

# Requirements for Date Elements

Approved by CISC on 3/9/2011

## WMS

### 1. Define <dateIssued> under originInfo.

### 2. define the attributes provided below for all date elements in all types of metadata (descriptive, source, technical, rights). See MODS “Attributes Used Throughout the MODS Schema”: <http://www.loc.gov/standards/mods/userguide/generalapp.html#list> for details.

Attribute	Obligation	Repeatable	CV	Usage
encoding	n	N	w3cdtf; iso8601; marc	
point	y	N	start; end	
qualifier	y	n	approximate; exact; inferred; questionable	
keyDate	n	N	yes	keyDate=yes is a directive to sort on this date; allow only one keyDate per record.

- a. On the input form, for each date element, provide a row of four boxes with the following labels, as illustrated below:

From [date 1] To [date 2] Encoding [e.g. w3cdtf] Date is [e.g., approximate]

- b. In the originInfo area, provide a fifth box for ‘sort date’ after the other four:

From [date 1] To [date 2] Encoding [e.g. w3cdtf] Date is [e.g., approximate] Sort date [e.g., yes]

- c. “Single date” and “Range Date” will no longer be split into two areas on the input form.
- d. In the Subject (Date) area, provide the 4 boxes (not sort date) immediately before (‘Term Source’ and ‘Date’). Change the current label ‘Subject (Date)’ to ‘Subject (Temporal).’ Add a label for the 4 boxes: ‘Date.’ Add a collective label for ‘Term Source’ and ‘Date’: ‘Date (Era).’ The user should be able to add a date under Date, or under Date (Era), or under both.
- e. The user must be allowed to input either a single date or a range of dates, or free-text for any date element.

Date1 is for a single date (structured or free text), or the initial date in a range. A single date must be input in the Date1 box; Date2 is for the end date in a range (structured or free text); it will be empty when a single date is provided.

A value in Date2 requires a value in Date1.

- f. Encoding: The value of each date is validated according to the encoding. (See below). Free text input will only be accepted when encoding is not specified.
- g. Point: If the user inputs a single date, xml should default to point=”start” and there will be no ‘end’ point.

If the user inputs a range of dates, Date1 should be coded point="start" and Date2 will be coded point="end"

- h. Qualifier: If the user specifies a qualifier of "exact," or does not specify a qualifier, xml should default to qualifier=""
- i. Key date: This applies to originInfo dates only. Sort date is MODS keyDate, and is a directive to sort on this date in public displays; allow only one keyDate per record. In a range of dates, the keyDate is Date1. The user must specify yes (sort on this date) or no (do not sort on this date). If a user specifies "yes" more than once within the originInfo dates, return the following error message "You can only have one sort date"

EXAMPLE:

#### Single structured date

<originInfo>

```
<dateIssued encoding="w3cdtf" point="start" keyDate="yes" qualifier="">1856</dateIssued>
```

#### Range of structured dates:

<originInfo>

```
<dateIssued encoding="w3cdtf" point="start" keyDate="yes" qualifier="">1856 </dateIssued>  
<dateIssued encoding=" w3cdtf " point="end" keyDate="no" qualifier="">1862</dateIssued>
```

#### Single free text date

```
<dateIssued encoding=" " point="start" keyDate="no" qualifier="">360 B.C.E.</dateIssued>
```

#### Range of free text dates

```
<dateIssued encoding=" " point="start" keyDate="no" qualifier="">360 B.C.E.</dateIssued>  
<dateIssued encoding=" " point="end" keyDate="no" qualifier="">300 B.C.E.</dateIssued>
```

**3. For all date elements where encoding="w3cdtf" allow and validate as follows (cf. <http://www.w3.org/TR/NOTE-datetime> and <http://www.w3.org/TR/xmlschema-2/#dateTime>):**

Year:

YYYY (eg 1997)

Year and month:

YYYY-MM (eg 1997-07)

Complete date:

YYYY-MM-DD (eg 1997-07-16)

Complete date plus hours and minutes:

YYYY-MM-DDThh:mmTZD (eg 1997-07-16T19:20+01:00)

Complete date plus hours, minutes and seconds:

YYYY-MM-DDThh:mm:ssTZD (eg 1997-07-16T19:20:30+01:00)

Complete date plus hours, minutes, seconds and a decimal fraction of a second

YYYY-MM-DDThh:mm:ss.sTZD (eg 1997-07-16T19:20:30.45+01:00)

where:

YYYY = four-digit year  
 MM = two-digit month (01=January, etc.)  
 DD = two-digit day of month (01 through 31)  
 hh = two digits of hour (00 through 23) (am/pm NOT allowed)  
 mm = two digits of minute (00 through 59)  
 ss = two digits of second (00 through 59)  
 s = one or more digits representing a decimal fraction of a second  
 TZD = time zone designator (Z or +hh:mm or -hh:mm)

This profile does not specify how many digits may be used to represent the decimal fraction of a second. An adopting standard that permits fractions of a second must specify both the minimum number of digits (a number greater than or equal to one) and the maximum number of digits (the maximum may be stated to be "unlimited").

This profile defines two ways of handling time zone offsets:

1. Times are expressed in UTC (Coordinated Universal Time), with a special UTC designator ("Z").
2. Times are expressed in local time, together with a time zone offset in hours and minutes. A time zone offset of "+hh:mm" indicates that the date/time uses a local time zone which is "hh" hours and "mm" minutes ahead of UTC. A time zone offset of "-hh:mm" indicates that the date/time uses a local time zone which is "hh" hours and "mm" minutes behind UTC.

**4. For other encoding or unspecified encoding, accept input without validation.** *[NOTE: This is the only way to accommodate BCE dates. Otherwise follow DLF/Aquifer Guidelines in eschewing free text alphanumeric strings. See pp. 12-13 below.]*

### **RUcore DISPLAYS**

If qualifier=approximate, then supply character string 'ca.[space]' immediately before the date(s)

For example:

XML:           <originInfo>  
                   <dateIssued qualifier="approximate" point="start">1894</dateIssued>  
                   </originInfo>  
 Display as:    ca. 1894

If qualifier=inferred, then supply square brackets around the date(s)

For example:

XML:           <originInfo>  
                   <dateIssued qualifier="inferred" point="start">1894</dateIssued>  
                   </originInfo>  
 Display as:    [1894]

If qualifier=questionable, then supply a question mark immediately following the date(s)

For example:

XML:           <originInfo>  
                   <dateIssued qualifier="questionable" point="start">1894</dateIssued>  
                   </originInfo>  
 Display as:    1894?

If point attribute has both 'start' and 'end' values, concatenate them, separated by a hyphen

XML:           <mods:originInfo>  
                   <mods:dateCreated point="start" qualilfier="exact">1861</mods:dateCreated>  
                   <mods:dateCreated point="end" qualilfier="exact">1865</mods:dateCreated>  
                   </mods:originInfo>  
 Display as:    1861-1865