

Title: Agenda of Usage Board meeting  
Date of meeting: Saturday, 12 October 2002 - all day  
Sunday, 13 October 2002 - all day  
Venue: Florence, Italy  
Date Modified: 2002-10-07  
Description: The agenda is maintained and occasionally updated by the Usage Board Chair, Tom Baker in the weeks preceding a meeting. Revisions are posted to the Usage Board mailing list, which publicly accessible on a read-only basis at [1]. On completion of a meeting, the agenda is archived on the DCMI Web site and can be accessed through the Usage Board Meetings page [2].

Expected participation:	Guests:
Tom Baker, chair	Makx Dekkers, Saturday
Andy Powell	Rachel Heery, Sunday?
Diane Hillmann	
Haruki Nagata	Apologies:
Rebecca Guenther, late arrival	Roland Schwaenzl
Stuart Sutton	
Traugott Koch	

Saturday, 12 October

0830-1200: 210" Total  
20" Grammar (1)  
90" Process (2)  
30" Encoding Scheme registration (3)  
40" UB Web pages (8)  
30" Coffee

1200-1300: 60" Lunch

1300-1700: 240" Total  
30" Schema representations (9)  
30" Coffee  
Time permitting:  
-- Anything not finished from the morning  
-- DC-Gov terms  
-- Structured values

Sunday, 12 October

0830-1200: 210" Total (need 180"?)  
60" DC-Gov terms (7)  
60" Role values (6)  
30" Coffee

1200-1300: 60" Lunch

1300-1700: 240" Total  
60" Structured Values (4)  
60" Libraries profile (5)  
30" Coffee

1. Statement of Dublin Core "grammar" (Tom Baker)  
Time: 20 min

Tom: Everyone should re-read the currently posted version of the one-page grammar statement and compare it with the 2002-10-06 version. The 2002-10-06 version includes an Issues list at the end that would of course be deleted

from the statement if we approve it. I am not expecting we will need alot of time in the meeting for discussion; any additional wordsmithing we may want to do should be outside of the meeting time.

Required reading:

-- Revised version of Grammar, 2002-10-06

<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0210&L=dc-usage&T=0&O=A&P=2314>

-- Legacy version of Grammar, 2002-07-13

<http://dublincore.org/usage/documents/2002/07/13/mission/>

2. Usage Board Process (Stuart Sutton)

Time: 40 min

Stuart: The latest version (UB-Process-Rev2.html) has additional revisions from the last circulated version (UB-Process-Rev1.html). One change was global--the original used the word "qualifier" and "qualification" of terms throughout which I changed to "refinement" in keeping with current practice. I also removed a number of textual references to the notion of domain-specific stuff where such references no longer appear relevant. With the exception of the global change to "refinement", all others have been marked with a strike through so they are clearly visible. Unfortunately, the additions of new text is in color and, therefore, lost when we do printouts. Obviously, the major change is in the status of decisions (recommended, conforming etc.) and in the addition of part on application profiles. Also: I am assuming that our discussion led by Diane on documentation and the official status of documents other than recommendations, conforming etc. (including this process document) may well lead to additional textual changes in the process document.

Diane will lead a discussion of her draft "DCMI Documentation and Documentation Maintenance Issues", which is on the agenda for discussion at the Advisory Board meeting in Florence. The draft draws lessons from the experience of managing documentation in the Usage Board and proposes that DCMI generalize some of the Usage Board methods and terminology for use by DCMI more generally.

Stuart and Diane question whether we really need to have the new status "Reviewed" for application profiles -- perhaps "Registered", used for Encoding Schemes, could serve here as well.

Required reading:

-- DCMI Usage Board Administrative Processes, 2002-10-04 version,

<http://www.ischool.washington.edu/sasutton/UB-Process-Rev2.html>

-- DCMI Usage Board Review of Application Profiles

<http://dublincore.org/usage/documents/profiles/>

-- DCMI Documentation and Documentation Maintenance Issues

<http://www.gmd.de/People/Thomas.Baker/DC-Documentation-Issues.html>

3. Registration of Encoding Schemes (Traugott Koch)

Time: 30 min

Traugott: Text still needs to be changed on pages (action is on Harry). Part of the update should be several minor issues I mentioned in the last letter to the list some of which we did not have the time to deal with in Bath. We should aim at getting closure on the Guidelines in

Florence. As for the guidelines: apart from adding links to the registry, no further changes should be needed before starting the registry.

Required reading:

- Guidelines for Vocabulary and Encoding Scheme Qualifiers, draft dated 2002-02-13,  
<http://dublincore.org/usage/documents/vocabulary-guidelines/>

Prototype:

- Vocabulary and Encoding Scheme Registration,  
<http://wip.dublincore.org:8080/schemes/index.html>

#### 4. Structured Values, or "DCSVs" (Andy Powell) Time: 60 mins

Discussion should include the following:

- summarise the current status of existing 'structured values'
- agree (in principle) to any required changes to current documents
- agree a way of actioning any agreed changes
- agree some scope for what we mean by 'structured value' - e.g. is a value containing MathML markup a structured value?
- agree associated rules/guidelines
- agree general policy for acceptance of new 'structured' values

Required reading:

- General issues:  
<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0204&L=dc-usage&O=A&P=2547>
- Journal Article Bibliographic Citation DCSV (Citation Working Group)  
<http://dublincore.org/usage/meetings/2002/05/citdcsv.html>
- DCMI Agent Detail, structured values for CCP elements (Rebecca Guenther)  
<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0204&L=dc-agents&F=&S=&P=169>

Background reading:

- <http://dublincore.org/documents/2000/07/28/dcml-dcsv/>
- <http://dublincore.org/documents/1999/04/30/labelled-values-syntax/>
- <http://dublincore.org/documents/2000/07/28/dcml-point/>
- <http://dublincore.org/documents/2000/07/28/dcml-period/>
- <http://dublincore.org/documents/2000/07/28/dcml-box/>

#### 5. Libraries profile (Rebecca Guenther) Time: 60 min maximum

Rebecca: We've already discussed this before. I'm taking the controversial things out, so I don't think it would take too long.

Required reading:

- Libraries profile (Rebecca Guenther)  
<http://dublincore.org/documents/2002/04/16/library-application-profile/>
- DCMI Usage Board Review of Application Profiles (see point 2 above)

#### 6. Use of role values as element refinements for Creator, Contributor, Publisher (Rebecca Guenther) Time: 60 min

Required reading:

- Proposal for Agent Roles, revised 2002-10-07  
<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0210&L=dc-usage&T=0&O=A&P=2412>
- Discussion  
<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0210&L=dc-usage&T=0&O=A&F=&S=&P=4328>

Background reading:

- Proposal: Agent roles in DCMES (2002-04-05)  
<http://dublincore.org/usage/meetings/2002/05/Agent-roles.html>
- Relator Terms and Codes  
<http://lcweb.loc.gov/marc/sourcecode/relators/relators.html>

7. DC-Government new-term proposals (Stuart Sutton)

Time: 60 min

Proposals announced to DC-General for comment period:

- <http://dublincore.org/groups/government/accessRights.shtml>
- <http://dublincore.org/groups/government/acquired.shtml>
- <http://dublincore.org/groups/government/securityClassification.shtml>

Background reading:

- <http://dublincore.org/usage/meetings/2002/05/Dc-gov.proposal.pdf>
- <http://dublincore.org/usage/decisions/2001/government-02.shtml>
- [http://dublincore.org/usage/meetings/2001/10/DC-Gov\\_proposal\\_v0.2\\_2001-10-121.html](http://dublincore.org/usage/meetings/2001/10/DC-Gov_proposal_v0.2_2001-10-121.html)

8. Usage Board documentation and Web pages (Tom Baker)

9. Usage Board role vis-a-vis schema representations of DCMI terms (Roland Schwaenzl)

10. Other issues

- According to the term declaration, W3CDTF and Period only apply to Date, not any of the Date refinements. Should they apply to Date AND all its refinements (both recommended and conforming)?
- In response to a question from Chris Croome on 7 August, there were helpful postings from Andy Powell and Jon Hanna, after which Chris asked whether we have any way to capture and make available clarifications of this kind.  
<http://www.jiscmail.ac.uk/cgi-bin/wa.exe?A2=ind0208&L=dc-general&T=0&O=A&P=2886>  
Where could we put such information? How would this relate to the User Guide activity?

REFERENCES

- [1] <http://www.jiscmail.ac.uk/lists/dc-usage.html>
- [2] <http://dublincore.org/usage/meetings/>

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**Reply-To:** A mailing list for the Dublin Core Metadata Initiative's Usage Board <DC-USAGE@JISCMAIL.AC.UK>

**From:** Thomas Baker <thomas.baker@BI.FHG.DE>

**Subject:** Revised DCMI Grammar

**Content-Type:** text/plain; charset=us-ascii

**Content-Disposition:** inline

Here is a revised version of the one-page Grammar. I have done my best to incorporate numerous suggestions. Cases where comments may require further thought or discussion are summarized at the end of the paper.

I would like to discuss this in Florence (it is already on the agenda), and hopefully approve a draft for use by the sub-committee looking at encoding issues and perhaps for approval at the Advisory Board meeting on Friday.

Tom

Creator: [DCMI Usage Board](mailto:dc-usage@jiscmail.ac.uk)

Latest version: <http://dublincore.org/usage/documents/grammar/>

Date modified: 2002-10-06

**Description:** This document describes the grammatical principles that govern the decisions of the Usage Board as the maintenance body for DCMI metadata semantics. See also a related document, "DCMI Usage Board Mission" [1].

## 1. Scope of this grammar

This grammar presents the typology of DCMI metadata terms and describes the principles underlying their definition and use. As defined in the "Namespace Policy for the Dublin Core", a DCMI term is "a DCMI element, a DCMI qualifier or term from a DCMI-maintained controlled vocabulary." A DCMI namespace, in turn, is "a collection of DCMI terms." [2]

## 2. Elements and qualifiers

<a name="element"></a>

### 2.1. Elements

An Element is a property of a resource.

### 2.2. Qualifiers

"Qualifiers" is the generic heading traditionally used for terms now usually referred to specifically as Element Refinements or Encoding Schemes.

