ms-windows</value>
</name>

<name>
  <source>LOMv1.0</source>
  <value>netscape communicator</value>
</name>

```


4.4.1.3:Minimum Version

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Lowest possible version of the required technology to use this learning object.	1	Unspecified		CharacterString (smallest permitted maximum: 30 char)
<i>Lowest or earliest version of the required technology.</i>				
For the reasons given in 4.4:Requirement, CanCore does not recommend the use of this element for the purposes of interoperation in distributed environments.				

Vocabulary Recommendation

When the software is designated with both a popular version name (e.g., Office XP) and a version name that more closely resembles the examples provided by the LOM (e.g., Office 10, 4.2), use the latter.

Examples

- XP
- 5.5

XML Examples

```
<minimumVersion>XP</minimumVersion>
<minimumVersion>5.5</minimumVersion>
```

4.4.1.4:Maximum Version

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Highest possible version of the required technology to use this learning object.	1	Unspecified		Character-String (smallest permitted maximum: 30 char)
<p><i>Highest or latest version of the required technology.</i></p> <p>For the reasons given in 4.4:Requirement, CanCore does not recommend the use of this element.</p> <ul style="list-style-type: none"> • This element may be useful to indicate the requirements associated with legacy systems that are no longer fully supported • In many other cases, this element is likely to be left blank 				

Vocabulary Recommendation

When the software is designated with both a popular version name (e.g., Office XP) and a version name that more closely resembles the examples provided by the LOM (e.g., Office 10, 4.2), use the latter.

Examples

- 2000
- 4.5

XML Examples

```
<maximumVersion>2000</maximumVersion>
<maximumVersion>4.5</maximumVersion>
```

4.5: Installation Remarks

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Description of how to install this learning object.	1	Unspecified	-	LangString (smallest permitted maximum: 1000 char)
<p><i>Instructions for the installation of the learning resource, or comments on the availability of instructions or installation aids (e.g., install shield or wizard).</i></p> <ul style="list-style-type: none"> This element should be used to describe only those requirements and procedures specific to software or resource installation. Other technical requirements should be expressed using other LOM elements. <p>This element is not included in CanCore for the following reasons:</p> <ul style="list-style-type: none"> It is useful only in exceptional cases, most likely where an educational resource is stand-alone software requiring special installation procedures. It is of limited use for resource discovery and selection (installation instructions are not likely to form a primary criterion for the selection of resources by students or educators). For those resources requiring it, installation information is likely to be provided with the resource itself (e.g., in a readme file), and would preferably be presented via a set-up wizard or other mechanism developed for increased usability. 				

Example

- Unzip the zip file and open index.html in your web browser.

XML Example

```
<installationRemarks>
  <string language="eng">Unzip the zip file and open index.html in
  your web browser.</string>
</installationRemarks>
```

4.6:Other Platform Requirements

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Information about other software and hardware requirements. NOTE: This element is intended for descriptions of requirements that cannot be expressed by data element 4.4:Technical.Requirement.	1	Unspecified	-	LangString (smallest permitted maximum: 1000 char)
<p><i>Provide a concise yet thorough description of technical requirements for using the learning resource. If the resource provides its own description of these requirements, such information can be included verbatim (as long as copyright is respected). Describe the resource using language most likely to be understood by the community of end users, regardless of the type of technology involved.</i></p> <ul style="list-style-type: none"> • CanCore understands the expressive power of 4.4:Requirement to be limited in the case of many technical requirements. In light of the LOM note for element 4.6 ("This element is intended for descriptions of requirements that cannot be expressed by data element 4.4:Requirement"), CanCore recommends the use of 4.6:Other Platform Requirements for the description of <i>all</i> technical requirements not already indicated by 4.1:Format. 				

Examples

- Pentium 100 processor with MP3 player and sound card
- This resource requires Adobe Acrobat Reader. It has been found to work best with version 3.xx of this software.

XML Examples

```
<otherPlatformRequirements>
  <string language="eng">Pentium 100 processor with MP3 player and
  sound card</string>
</otherPlatformRequirements>
```

```
<otherPlatformRequirements>
  <string language="eng">This resource requires Adobe Acrobat
  Reader. It has been found to work best with version 3.xx of this
  software.</string>
</otherPlatformRequirements>
```

4.7:Duration

<i>Explanation</i>	<i>Size</i>	<i>Order</i>	<i>Value Space</i>	<i>Datatype</i>
Time a continuous learning object takes when played at intended speed. NOTE: This data element is especially useful for sounds, movies, or animations.	1	Unspecified	-	Duration
<p><i>Provide the complete duration of the learning resource using the Duration datatype.</i></p> <ul style="list-style-type: none"> • Use for time-based media only. • Do not use for interactive resources where duration may vary. • This datatype is based the ISO 8601:2000 standard for expressing date and time. The relevant aspects of this ISO standard for expressing duration are summarized at http://www.w3.org/TR/xmlschema-2/#duration. • This element does <i>not</i> necessarily refer to the amount of time needed for a student to use the learning resource. Use 5.9:Educational.TypicalLearningTime to indicate this duration. 				

Technical Implementation Note

To avoid manual input, values for this element should be captured from or supplied by an electronic system whenever possible.

Examples

- PT1H20M25S (one hour, twenty minutes, twenty-five seconds)
- PT37M45S (thirty-seven minutes, forty-five seconds)
- depending on playback speed, between 20 and 25 minutes

XML Examples

```

<duration>
  <duration>PT1H20M25S</duration>
</duration>

<duration>
  <duration>PT37M45S</duration>
</duration>

<duration>
  <description>
    <string language="eng">depending on playback speed, between 20
    and 25 minutes</string>
  </description>
</duration>

```