<a name="element-refinement"></a>

#### 2.2.1. Element Refinements.

An Element Refinement is a property of a resource which shares the meaning of a particular DCMI Element but has a more restricted scope. In some application environments (notably HTML-based encodings), Element Refinements are used together with Elements in the manner of natural-language "qualifiers" (i.e., adjectives) [3]. However, if Element Refinements are properties of a resource (like Elements), Element Refinements can in principle be used in metadata records independently of the properties they refine. A shift from the former view to the latter is reflected in the names assigned by the Usage Board to Element Refinements, with a move away from adjective-like names such as "created" (approved in July 2000) towards noun-phrase-like names such as "dateCopyrighted" (approved in July 2002). One consequence of using Element Refinements independently of Elements is that information about relationships between them will reside outside of the metadata records in separate schemas that applications needing to perform operations such as dumb-down will need to consult.

<a name="encoding-scheme"></a> 2.2.2. Encoding Schemes.

Encoding Schemes are pointers to contextual information or parsing rules that aid in the interpretation of a term value. Such contextual information may take the form of controlled vocabularies, formal notations, or parsing rules. A value qualified with an Encoding Scheme may thus be a term from a controlled vocabulary (e.g., from a set of subject headings) or a string formatted in accordance with a formal notation

(e.g., "2000-01-01" as the standard expression of a date).  
If an Encoding Scheme is not understood by a client or agent,  
the value may still be useful to a human reader.

### 2.3. Dumb-down Principle

The qualification of Dublin Core Elements is guided by a rule known colloquially as the Dumb-Down Principle. According to this rule, a client should be able to ignore any qualifier and use the value as if it were unqualified. While this may result in some loss of specificity, the remaining term value (minus the qualifier) must continue to be generally correct and useful for discovery. Qualification is therefore supposed only to refine, not extend the semantic scope of an Element.

### 2.4. Appropriate values

Best practice for a particular Element or Qualifier may vary by context. Definitions may provide some guidance; other information may be found in the Usage Guide [6].

<a name="controlled-vocabulary-term"></a>

### 3. Controlled-Vocabulary terms

The Usage Board maintains the DCMI Type Vocabulary [7] -- a general, cross-domain list of recommended terms that may be used as values for the Resource Type element to identify the genre of a resource. The member terms of the DCMI Type Vocabulary are called Controlled-Vocabulary Terms.

## REFERENCES

- [1] <http://dublincore.org/usage/documents/mission/>
- [2] <http://dublincore.org/documents/2001/10/26/dcmi-namespace/>
- [3] <http://www.ietf.org/rfc/rfc2731.txt>
- [4] <http://www.ukoln.ac.uk/metadata/dcmi/dc-xml-guidelines/>
- [5] <http://dublincore.org/documents/dcq-rdf-xml/>
- [6] <http://dublincore.org/documents/usageguide/>
- [7] <http://dublincore.org/usage/terms/dcmitype/>

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Issues, section by section:  
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### 1. Scope of this grammar

-- Traugott sees an inconsistency between the use of  
"DCMI metadata terms" followed by the phrase "term

from a DCMI-maintained controlled vocabulary".  
(In this case, the quoted text from the Namespace Policy might need to be changed.)

## 2.1. Elements

- Traugott wonders whether the RDF-speak (references to "property" and "sub-property") is appropriate or sufficient; also for Section 2.2.1.

### 2.2.1. Element refinements

- Pete would prefer to avoid the use of "sub-property", which may be meaningful to RDF schema folks but, for others, could carry some unwelcome associations with notions such as "child elements" or XML element containment. Pete suggests saying: "An Element Refinement is a property which shares the meaning of a particular DCMI Element but has a more restricted scope." (Result: I have dropped the use of "sub-property" entirely, also in the attributes of the term declarations, see <http://dublincore.org/usage/terms/>; however, I retain the reference to "property" in the definition of Elements.)
- Pete also felt that the reference in the definition of Element Refinements to XML and XML/RDF practice might be inappropriately introducing a representational/syntactic issue into a definition that should be representation-independent. (Pete suggests a rewrite that I have adapted for the latest draft.)

## 2.3. Statement of the Dumb-down Principle

- Roland is concerned that the statement does not sufficiently address the issue of formal notations from Encoding Schemes. As worded, the statement gives (in his opinion) the impression that the formal notation of an Encoding Scheme is the best thing to use for dumb-down purposes: for example, the code "19D10" as the value for dc:subject. However, Roland feels strongly that "19D10" is not the subject of the resource. I infer that Roland would rather see a human-readable text string as the subject. At any rate, he would like the wording of 2.3 to clarify this issue. (This has not yet been done.)

## 3. Controlled-vocabulary terms



-- Traugott likes the introduction of "Controlled-vocabulary term" and thinks we should propagate this change to other contexts (I have tried to do this). He favors referring to a "vocabulary term" ("there are terms from uncontrolled vocabularies as well") or "member terms of a vocabulary".

--

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# Dublin Core Metadata Initiative

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Title: DCMI Usage Board Mission and Principles  
Creator: [DCMI Usage Board](#)  
Identifier: <http://dublincore.org/usage/documents/2002/07/13/mission/>  
Latest version: <http://dublincore.org/usage/documents/mission/>  
Date modified: 2002-07-13

## 1. Mission of the DCMI Usage Board

The mission of the Usage Board is to ensure an orderly evolution of the metadata terms maintained by the Dublin Core Metadata Initiative. The Usage Board evaluates proposals for new terms (or changes to existing terms) in light of grammatical principle, semantic clarity, usefulness, and overlap with existing terms. To proposals that are accepted it assigns a specific status. The Usage Board also evaluates constructs that use DCMI terms, such as Application Profiles. The Usage Committee strives for consensus, justifying its decisions and interpretations in terms both of principle and of empirical practice.

## 2. Publication policy

The Usage Board makes available its proceedings and decisions in a publicly available space on the DCMI Web site.

## 3. Process

Usage Board process is described in a separate document, "Dublin Core Usage Board Administrative Processes" [1].

## 4. Scope

The Usage Board maintains the terms defined within DCMI namespaces, as described in the document "Namespace Policy for the Dublin Core Metadata Initiative" [2], and reviews constructs that use these terms, such as Application Profiles [3].

## 5. DCMI metadata grammar

Dublin Core may be seen as a small language for making a particular class of statements about resources. Like natural languages, it has a vocabulary of word-like terms, the two classes of which -- elements and qualifiers -- function within statements like nouns and adjectives; and it has a syntax for arranging elements and qualifiers into statements according to a simple pattern. Optional qualifiers may make the meaning of a property more definite, as in "Resource has dc:date dcq:revised '2000-06-13'." This grammar is described more fully in [3].

Vocabulary terms in Dublin Core refer to elements, qualifiers,

or terms in controlled vocabularies maintained by DCMI. Vocabulary terms are uniquely defined in namespaces [2].

Strictly speaking, a Dublin Core element or qualifier is a unique identifier formed by a name (e.g., title) prefixed by the URI of the namespace in which it is defined, as in <http://purl.org/dc/elements/1.1/title>. In this context, a namespace is a vocabulary that has been formally published, usually on the Web; it describes elements and qualifiers with natural-language labels, definitions, and other relevant documentation.

### 5.1. Elements

An element is a property of a resource.

### 5.2. Qualifiers

Qualifiers modify the properties of Dublin Core statements by specifying, in the manner of natural-language adjectives, "what kind" of subject, date, or relation. Qualifiers currently fall into two classes:

5.2.1. Element Refinements. An element refinement is a qualifier that makes the meaning of an element narrower or more specific. A refined element shares the meaning of the unqualified element, but with a more restricted scope. A client that does not understand a specific element refinement term should be able to ignore the qualifier and treat the metadata value as if it were an unqualified (broader) element. The definitions of element refinement terms for qualifiers must be publicly available.

5.2.2. Encoding Schemes. Encoding schemes are pointers to contextual information or parsing rules that aid in the interpretation of an element value. These schemes include controlled vocabularies and formal notations or parsing rules. A value expressed using an encoding scheme will thus be a token selected from a controlled vocabulary (e.g., a term from a classification system or set of subject headings) or a string formatted in accordance with a formal notation (e.g., "2000-01-01" as the standard expression of a date). If an encoding scheme is not understood by a client or agent, the value may still be useful to a human reader. The definitive description of an encoding scheme for qualifiers must be clearly identified and available for public use.

### 5.3. Dumb-down Principle

The qualification of Dublin Core properties is guided by a rule known colloquially as the Dumb-Down Principle. According to this rule, a client should be able to ignore any qualifier and use the value as if it were unqualified. While this may result in some loss of specificity, the remaining element value (minus the qualifier) must continue to be generally correct and useful for discovery. Qualification is therefore supposed only to refine, not extend the semantic scope of a property.

#### 5.4. Appropriate values

Best practice for a particular element or qualifier may vary by context. Definitions may provide some guidance; other information may be found in the User's Guide [5].

#### 5.5. Controlled-Vocabulary terms

The Usage Board maintains the DCMI Type Vocabulary -- a general, cross-domain list of recommended terms that may be used as values for the Resource Type element to identify the genre of a resource. The member terms of the DCMI Type Vocabulary are called Controlled-Vocabulary Terms.

#### REFERENCES

- [1] <http://dublincore.org/usage/documents/process/>
- [2] <http://dublincore.org/documents/dcmi-namespace/>
- [3] <http://dublincore.org/usage/meetings/2001/05/grammar.htm>
- [5] <http://dublincore.org/documents/usageguide/>
- [6] <http://dublincore.org/usage/documents/profiles/>
- [7] <http://www.ietf.org/rfc/rfc2731.txt>
- [8] <http://dublincore.org/documents/dc-xml-guidelines/>
- [9] <http://dublincore.org/documents/dcq-rdf-xml/>



Metadata associated with this resource: <http://dublincore.org/usage/documents/2002/07/13/mission/index.shtml.rdf>

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# DCMI Usage Board Administrative Processes

**Title:**

**Creator:** Diane I. Hillmann, [dih1@cornell.edu](mailto:dih1@cornell.edu)

**Status:** ???

**Date Issued:** [ R E V I S E ]

**Identifier:** [ R E V I S E ]

**Replaces:** [ R E V I S E ]

**Is Replaced By:** Not Applicable

**Latest version:** <http://www.dublincore.org/usage/documents/process/>

**Description of document:** This document describes the rules and regulations of the DCMI Usage Board for reaching decisions on terms and the registration of encoding schemes, vocabularies, and application profiles.

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## Usage Board: Overview, Meetings, Documentation

### 1. Usage Board Membership [\[top\]](#)

**1.1.**The UB will consist of at least seven and no more than eleven people (nine is ideal) appointed by the DCMI Directorate.

**1.2.**Usage Board member terms shall be for two years, renewable once. Initial appointments will be made so as to stagger terms.

**1.3.**Members should be selected based on the following criteria:

**1.3.1.**Knowledgeable concerning the development history and purpose of the DC element set and its relationship to the metadata world at large;

**1.3.2.**Related to a metadata community relevant to DCMI;

**1.3.3.**Willing and able to commit time and energy to the functions of the UB;

**1.3.4.**Able to communicate verbally and in writing in English well enough to prepare documents and discuss complex issues in a group setting;

**1.3.5.**Geographic and domain distribution of members is relevant but will not override other criteria.

**1.4.**The UB Chair will be appointed from one of the membership by the DCMI Directorate. The term of the chair shall be for two years, renewable once.

**1.5.**For internal communication the UB uses the closed mailing list [dc-usage@jiscmail.ac.uk](mailto:dc-usage@jiscmail.ac.uk). The messages are archived and publicly available at <http://www.jiscmail.ac.uk/lists/dc-usage.html>.

## 2. Meetings [\[top\]](#)

### 2.1.Scheduling

**2.1.1.**Meetings should be at least twice a year.

**2.1.1.1.**One meeting should be scheduled during the annual DC general workshop/conference.

**2.1.1.2.**The second should be scheduled at a different time of the year, preferably close to other conferences, so as to make attendance convenient for as many members as possible.

**2.1.1.3.**Scheduling should be done far enough in advance so that as many members as possible may be present.

**2.2.**Funding for meetings should be supported as much as possible by DCMI.

### 2.3. Meeting agenda

**2.3.1.** The UB Chair maintains the agenda, which cites links to relevant supporting documentation, including JISCMAIL postings.

**2.3.2.** All materials pointed to in the agenda are archived at <http://dublincore.org> after the final pre-meeting version of the agenda has been distributed. After the meeting, the archive version of the agenda is edited to point to these archive copies.

### 2.4. Attendance by members

**2.4.1.**Members must attend at least one meeting in a given year to maintain membership in good standing.

**2.4.2.**Members who miss two meetings in succession may be replaced

by the DC Directorate.

## **2.5.Attendance by others**

**2.5.1.Attendance at UB meetings by other than the UB is by invitation.**

**2.5.1.1.Interested attendees should request an invitation via the UB Chair or the Managing Director.**

**2.5.2.Participation in discussion of proposals by any interested parties is encouraged.**

## **2.6.Agenda preparation and distribution**

**2.6.1.The UB chair is responsible for preparing the meeting agendas and assigning shepherds to proposals.**

**2.6.2.Agenda items shall include the name and email address of the UB member responsible for shepherding the proposal through the UB process.**

**2.6.3.Agendas shall be available on the UB page of the DCMI website.**

## **2.7.Meeting minutes and decisions**

**2.7.1.Minutes of discussion points and decisions shall be drafted by a note-taker and posted to the DCMI website.**

**2.7.2.Important decisions will be assigned a number for citation purposes and documented on the DCMI website.**

# **3. Categories of Usage Board Decisions [\[top\]](#)**

**3.1. *Recommended:*** Element, Element Refinement, and DCMI Type Vocabulary terms useful for resource discovery across domains.

**3.2. *Conforming:*** Element and Element Refinement terms for which an implementation community has a demonstrated need and which conform to the grammar of Elements and Element Refinements, though without necessarily meeting the stricter criteria of usefulness across domains or usefulness for resource discovery.

**3.3. *Obsolete:*** For Element and Element Refinement terms that have been superseded, deprecated, or rendered obsolete. Such terms will remain in the registry for use in interpreting legacy metadata.

**3.4. *Registered:*** Used for vocabulary schemes, application profiles and language translations for which the DCMI provides information but not necessarily specific recommendation.

# **4. Documentation [\[top\]](#)**

## **4.1.Documentation**

**4.1.1.Important documents like UB membership, meeting agendas, meeting minutes, proposals to the UB, voting or decision documents and results (if not part of minutes) and similar are archived as separate documents in an area of the DCMI web site devoted to the UB.**

**4.1.2.**Structure of the UB website is similar to a working group page with an issues, forums and resources section. If necessary, an UB internal section can be password protected.

**4.1.3.**Historic documents relevant to the UB work, like voting proposals and results from the first DC refinement voting will be archived at the same page.

**4.1.4.**Results of the UB work which take the form of official DCMI documents (working drafts, proposed recommendations and recommendations) are made available and archived at:

<http://dublincore.org/documents/>as all the other similar documents.

**4.1.5.**The UB page maintains links to all XML/RDF schemas of UB-maintained namespaces held on the DCMI Web site.

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## Proposals for Recommendations and Registrations: Form and Process

### 5. Proposals for Recommendations **Terms** [\[top\]](#)

#### 5.1.Sources of proposals

##### 5.1.1.DCMI working groups

##### 5.1.1.1.Existing working groups

##### 5.1.1.2.Working groups established for the purpose of developing proposals

##### 5.1.2.Metadata implementers

##### 5.1.3.UB itself

#### 5.2.Requirements for proposals for "Recommended" and "Conforming" status

##### 5.2.1.To be supplied by the proposers (see table below):

***Proposal Requirements Table***

Name	A suggested unique token for use in encodings
Label	A suggested human-readable label for the proposed term
Definition	The definition of the term
Comment	Information concerning the possible application of the proposed term
Examples	Examples of use of the proposed term, making clear what type of literal values are expected



Type of term	Is the proposed term an "element," or an "element refinement" (as defined in <a href="http://dublincore.org/usage/documents/mission.shtml">http://dublincore.org/usage/documents/mission.shtml</a> ) [NOTE: Encoding schemes <b>are</b> registered using a separate process]
Term qualified	If the proposed term is a element refinement <sup>t</sup> , which term does it qualify?
Why needed	A justification of the need for the proposed term
Proposed status	Is the term proposed as <b>Recommended or Conforming</b> ?
Related DCMI terms	A discussion of possible overlap with existing terms
Related non-DCMI terms	An annotated listing of related terms in non-DCMI metadata vocabularies
Impact on applications	An annotated listing of existing applications that could be affected by recognition of this term
About the proposers	A pointer to a description, in standard form (to be specified) of the working group or organization putting forward the proposal: its scope, aims, a brief history, current status, and a pointer to archives

### **5.2.2.**To be supplied by the UB shepherd:

#### **5.2.2.1.** A summary history of the post-announcement discussion

**5.3.**Guidelines: The following criteria are offered as guidelines for working groups that are developing a proposal -- they reflect criteria that the Usage Board will use in its decision-making. They do not constitute further requirements for the formal documentation of a proposal.

#### **5.3.1.**Criteria for evaluating a term proposal

##### **5.3.1.1.**Clarity

###### **5.3.1.1.1.**Can the term be clearly defined?

###### **5.3.1.1.2.**Can the semantics of the proposed element or element refinement be expressed precisely, unambiguously, and briefly?

##### **5.3.1.2.**Practicality

**5.3.1.2.1.**Is the term practical?

**5.3.1.2.2.**How difficult would it be for people creating metadata to comprehend the semantics of the proposed element or element refinement and to apply it reasonably in the description of resources?

**5.3.1.3.**Placement

**5.3.1.3.1.**Does the term refine an existing element?

**5.3.1.3.2.**If the proposed term is an element, can it reasonably be handled as effectively as an element or value refinement for an existing element?

**5.3.1.3.3.**Are there alternative ways of implementing the term? Within the conceptual framework of the Dublin Core Element Set (i.e., element/element refinements and value/value refinements), are there alternative ways to achieve the ends sought?

**5.3.1.4.**Needs

**5.3.1.4.1.**Is there a clear requirement in existing implementations for the term in support of resource discovery?

**5.3.1.4.2.**Is there a demonstrated need for the proposed element, element refinement, or value refinement?

**5.3.1.4.3.**Are there existing implementations or controlled vocabularies, etc., supporting the term?

**5.3.1.5.**Fit with other elements/refinements

**5.3.1.5.1.**Follows existing principles of refinement

**5.3.1.5.2.**Is well-formed

**5.3.1.5.3.**Does not conflict with or create ambiguity with regard to existing elements, or refinements

**5.3.1.5.4.**Does not create problems for existing legacy implementations if those implementations have followed recommended practice

**5.4.**Decision tree for assessing the need for a new term

***Decision Tree Table***

Condition 1:	Can the community of practice's need be solved with a value refinement (i.e., through a domain-specific vocabulary) for an existing DCMI element or element refinement?	If so, do that; else ...

Condition 2:	Can the community of practice's need be solved through an application profile that references an element or element refinement from an existing and recognized non-DCMI namespace?	If so, do that; else ...
Condition 3:	Can the community of practice's need be solved with a new domain-specific refinement for an existing DCMI element?	If so, do that; else ...
Condition 4:	Create a new domain-specific DCMI element (and, if necessary, element and value refinements) to meet the community of practice's need.	

## 5.5. Process for Moving Proposals

### 5.5.1. Pre-announcement process

**5.5.1.1.** Proposal is received by DCMI Managing Director or UB Chair.

**5.5.1.2.** Proposal is given preliminary review for completeness by DCMI Managing Director and UB Chair.

**5.5.1.3.** If complete and no revisions needed, proposal is circulated to UB members and announced for public comment. by the Managing Director. **A period of two weeks will be allowed between the date of the decision on completeness and the public announcement of the proposal to provide time for preparation of the supporting materials for public dissemination.**

**5.5.1.4.** If incomplete or revisions needed, proposal is returned to originator, with request for revision or additional information.

### 5.5.2. Announcements

**5.5.2.1.** Announcements of comment period for proposals to be discussed by the UB shall be made on the DC-general list and other relevant lists.

**5.5.2.2.** Announcements of proposals shall be made by the DCMI Managing Director.

**5.5.2.3.** Announcements will include:

**5.5.2.3.1.** Links to relevant information to be considered with the proposal

**5.5.2.3.2.** Relevant deadlines for comments

**5.5.2.3.3.** Addresses for comment submission

**5.5.2.3.4.** Information about UB meeting at which the

proposal will be discussed, including **place, time,**  
**and** how to request an invitation to participate

**5.5.2.3.5.** Name and contact information for the assigned shepherd

### **5.5.3.** Communication Responsibility Table

*Community Responsibility Table*

<b>What</b>	<b>Where</b>	<b>Who</b>	<b>Comment</b>
Proposal draft posted	WG list, DC-General	WG Chair	
Proposal added to DC-UB agenda	DC-UB Website, DC-UB list	DC-UB Chair	
Proposal announced for public comment	DC-General	DCMI Managing Director	
Usage Board Outcome	DC-General	DCMI Managing Director	
Scheme submission	DC-UB List	Web Team Submission Tool	
Scheme registration	DC-UB List	Web Team Submission Tool	Shepherd may announce to WG list
Digest of scheme registrations	DC-General	DC-UB chair	

### **5.5.4.** Shepherds

**5.5.4.1.** Each proposal shall be assigned a shepherd by the UB chair from among the UB membership.

**5.5.4.2.** Shepherds should have knowledge of the proposal issues or be connected to the WG originating the proposal.

#### **5.5.4.3.** Responsibilities

**5.5.4.3.1.** Monitor discussion on relevant lists (shepherds should be members of the relevant DC WG list during the time of consideration of a proposal).

**5.5.4.3.2.** Summarize the comment period discussion and points of contention of the proposal for the UB, either

verbally at the meeting or in writing prior to the meeting (preferred).

**5.5.4.3.3.** Serve as liaison to the relevant WG or community during the time the proposal is under discussion and after a decision has been made.

**5.5.4.3.4.** Recommend to the UB any further action after a decision has been made on the proposal.

**5.5.4.3.5.** Prepare registration information for the DCMI Web Team.

**5.5.4.3.6.** Prepare draft of UB official decision on the proposal for review and approval by the UB.

#### **5.5.5.** Comment period

**5.5.5.1.** Comment period on proposals should be managed on the DC-General list.

**5.5.5.2.** Comment periods should be at least one month.

**5.5.5.3.** Public discussions of UB related issues during public comment periods should take place on DC-GENERAL or other working group mailing lists as specified in the announcement.

#### **5.5.6.** Voting

**5.5.6.1.** Voting shall be limited to scheduled meetings and conference calls.

**5.5.6.2.** Voting shall be limited to UB members present at the meeting or conference call and able to participate in the discussion.

**5.5.6.3.** UB members who cannot be present may present their arguments for or against a proposal in writing prior to a meeting (this shall not constitute a vote).

**5.5.6.4.** UB members who cannot be present may explore other options with the chair, if they cannot be present for an important vote. In all cases, a vote may not be cast by a member who is not present, either actually or virtually, for the relevant discussion.

**5.5.6.5.** Consensus is achieved if no more than one UB member objects to a proposal.

#### **5.6.** Registration of UB Decisions on Proposals

**5.6.1.** A document explaining the UB decision regarding a proposal will be written in a timely fashion by the shepherd and approved by the UB.

**5.6.1.1.** The decision will include brief statements of recommendations being issued and detailed explanations of UB decisions not to issue recommendations.

**5.6.1.2.** UB decisions will be in a form determined by the UB and numbered consecutively for the purpose of citation.

**5.6.1.3.** The DCMI Web Team will publish UB decisions in the Documents section of the DCMI Web site in a category named

## DCMI Usage Board Decisions.

**5.6.2.**Recommended terms will be registered by the shepherd who was responsible for moving the proposal through the UB process.

**5.6.2.1.**The shepherd will complete a web form transferring the relevant information to the DCMI Web Team for inclusion into the Registry.

**5.6.2.2.**The DCMI Web Team will report to the UB list when registration has been completed.

## 6. Proposals for Registration of Encoding Schemes and Vocabularies [\[top\]](#)

**6.1.**Submissions of new encoding schemes and vocabularies will be received on the DC-UB list via a web form

**6.2.**DC UB members will "claim" responsibility to shepherd submissions based on:

**6.2.1.**Their knowledge of a particular scheme or vocabulary

**6.2.2.**Their knowledge of the language used in the scheme or vocabulary

**6.2.3.**Their interest or knowledge of a particular subject or topical area covered by the scheme or vocabulary

**6.2.4.**The time they have available for such tasks

**6.3.** Submissions unclaimed after one week will be assigned to a DC-UB member by the chair.

**6.4.**The DC-UB chair will not shepherd individual submissions, but will keep track of submissions and ensure that all are resolved in some manner.

**6.5.**The shepherd will be responsible for verifying the submitted information:

**6.5.1.**Name of the scheme or vocabulary

**6.5.2.**Availability and maintenance status

**6.5.3.**Appropriateness of the maintenance agency

**6.5.4.**Uniqueness and appropriateness of the proposed token

**6.5.5.**Possible use with elements not specified in the proposal

**6.6.**If necessary, the shepherd will initiate contact with the maintenance agency in the case of questions or concerns about the status of the scheme, the proposed token, or to clarify the submission.

**6.7.**The shepherd will edit the submission and complete the registration process by submitting the information to the DCMI Web Team.

**6.8.**The DCMI Web Team will report to the UB list when registration has been completed.

**6.9.**The DC-UB chair will prepare a monthly report of all new schemes.

## 7. Proposals for Registration of Application Profiles [\[top\]](#)

**7.1. Submitting Entities: Application profiles may be presented to the Usage Board by any DCMI working group.**

## **7.2. For the purposes of review by the Usage Board:**

**7.2.1.** Application profiles must provide, for each term, an identifier of the element set where it is defined, ideally in the form of URIs for individual terms.

**7.2.2.** If the terms in an application profile describe anything other than generic "resources" (the typical domain of Dublin Core), the application profile must make this clear. This is particularly important if an application profile is based on a data model that describes multiple classes of resources, such as agents or collections.

**7.2.3.** It is recommended that application profiles be prepared using previously reviewed application profiles as models for their layout, appearance, and content. Aside from the required term and element set identifiers, there are no particular constraints on the types of documentation -- local definitions, comments, constraints, or technical notes -- that may be associated with a term.

**7.2.4.** Each application profile must provide, or point to, a short text that describes:

**7.2.4.1.** The context and purposes in which the application profile is used or is likely to be used.

**7.2.4.2.** The organizations or individuals involved in its development and a capsule history thereof.

**7.2.4.3.** Any arrangements, policies, or intentions regarding the future development and maintenance of the application profile.

## **7.3. Review of Application Profiles by the Usage Board**

**7.3.1.** The Usage Board is interested in reviewing application profiles that make substantial use of Dublin Core elements. The review of application profiles by the Usage Board serves to:

**7.3.1.1.** analyze the usage of Dublin Core within significant implementations;

**7.3.1.2.** assign a DCMI stamp of approval;

**7.3.1.3.** promote the sharing of application profiles between communities; and

**7.3.1.4.** identify new terms as candidates for inclusion in DCMI namespaces.

**7.3.2.** An application profile is "well-formed" if it is presented in accordance with the broad and flexible requirements outlined above. These presentation requirements may become more specific as "good practice" emerges over time.

**7.3.3.** Usage Board review focuses on the use of terms related to Dublin Core terms and on any data models that provide a context for those terms. The Usage Board is agnostic about the use of terms not directly related to Dublin Core; strictly speaking such terms are outside the scope of Usage Board review.

**7.3.4.** The use of terms related to Dublin Core (such as refinements of

Dublin Core elements, or Dublin Core elements that have been constrained for particular contexts) will be evaluated from the standpoint of grammatical principle (eg, "dumb-down"), clarity, and good practice.

#### **7.4. Publication and use of Usage Board Reviews**

**7.4.1.** For application profiles that "pass" review, the Usage Board will publish a Review on a Web page for application profiles.

**7.4.2.** Each Review will include, at a minimum:

**7.4.2.1.** Any comments from the Usage Board on the application profile.

**7.4.2.2.** Pointers to locally archived copies of the application profile as originally submitted and (if necessary) as subsequently amended in light of Usage Board comments.

**7.4.2.3.** A pointer to the "latest version" of an application profile held by its maintainers.

**7.5.** Review represents a form of recognition, and its URL will be persistent for purposes of citation.





# Dublin Core Metadata Initiative

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Title: DCMI Usage Board Review of Application Profiles  
 Creator: Thomas Baker  
 Identifier: <http://dublincore.org/usage/documents/2002/07/06/profiles/>  
 Latest version: <http://dublincore.org/usage/documents/profiles/>  
 Date modified: 2002-07-06  
 Description: This document defines the term "Application Profile" in the context of the Dublin Core Metadata Initiative and outlines the criteria by which the DCMI Usage Board can review an Application Profile and assign to it a status.

## 1. "Application Profile" defined

For the purposes of DCMI Usage Board review, an Application Profile (AP) is a declaration of which metadata terms an organization, information resource, application, or user community uses in its metadata. Moreover:

- By definition, an AP cannot "declare" new metadata terms and definitions; it only "reuses" terms from existing element sets [HEERY].
- The ideal element set will use URIs to uniquely identify its terms within XML namespaces [DCMI-NAMESPACE]. As of 2002, however, this cannot be required.
- By definition, any new term coined for use in an AP must first be declared in a form citable in the AP.
- An AP may also provide additional documentation on how the terms used are constrained, encoded, or interpreted for particular purposes.

As of 2002, APs are seen primarily as a form of documentation, the purpose of which is to help implementor communities harmonize their metadata practice. It is hoped that in the longer term, machine-processable versions of such APs based on data models such as RDF will provide a basis for automating metadata interoperability functions such as semantic crosswalks and format conversions.

## 2. Documentation requirements for Application Profiles

Application Profiles may be presented to the Usage Board by any DCMI working group.

For the purposes of review by the Usage Board:

- APs must provide, for each term, an identifier of the element set where it is defined, ideally in

the form of URIs for individual terms.

- If the terms in an AP describe anything other than generic "resources" (the typical domain of Dublin Core), the AP must make this clear. This is particularly important if an AP is based on a data model that describes multiple classes of resources, such as agents or collections.
- It is recommended that APs be prepared using previously reviewed APs as models for their layout, appearance, and content. Aside from the required term and element set identifiers, there are no particular constraints on the types of documentation -- local definitions, comments, constraints, or technical notes -- that may be associated with a term.
- Each AP must provide, or point to, a short text that describes:
  - The context and purposes in which the AP is used or is likely to be used.
  - The organizations or individuals involved in its development and a capsule history thereof.
  - Any arrangements, policies, or intentions regarding the future development and maintenance of the AP.

### 3. Review of Application Profiles by the Usage Board

- The Usage Board is interested in reviewing APs that make substantial use of Dublin Core elements. The review of APs by the Usage Board serves to:
  - analyze the usage of Dublin Core within significant implementations;
  - assign a DCMI stamp of approval;
  - promote the sharing of APs between communities; and
  - identify new terms as candidates for inclusion in DCMI namespaces.
- An AP is "well-formed" if it is presented in accordance with the broad and flexible requirements outlined above. These presentation requirements may become more specific as "good practice" emerges over time.
- Usage Board review focuses on the use of terms related to Dublin Core terms and on any data models that provide a context for those terms. The Usage Board is agnostic about the use of terms not directly related to Dublin Core; strictly speaking such terms are outside the scope of Usage Board review.
- The use of terms related to Dublin Core (such as qualifiers of Dublin Core elements, or Dublin Core elements that have been constrained for particular contexts) will be evaluated from the standpoint of grammatical principle (eg, "dumb-down"), clarity, and good practice.

### 4. Publication and use of Usage Board reviews

- For APs that "pass" review, the Usage Board will publish a Review on a Web page for APs.
- Each Review will include, at a minimum:
  - Any comments from the Usage Board on the AP.
  - Pointers to locally archived copies of the AP as originally submitted and (if necessary) as subsequently amended in light of Usage Board comments.
  - A pointer to the "latest version" of an AP held by its maintainers.
- Review represents a form of recognition, and its URL will be persistent for purposes of citation.
- The official status of reviewed APs will be that of "Reviewed".

## References

[HEERY] Rachel Heery and Manjula Patel, Application profiles: mixing and matching metadata schemas, Ariadne 25, September 2000, <http://www.ariadne.ac.uk/issue25/app-profiles/intro.html>.

[DCMI-NAMESPACE] Andy Powell, Harry Wagner, Stuart Weibel, Tom Baker, Tod Matola, Eric Miller, Namespace policy for the Dublin Core Metadata Initiative, <http://dublincore.org/documents/dcml-namespaces/>.



Metadata associated with this resource: <http://dublincore.org/usage/documents/profiles/index.shtml.rdf>

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## DCMI Documentation and Documentation Maintenance Issues

Proposal based on lessons learned from the evolution of the DC UB process

For the past 18 months, the DCMI Usage Board has been simultaneously setting up and carrying out a process for managing Dublin Core terms. This process, though far from perfect, has achieved reasonable success in bringing a level of organization where there had been little before. I believe that we are far enough along to point out some areas where what the UB has done may be useful in thinking through the steps needed to set up a useful process for other documentation that DCMI needs to create and manage.

The newest revision of the UB Process document (to be approved in Florence) is currently located at: <http://www.ischool.washington.edu/sasutton/UB-Process-Rev1.html> It has several features that should be considered when framing a document approval process for DCMI.

### 1. Shepherd

In Usage Board practice, a shepherd is assigned to proposals or issues before the UB. The shepherd is responsible for moving a document through the process, working with the relevant group to manage public comment periods, ensuring that procedures are followed and deadlines kept. The shepherd may or may not have prior expertise with the issues at hand, but is expected to be able to keep the process on track and consult with others when needed.

Because the shepherd is distinct from the leadership of a working group, he or she is neither overburdened with the running of a group, nor working as an advocate for a particular position. This allows the shepherd to maintain focus on bringing the document through the required steps, without perceived or actual conflicts of interest.

Among the tasks a shepherd may assume in regards to a document could be ensuring that relevant reviewers are apprised of review periods, coordinating responses to specific issues, and preparing summaries of issues for final steps in the approval process.

### 2. List discussion is only part of the process

Because the Usage Board process is necessarily tied to face-to-face meetings twice a year, a specified cutoff point is reached one month prior to each meeting, by which time the agenda is set and issues not sufficiently resolved must wait until a later meeting. This makes it possible to set and enforce much clearer timeframes for discussion and approval than has been possible with documents not part of the Usage

Board purview.

### 3. Documentation of process

It often seems that the process of moving a document to recommended status has been based on the faulty idea that at some point the combatants will tire of endlessly duking out the same issues on a discussion list and some consensus will emerge. Surely the interminable discussion that has been a feature of the Qualified-DC-in-RDF discussions on the DC-ARCH list has proved that consensus does not always beat ennui to the finish line. As a result of the amorphous and dysfunctional process visible to anyone who cares to subscribe to DC-ARCH, DCMI has achieved a reputation as a group that cannot get things done, and all too often implementors have just gone ahead and set their own "standards," in the absence of DCMI consensus.

As the organization ages, we also must contend with a "legacy" of documentation that no longer reflects our current thinking, with no process for regular review and revision or deprecation. The Old Guard knows their way through the maze of documents, but newbies do not, and risk going off into the bushes with their implementations, guided by moldy documents. This state of affairs makes interoperability increasingly difficult (as if it were not already difficult enough). The UB has struggled with these issues within the boundaries of its task with elements, element refinements and schemes, but clearly the issues are similar with all levels and types of documentation.

### 4. Approval terminology

Because we have to a certain extent modeled our approval process on the W3C, we have inherited a very limited palette of statuses to apply to documentation. As the range of our documentation expands, this no longer seems to convey what it is we expect from those using the documentation.

The new version of the UB process document spells out several statuses for elements, element refinements, schemes, application profiles, and translations.

3.1. Recommended: Element, Element Refinement, and DCMI Type Vocabulary terms useful for resource discovery across domains.

3.2. Conforming: Element and Element Refinement terms for which an implementation community has a demonstrated need and which conform to the grammar of Elements and Element Refinements, though without necessarily meeting the stricter criteria of usefulness across domains or usefulness for resource discovery.

3.3. Obsolete: For Element and Element Refinement terms that have been superseded, deprecated, or rendered obsolete. Such terms will remain in the registry for use in interpreting legacy metadata.

3.4. Registered: Used for vocabulary schemes, application profiles and language translations for which the DCMI provides information but not necessarily specific recommendation.

As far as I know, the only status now available for other documents is "recommended." Not only is this limiting in the sense that it does not allow us to flag obsolete documents, it does not reflect the variety of purposes that documents might fulfil in DCMI. Ideally, a status might be assigned to reflect where a document exists within a formal process. In addition, a "final" category of status should reflect what we expect people to do with the document in the context of an implementation. "Recommended" seems ambiguous given the variety of contexts we could envision. For instance, if we have more than one schema document--perhaps one for XML and another for XML/RDF, what does "recommended" really mean? Some have suggested that there might be room for looser and stricter flavors of each of those, which makes the use of "recommended" as our only status even more problematic.

A "recommended" status also seems problematic for "Using Dublin Core," though clearly whatever process is conceived for DCMI documentation should also apply to it. In this case, we might envision a more or less constant process of revision, from typos to whole new sections, perhaps keyed to UB meetings--at what level should a document approval process be necessary?

Proposal:

The DCMI Advisory Board should name a small group to review the DC UB process document and make a formal recommendation for a document review and approval process for other DCMI documentation outside the purview of the UB. The charge should include:

- a. Definitions of what documents should be included in the process (e.g., guidelines, schemas, translations, etc.)
- b. A possible set of statuses to be conferred, and definitions
- c. A formal process for review and approval of documents, including subsequent "maintenance" review, perhaps including sunset provisions and designation of obsolete or outdated documents
- d. The process document itself should be reviewed according to the defined process

dih 9/27/02

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<b>Title:</b>	<b>Guidelines for Vocabulary and Encoding Scheme Qualifiers</b>
<b>Creator:</b>	Traugott Koch, <a href="mailto:Traugott.Koch@ub2.lu.se">Traugott.Koch@ub2.lu.se</a>
<b>Date Issued:</b>	2002-02-13
<b>Identifier:</b>	<a href="http://dublincore.org/usage/documents/2002/02/13/vocabulary-guidelines/">http://dublincore.org/usage/documents/2002/02/13/vocabulary-guidelines/</a>
<b>Replaces:</b>	<a href="http://dublincore.org/usage/documents/2001/10/08/vocabulary-guidelines/">http://dublincore.org/usage/documents/2001/10/08/vocabulary-guidelines/</a>
<b>Is Replaced By:</b>	Not Applicable
<b>Latest version:</b>	<a href="http://dublincore.org/usage/documents/vocabulary-guidelines/">http://dublincore.org/usage/documents/vocabulary-guidelines/</a>
<b>Status of Document:</b>	This is a DCMI Usage Board Working Draft.
<b>Description of document:</b>	<p><b>DCMI recognizes</b> that different discourse and practice communities have legitimate, particular needs to be able to select either value qualifier schemes from an array of recognized controlled vocabularies (e.g., thesauri, classification systems, taxonomies, ontologies, and word lists) or value encoding schemes that determine the syntactic structure of those values (e.g., date encoding schemes). To promote the greatest degree of interoperability, DCMI encourages the registration of recognized value qualifiers with DCMI.</p> <p><b>DCMI recognizes</b> that in order to promote interoperability through the common assignment of terms from established, publicly recognized controlled vocabularies and encoding schemes, the most critical, immediate need is to provide registration mechanisms for vocabularies for the "Subject" vocabulary.</p>

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# Guidelines for registration of vocabulary and encoding scheme qualifiers

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**DCMI recognizes** that different discourse and practice communities have legitimate, particular needs to be able to select either value qualifier schemes from an array of recognized controlled vocabularies (e.g., thesauri, classification systems, taxonomies, ontologies, and word lists) or value encoding schemes that determine the syntactic structure of those values (e.g., date encoding schemes). To promote the greatest degree of interoperability, DCMI encourages the registration of recognized value qualifiers with DCMI.

**DCMI recognizes** that in order to promote interoperability through the common assignment of terms from established, publicly recognized controlled vocabularies and encoding schemes, the most critical, immediate need is to provide registration mechanisms for vocabularies for the "Subject" vocabulary.

## 1. General

- 1.1 DCMI does not approve vocabulary schemes, but acknowledges formally maintained schemes as suitable for use with DC metadata. Thus, the schemes have the status "Registered" which does not necessarily imply that they are recommended by the DCMI.
- 1.2 DCMI maintained schemes have the status "Recommended".

## 2. Registration process

- 2.1 Anyone can propose a scheme for registration by submitting the required information to the web form at:  
<http://wip.dublincore.org:8080/schemes/submitServlet>
- 2.2 The DCMI Usage Board applies a "fast track" decision process involving the guidelines and criteria listed below.
- 2.3 Schemes given the status "Registered" (or "Recommended") are included in the DCMI Registry.
- 2.4 For each scheme, the registrant should provide the following information:
  - Full name of the scheme
  - Suggested abbreviated name (acronym)



- Maintenance agency
- Maintenance agency contact person
- Maintenance agency contact email address
- Submitter email address (if different from the maintenance agency contact email address)
- Online access point (URL if applicable)
- Access information (URL or physical address)
- Additional information about the scheme
- Domain(s) and extent of usage
- Associated element(s) or element qualifier(s)

### Example

<b>Full name of the scheme</b>	Dewey Decimal Classification
<b>Suggested abbreviated name (acronym)</b>	DDC
<b>Maintenance agency</b>	OCLC Forest Press
<b>Maintenance agency contact person name</b>	{ Name of current editor or contact person }
<b>Maintenance agency contact email address</b>	dewey@oclc.org
<b>Submitter email address</b>	{ Email address of submitter if different than the maintenance agency }
<b>Online access point</b>	Web Dewey in CORC ( <a href="http://purl.oclc.org/corc/">http://purl.oclc.org/corc/</a> )
<b>Access information</b>	<a href="http://www.oclc.org/fp/products/index.htm">http://www.oclc.org/fp/products/index.htm</a>

<b>Additional information about the scheme</b>	License required
<b>Domain(s) and extent of usage</b>	Most frequently used universal classification system for library OPACs and national bibliographies; limited recent usage in web catalogues etc.
<b>Associated element(s) or element qualifier(s)</b>	Subject

### 3. Guidelines

- **3.1 Kind of schemes to be registered**
  - 3.1.1 Schemes which are created and maintained by recognized entities and properly published may be registered.
- **3.2 Naming of the schemes**
  - 3.2.1 Schemes should be named with their official names. The name of the organization maintaining or owning the scheme is rarely sufficient since it does not unambiguously stand for the vocabulary alone.
  - 3.2.2 The scheme names and tokens are only appropriate for an unchanged use of an official version of the scheme. Unofficial versions, modified versions, unofficial translations and similar should not use the official label but apply a local name (e.g. based on the service, project or provider name. Ex.: The DutchESS service is using a local variant of the BC classification. It should be named DutchESSC or DutchESS-BC if it is really close to the official scheme).
  - 3.2.3 A subset of an official scheme where terms are unaltered may not be registered separately.
- **3.3 Tokens/acronyms to be used as DCMI qualifier labels**
  - 3.3.1 The tokens must be unique. Every effort will be made to maintain the short name proposed by the maintaining agency. In case of collisions, a suitable alternative will be chosen in consultation with the maintaining agency.
  - 3.3.2 Existing official acronyms or short names should be used as tokens.
  - 3.3.3 Official translated versions receive a label where a standard language code is added, e.g. DDC-fr. This is necessary

since translated versions are rarely fully equivalent. Other translations, if registered, will be assigned an alternative name.

○ 3.4 **Specification of scheme versions**

- 3.4.1 DCMI will register multiple versions of schemes if they appear to be important and/or it is requested by a user applying for registration.
- 3.4.2 Versioned schemes should be registered and used when there is a considerable probability that databases exist which apply terms and classes belonging to older versions of the scheme.
- 3.4.3 The official version of the scheme used should be indicated like in the following examples: DDC21, DDC21ab-fr (abridged DDC version 21 in French), MSC2000.

---

Related links:

[Stuart Sutton's latest version](#)

[Draft list of candidate vocabularies](#)

[Traugott Koch](#) ([Traugott.Koch@ub2.lu.se](mailto:Traugott.Koch@ub2.lu.se))

Created: 2001-05-11

Last update: 2002-02-13



Metadata associated with this resource: <http://dublincore.org/usage/documents/vocabulary-guidelines/index.shtml.rdf>

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## Vocabulary and Encoding Scheme Registration

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The goal of this application is the establishment of a registry of vocabulary and encoding schemes. The DCMI does not approve vocabulary and encoding schemes, but acknowledges formally maintained schemes as suitable for use with DC metadata. DCMI maintained schemes have the status "Recommended". Encoding schemes for other DCMES elements than Subject can have the status "Conforming" or "Recommended".

Please direct questions,  
comments and suggestions to:

[Harry Wagner](#)

Dublin Core Metadata Initiative  
OCLC Office of Research

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**Sender:** A mailing list for the Dublin Core Metadata Initiative's Usage Working Grou <DC-USAGE@JISCMail.AC.UK>  
**From:** [Andy Powell](#) <a.powell@UKOLN.AC.UK>  
**Subject:** [Re: Agenda for 12-13 May - first draft](#)  
**In-Reply-To:** <20020415164250.A692@LEPIDUS>  
**Content-Type:** TEXT/PLAIN; charset=US-ASCII

On Mon, 15 Apr 2002, Thomas Baker wrote:

> 7. Structured Values (Andy)  
 >  
 > -- Journal Article Bibliographic Citation (DCSV proposal from the  
 > Citation Working Group)

I plan to send a more complete version of this message to dc-architecture to initiate some discussion related to structured values and DCSV. For info, this is my take on the current situation...

1) The current DCSV specification is confusing in associating the DCSV label with two different syntaxes - one based on text strings, one based on XML.

2) This confusion is carried over into the other specs built on DCSV - DC-Point, DC-Box, and DC-Period.

3) My feeling is that the DCSV label should only be associated with the text encoding and that references to the XML encoding should be removed from the relevant specs.

4) My feeling is that we need to develop some rules for the content of structured values. I have suggested rules in the past along the lines of

the structured value, taken as a whole, should fall within the semantics

of the containing element

The current specs for DC-Point, DC-Box and DC-Period fall cleanly within this rule. I suspect that the DC-citation spec does also. I'm less convinced that the recent DC-Agent structured value proposal does.

So... various actions fall out of this (IMHO).

- a) Update the DCSV spec
- b) Update the DC-Point, DC-Box and DC-Period specs
- c) Develop new guidelines/spec for rules about structured values (possibly as part of DC-usage documentation?)

I don't know who can take these actions on!

(Note: none of this suggests that you can't use XML to encode structured values... just that if you do, then you shouldn't label it as being DCSV).

Andy

--

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Resource Discovery Network <http://www.rdn.ac.uk/>

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# A Journal Article Bibliographic Citation Dublin Core Structured Value

## Dublin Core Metadata Initiative - Citation Working Group

28 March 2002

**This version:** <<http://epub.mimas.ac.uk/DC/citdcsv-20020328.html>>

**Previous version:** This is the first version for review

**Latest version:** <<http://epub.mimas.ac.uk/DC/citdcsv.html>>

**Author:** Ann Apps <[ann.apps@man.ac.uk](mailto:ann.apps@man.ac.uk)>

MIMAS, University of Manchester, UK

**Status of this document:** *Under Review*

**Description:** This document contains a proposal by the DCMI Citation Working Group [1] to the Dublin Core Usage Board for a method of encoding a Dublin Core compliant set of metadata properties for recording bibliographic citation information about journal articles within a string value. This proposed new encoding scheme, which employs a Dublin Core Structured Value, would become an alternative encoding scheme for *dc:identifier* and the proposed new element refinement *dcterms:citation* [2].

---

## Summary

Elements	<b>dc:identifier</b> and <b>dcterms:citation</b> [2]
Qualifier	New encoding scheme: <b>DCMI Cite</b> , a DCSV as defined in section 3.2
Source of Proposal	DCMI Citation Working Group [1]
Justification	See sections 2 and 5

Overlap with other terms	None
Impact and Interoperability	There will be existing DC applications which have used differing methods for solving this problem, but there is no existing best practice
Best practice recommendations	See section <a href="#">3.3</a>
Examples	See section <a href="#">4</a>

---

# 1. Introduction and Objective

This document describes a proposal to the Dublin Core Usage Board for a recommendation to:

- Provide a Dublin Core compliant set of metadata properties for recording bibliographic citation information about journal articles
- Suggest an encoding mechanism for this set of properties within a string value

The suggested encoding scheme is a Dublin Core Structured Value (DCSV) [\[3\]](#) called *DCMI Cite*. This encoding scheme could be used as a qualifier for *dc:identifier* and for the proposed new element refinement *dcterms:citation* [\[2\]](#).

The purpose of these bibliographic citation properties is primarily to support resource discovery. They would assist with discovering the location of a resource and thus could support citation linking. In addition they could be used for resource description to support capture of the complete bibliographic record for a journal article.

One objective of this proposal is to provide a mechanism for encoding journal article bibliographic citation information within a single text string. This encoding method will be suitable for capturing this information within a *meta* tag in the *head* section of an HTML or xhtml document.

This proposal is a companion to the proposal for "A *citation* Element Refinement for *dc:identifier*" [\[2\]](#), but neither proposal depends on the other.

# 2. Bibliographic Citations

It should be noted that the bibliographic information described here is the complete bibliographic record for the resource itself. This proposal is not concerned with



capturing citation linking data for a related resource.

## 2.1 Journal Article Bibliographic Citation Properties

The properties generally used to capture the bibliographic citation of a journal article may be identified at three distinct levels: the **Journal** level; the journal **Issue** level (which may also include a journal Volume level); and the individual **Article** level. The following table indicates these properties according to this hierarchical level, and where appropriate which Dublin Core element is already available to record the information.

Level	Property	DC Element
Journal	Journal Title	
	Journal Abbreviated Title	
	Journal Identifier	
Issue	Volume	
	Number	
	Chronology	
Article	Article Title	dc:title
	Author	dc:creator
	Publisher	dc:publisher
	Publication Year	dc:date
	Publication Date	dc:date
	Identifier	dc:identifier
	Pagination	

*Notes:*

- Journal Abbreviated Title may adhere to a published scheme, eg. ISO4, Chemical Abstracts, Index Medicus, Vancouver, World List. Often it is an abbreviated journal title which is included in a reference to an article rather than the full title of the journal.
- A journal identifier would usually be an ISSN.
- Issue Numbers are denoted differently in different journals, eg. `part'. Some journals are arranged by year, eg. 12/1999, in which case the year is effectively the volume.
- Chronology is the `cover date' as it appears on the cover of a printed journal. This may be different from the actual date of publication of the issue, which would be encoded in *dc:date/dct:issued*.

- Chronology could be denoted by a season or quarter.
- An article identifier could be: a URL to the actual article; a DOI; an article-level SICI; etc. Note that the only scheme for *dc:identifier* ratified by Dublin Core is URI, but that global standard identifiers such as ISSN and DOI can be encoded as URIs.
- Other information about an article may be recorded within other elements of the DC record. For instance, its abstract could be captured in *dc:description*, its language in *dc:language* and keywords or classification information in *dc:subject*.
- Only the most common bibliographic information about an article has been included here. A Journal Issue could also have an identifier, such as an issue-level SICI, but this is less commonly used.

It is apparent from this table that there is currently no method within Dublin Core to capture the bibliographic citation of a journal article, except by recording the information in an ad hoc way within a *dc:description* element, or by capturing the metadata in a hierarchical manner.

## 3. The Proposal

### 3.1 Proposed Encoding for Journal Articles

The proposed recommended method for capturing bibliographic citation information about journal articles in Dublin Core is as follows:

- The bibliographic citation information for a journal article should be captured within a *dc:identifier* element or within a proposed *dcterms:citation* element refinement, encoded using a **DCMI Cite DCSV**.
- This information may include:
  - Journal Title, Journal Abbreviated Title, Journal Identifier
  - Volume, Issue Number, Chronology
  - Pagination
- In addition a Journal Identifier or a Journal Issue Identifier may be included in a *dcterms:isPartOf dc:relation* element refinement
- All other information about an article, such as its title and authors, should be included as appropriate within the 15 elements of the basic Dublin Core Metadata Element Set

The proposed *DCMI Cite DCSV* would be suitable for encoding bibliographic citation information within a *meta* tag in the *head* section of an HTML or XHTML

document, as well in XML/RDF values.

## 3.2 Proposed *DCMI Cite* Encoding Scheme

The proposed recommendation requires a new encoding scheme, *DCMI Cite* which follows the recommended Dublin Core Structured Value (DCSV) [\[3\]](#) syntax for encoding a list of labelled values within a text string:

### DCMI Cite

**Name:** DCMICite

**Label:** DCMI Cite

**Definition:** DCMI Cite identifies a journal article by its bibliographic citation information.

The proposed labels which may be encoded within *DCMI Cite* are:

### Journal Title

**Label:** journalTitle

**Definition** The title of a journal, ie. a serial publication. This may include the sub-title, but not extra information such as its affiliation with a society.

### Abbreviated Journal Title

**Label:** journalAbbreviatedTitle

**Definition:** The abbreviated title of a journal, such as it may appear in a reference list It may follow some recommended scheme such as ISO4, Chemical Abstracts, Index Medicus, Vancouver, World, but the scheme would not be encoded within *DCMI Cite*. List.

### Journal Identifier

**Label:** journalIdentifier

**Definition:** A global standard identifier of a journal. This would usually be an ISSN, but may follow some other standard such as CODEN.

### Volume

**Label:** journalVolume

**Definition:** A number of a journal volume, in roman or arabic form, as it appears on the cover.

### Issue Number

**Label:** journalIssueNumber

**Definition:** The issue, part or number which denotes a particular issue of a journal, as it appears on the cover. In many cases this indicates a part of a journal volume.

### Chronology

**Label:** journalIssueDate

**Definition:** The formal date of a particular issue of a journal, as it appears on the cover.

## Pagination

**Label:** pagination

**Definition:** The inclusive page range of an article within a particular journal issue, from first to last page. (For an electronic-only journal article, this property could record an article number.)

Note that this recommendation is based on the print model of journal publishing. At the present time, recording the position of an article within a printed journal is the generally used model and a requirement for reference linking. Most journals are still published according to this model, and many cited articles appear in older journals which were originally published in print. Where articles published in electronic-only journals are cited the pagination and possible the issue numbering information is irrelevant, though it would by necessity be replaced by some other numbering. This issue will be considered in the future by the DCMI Citation Working Group.

The DCSV syntax, to be used for *DCMI Cite* defines a list of 'label=value' pairs embedded within a text string. This syntax is a DCMI recommendation.

- equals-signs (=) separate plain-text labels of structured value-components from the values themselves
- semi-colons (;) separate value-components within a list
- equals-signs (=) and semi-colons (;) required within a value should be backslash (\) escaped

## 3.3 Best Practice Encoding

In the spirit of Dublin Core all the introduced properties are optional and repeatable with no prescribed order. However, common sense indicates that a bibliographic citation must contain sufficient information to identify a resource, and that the citation should not include conflicting details. This is generally understood to be a minimum of journal identification, journal volume and article start page, although this may vary depending on the organisation of the journal, eg. some journal issues always number from page one making the issue number significant. In order to satisfy the 'dumb-down' principle it is recommended that a 'DCMI Cite' contain sufficient details to identify the resource. Taking these considerations into account, it is recommended that:

- A citation should contain at least the minimum information to identify the article
- A citation should contain at least one of: journalTitle;

journalAbbreviatedTitle; or journalIdentifier

- The only properties which may be repeated are: journalAbbreviatedTitle; journalIssueNumber; and journalIssueDate

It is further suggested that:

- journalIdentifier should be used within a citation only when journalTitle or journalAbbreviatedTitle are not known. If a journal identifier, such as ISSN, is required in addition to the journal title it should be included in a *dcterms:isPartOf* element.
- Repeated journalIssueDate or journalAbbreviatedTitle should not specify conflicting information. It would be sensible to repeat journalIssueDate only where the information was required in different formats, eg. Spring 2001 and 2001-04.
- Repeated journalIssueNumbers could be used for 'parts of parts', eg. Volume 6, Issue 9, Part 2. Note that an alternative representation of this example could be: Volume 6, Issue 9/2.

## 4 Examples

### 4.1 A Journal Article Metadata Record

This is an example of a Dublin Core record for a journal article including its bibliographic citation information. This example is independent of any syntax recommendation apart from the DCMI Cite DCSV. Any other syntax and any line breaks used in this example are for clarification purposes only.

```
dc:title = Studying E-journal User Behavior Using Log Files
dc:creator = Lu, Y
dc:creator = Apps, A
dc:subject(scheme=DDC) = 020
dc:description = Statistical methods for analysing e-journal user
behaviour.
dc:publisher = Pergamon
dcterms:issued(scheme=W3CDTF) = 2000
dc:type(scheme=DCMIType) = text
dcterms:medium(scheme=IMT) = application/pdf
dc:identifier(scheme=URI) = doi:10.1060/xyz.abc
dc:identifier(scheme=URI) =
urn:sici:07408188(200010)22:3<311:SEUB>2.0.CO;2-X
```

```

dcterms:citation(scheme=DCMICite) =
  journalTitle=Library and Information Science Research;
  journalAbbreviatedTitle=LISR;
  journalVolume=22;
  journalIssueNumber=3;
  journalIssueDate=October 2000;
  pagination=311-338;
dc:language(scheme=RFC1766) = en
dcterms:isPartOf(scheme=URI) = urn:issn:0740-8188
dc:rights = © Elsevier, 2000

```

## 4.2 An *xhtml* Example

This is an example of two properties within an *xhtml* metadata record for the same journal article which define its bibliographic citation. The first property, *dcterms:citation*, uses the *DCMI Cite* DCSV encoding scheme. [Note that line breaks are for clarification only.]

```

<meta name="dcterms:citation" scheme="DCMICite"
content="journalTitle=Library and Information Science Research;
journalAbbreviatedTitle=LISR;
journalVolume=22;
journalIssueNumber=3;
journalIssueDate=2000;
pagination=311-338;" />
<meta name="dcterms:isPartOf" scheme="URI"
content="urn:issn:0740-8188" />

```

## 5. Other Possible Solutions

### 5.1 Using *dc:description*

The advantages of the *dc:description* solution would be to retain the essential simplicity of Dublin Core, and that the information would be presented to someone discovering the metadata in a human-readable way. The latter point is important, and any solution should provide data to a human end-user in a readily understandable form - they may wish to find the article on a library shelf. The disadvantage of using

*dc:description* is that it becomes difficult to perform further machine processing on the discovered metadata, which may be required for discovery of the location of the article.

## 5.2 A Hierarchical Solution

It would be possible to partially record the information in a hierarchical way, using a *dc:relation* element to point from an article record to a record for its containing issue, and similarly from the issue record to that for the containing journal. There are two drawbacks to this solution:

- There is no obvious DC element in which to encode the pagination information, which pertains to the article itself, not to the containing journal issue.
- It may be that there is insufficient knowledge of the containing journal and issue to allow for discovery of the article from such hierarchical metadata. An end-user would expect to receive all the information about an article following a search in one piece.

It could be thought that including information about a journal in the metadata for an article breaks the 'one-to-one' rule. However the objective here is not to provide information about the journal, but rather to provide a bibliographic citation of an article, which effectively identifies it.

## 5.3 An Application Profile

Another possible method for including in a metadata record information which doesn't fit obviously into one of the 15 elements of the Dublin Core element set (DCMES), or the ratified qualifiers, is to introduce application specific elements and qualifiers within an application profile<sup>[4]</sup>. Thus an option would be to define a 'citation' profile and include new elements such as 'journal title' within it. However, capturing bibliographic citation information seems to be a generic, cross-domain problem. The bibliographic citation of a journal article is fairly fundamental information, required within many subject areas, at least for academia and researchers. It is information which is becoming increasingly significant with the implementation of linking technologies. Therefore it would seem sensible to have a best practice convention for capturing journal article citation information within Dublin Core metadata using existing elements, rather than a proliferation of application profiles attempting to solve the same problem in different ways with new application specific elements. However, the bibliographic citation properties

identified within this proposal, and suggested for encoding within a *DCMI Cite* DCSV would form the basis of a Citation Profile suitable for encoding in XML or RDF.

## 5.4 OpenURL

The emerging OpenURL [\[5\]](#) standard may provide an alternative encoding scheme for capturing journal article bibliographic citation information within a single string. However, there are currently reasons for not recommending OpenURL as a citation encoding scheme:

- OpenURL is not yet a standard and so is not yet stable. Although it would be possible to make recommendations on using the original draft version of OpenURL, now "pinned down" as version 0.1, it is likely that Version 1.0 will be different. The current timescale for OpenURL is for the NISO Committee to produce a standard for voting by NISO members by Autumn 2002.
- It is possible that OpenURL Version 1.0 may not include all the properties of a journal article which have been identified in this proposal. Metadata included in an OpenURL is for linking purposes, rather than for metadata description.

When OpenURL becomes a NISO/ANSI standard, the DCMI Citation Working Group will produce guidelines for its use as a possible value for a *citation* identifier. But it would be an alternative to the proposed *DCMI Cite* DCSV rather than a replacement for it.

- The proposed *DCMI Cite* DCSV is relatively human-readable, whereas an OpenURL is more cryptic. OpenURL is suitable only for situations where the citation is for machine processing.
- In situations where bibliographic citation information is to be keyed manually, it would be difficult to use an OpenURL, whereas using *DCMI Cite* would be straightforward. It is possible that this keyed information would also be for machine processing, so a plain text citation would be unsuitable.

## 5.5 Previous Work

How to record a bibliographic record for a journal article has previously been discussed by an earlier Dublin Core Citation Working Group, whose recommendation made after the DC7 Workshop was 'Citation Qualifier Proposal - 2000' [\[6\]](#), which also includes details of a vote by the general DC community at the plenary session at DC8 Workshop.

## 6. References



- [1] DCMi Citation Working Group. <http://www.dublincore.org/groups/citation>
  - [2] A *citation* Element Refinement for *dc:identifier*  
<http://epub.mimas.ac.uk/DC/citproposal.html>
  - [3] Cox, S. and Ianella, R. (2000) DCMi DCSV: A syntax for writing a list of labelled in a text string. <http://dublincore.org/documents/dcmi-dcsv/>
  - [4] Heery, R. and Patel, M. (2000) Application profiles: mixing and matching metadata schemas. *Ariadne* **25**, September 2000.  
<http://www.ariadne.ac.uk/issue25/app-profiles>
  - [5] NISO Committee AX: Development of an OpenURL Standard.  
<http://library.caltech.edu/openurl/>
  - [6] Citation Qualifier Proposal - 2000.  
<http://www.dublincore.org/groups/citation/citqualifier2000.html>
-



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**Sender:** Electronic discussion list to support the efforts of the Agent working grou <DC-AGENTS@JISCMail.AC.UK>

**From:** "Clayphan, Robina" <Robina.Clayphan@BL.UK>

**Subject:** Re: Qualifiers for Creator, Contributor, Publisher

**Comments:** To: Dublin Core Libraries Application Profile <DC-LIBRARIES-AP@JISCMail.AC.UK>, "DC-LIBRARIES@JISCMail.AC.UK (E-mail)" <DC-LIBRARIES@JISCMail.AC.UK>

**Content-Type:** text/plain; charset="iso-8859-1"

Dear Colleagues,

Apologies for multiple copies.

This draft document is one of two proposals answering the third milestone defined for the Agents Working Group at the DC 2001 conference [1] and referred to in Rebecca's earlier email.

Milestone: Develop a list of CCP (Creator / Contributor / Publisher) qualifiers

Description: Develop a list of CCP (Creator / Contributor / Publisher) qualifiers. This would likely use the MARC relator codes as a point of departure, and define such things as agent refinements, classes, types and roles

## Introduction

This proposal has been discussed on the DC Libraries Application Profile list but is not intended solely for that domain. Comment is invited from other domains.

As a result of discussion it was decided to separate the issue of agent

Roles from other agent-related data and offer two proposals. One will describe a means of recording a Role for an agent and another will suggest a means to encompass other information about the resource that is also related to the agent. This document is the second of these and describes a Dublin Core Structured Value (DCSV) [2] for use as an encoding scheme with the Creator, Contributor or Publisher elements.

It should be noted that unlike previous agent proposals, this DCSV is NOT an attempt to describe the agent - that work is being progressed elsewhere in the Agents Working Group. This DCSV aims to enhance resource discovery in two ways: by adding further markup and therefore specificity to CCP values (e.g. parts of names); by including further agent-related information about the resource (e.g. affiliation at the time the resource was created).

Previous discussion of agent information had identified four Types of Agent: personal, corporate, instrument (variously called entity, service, automata) and event. Although each of these was assumed to have different components, further consideration indicated that, given some latitude in the definitions, the same group of components could serve for all types. All the components in the DCSV are optional and those not relevant to any particular type of agent can be ignored.

-----

## Proposed DCMI Agent Detail Encoding Scheme

The proposal requires a new encoding scheme, DCMI Agent Detail, which follows the Dublin Core Structured Value syntax [2] for encoding a list of labelled values within a text string. The Dublin Core Structured Value definition has the status of a DCMI recommendation.

All components are optional. Different domains are free to specify which components are desirable for the types of agent identified as valuable within that domain. For example, the Library Application Profile would provide guidance as to which components to use for agents appropriate to library resources. Examples are given after the description of the components.

### DCMI Agent Detail

Name: DCMIAgentDetail

Label: DCMI Agent Detail

Definition: DCMI Agent Detail contains additional information about the agent in its capacity as Creator, Contributor or Publisher of the resource being described. It is not intended to describe the agent.

The proposed labels which may be encoded within DCMI Agent Detail are:

### Family Name

Label: familyName

Definition: The family name or surname of the agent.

Note: Components for parts of names are given to avoid dependence on parsing the value based on punctuation and the difficulties that can arise

due to different cultural norms. Specific markup of values gives greater flexibility to users of the data for filing uses and enhanced resource discovery.

#### Given Names

Label: givenNames

Definition: The personal name or names of the agent.

#### Name

Label: name

Definition: The full name of the agent, personal, corporate or of another type, expressed in the manner recommended by any particular domain.

Note: An undifferentiated name component is included to accommodate names that do not require the family name/given name sub-elements or applications that choose not to use the sub-elements. In the latter case different domains are free to specify their own guidance as to how the value should be entered.

#### Affiliation Location

Label: affiliationLocation

Definition: The affiliation or location of the agent at the time they made their contribution to the described resource. This can be the name of an institution in the case of a personal agent or an address or geographic name in the case of a publisher or corporate agent.

Note: It is not envisaged that this would be updated, the rationale being that e.g. the affiliation of the author at the time of the creation of the resource is an attribute of some significance to the resource and remains the same for the resource even if the agent subsequently moves on.

#### Description

Label: description

Definition: To specify the type or nature of the agent. For example to specify an event or instrument/automata/service. (See examples)

#### Date Time

Label: dateTime

Definition: The date and time at which the agent executed its role in the life of the resource.

Note: This is regarded as important for event-type agents where the date the agent executed the given role may differ from the date the resource was created or issued.

#### Identifier

Label: identifier

Definition: An identifier for the agent.

Note: This component is included to allow for the inclusion of an agent identifier and/or to enable linking to another record describing the agent held separately from the record for the resource.

-----

Role was considered as a component of the DCSV. A separate proposal is being submitted to include role values as element refinements for the Agent

elements. This approach will be re-evaluated if necessary.

Jurisdiction has been proposed as an additional component of the DCSV. The following definition is put forward here for discussion and clarification.

Label: jurisdiction

Definition: The local, provincial, regional, national or supranational authority to which a corporate body belongs.

Note: For example, Jurisdiction may be "Australia" when Name is "Department of Finance and Administration".

#### DCSV Examples

These examples assume that Role values have been approved as CCP element refinements. Encoding schemes for the Identifier component within the DCSV are shown using the namespace convention which may or may not be an acceptable usage within a component. Line breaks are for the sake of clarity only.

Example 1 (HTML). Showing a person as creator, an organisation as sponsor and a publisher.

```
<meta name="DC.Creator.author"
scheme="DCMIAgentDetail"
content="familyName=Clayphan;
givenName=Robina;
affiliationLocation=The British Library;
identifier=AAAA:xxxx">
<meta name="DC.Contributor.sponsor"
scheme="DCMIAgentDetail"
content="name=Some Organisation;
affiliationLocation=London, England;
identifier=BBBB:yyyy">
<meta name="DC.Publisher" scheme="DCMIAgentDetail"
content="name=Some Publisher;
affiliationLocation=London, England;
identifier=CCCC:zzzz">
```

The following examples are guesses at how other domains would use the DCSV for the types of agent that have been mentioned in past discussions - principally the instrument/automata/service agent and event agent, which equates to conferences in current library usage. Role qualifiers have not been entered in either example. Guidance and examples are sought from other domains.

Example 2: showing an instrument/automata/service agent.  
(This is for a sound recording of a steam engine.)

```
<meta name="dc:Contributor"
scheme="DCMIAgentDetail"
content="name=The Flying Scotsman;
description=Steam Engine;
identifier=GNER:4472">
```

Example 3: showing an event agent as contributor.

```
<meta name="dc:Contributor"
scheme="DCMI-AgentDetail"
content="name=Glastonbury Festival 2000;
affiliationLocation=Glastonbury, UK;
description=Music and performing arts festival;
dateTime=2000-06">
```

Regards,  
Robina Clayphan

- 1 <http://dublincore.org/groups/agents/>
- 2 <http://dublincore.org/documents/2000/07/28/dcmi-dcsv/>

-----  
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**Title:** **DCMI DCSV: A syntax for writing a list of labelled values in a text string**

**Creator:** [Simon Cox](#)

**Creator:** [Renato Iannella](#)

**Date Issued:** 2000-07-28

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**Latest version:** <http://dublincore.org/documents/dcmi-dcsv/>

**Status of document:** This is a DCMI [Recommendation](#).

**Description of document:** We describe a method for recording lists of labelled values in a text string, called Dublin Core Structured Values, with the label DCSV. The notation is intended for structured information within attribute values in markup-languages such as HTML and XML. This is likely to be useful in recording complex element values in metadata systems based on the qualified Dublin Core model.

**NOTICE TO IMPLEMENTORS:** The syntax examples included in this document are provisional, and are currently under review as part of the DCMI work on recommending coordinated syntax recommendations for HTML, XML, and RDF. These recommendations and minor editorial changes in this document can be expected to take place in the near future. **Note that the use of "=" as a separator is a change from earlier versions of this specification which used ":" in the same position.** This change was considered desirable because the ":" character occurs frequently within strings which are likely to be used as names and values. Using "=" as a separator reduces the need to escape characters in the data.

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## Introduction

It is highly desirable to be able to encode or *serialise* structured values within a plain-text string. Some generic methods are in common use. Inheriting conventions from natural languages, commas (,) and semi-colons (;) are frequently used as list separators. Similarly, comma-separated-values (CSV) and tab-separated-values (TSV) are common export formats from spreadsheet and database software, with *line-feeds* separating rows or tuples. Dots (.) and dashes (-) are sometimes used to imply hierarchies, particularly in thesaurus applications. The eXtensible Markup Language [[XML](#)] provides a general solution, using tags contained within angle brackets (<, >) to indicate the structure.

A number of named encoding schemes use punctuation characters within a text string to indicate specific components. For example, a colon (:) terminates the protocol label, and slashes (/), question-marks (?), ampersands (&) and hashes (#) are used to separate other fields in identifiers coded as URI's [[URI](#)]. Colons (:) separate specified labels from values within a field, and semi-colons (;) separate fields within a personal



description according to a common implementation of vCard [[vCard](#)]. Hyphens are used to separate fields in a date according with the W3C profile of ISO8601 [[W3C-DTF](#)]. For some schemes - vCard and W3C-DTF, for example - the punctuation indicates a very formal structure to the value, and is expected to be parsed automatically.

Element *attributes* in markup languages, such as HTML [[HTML4](#)] and XML [[XML](#)], provide a position for recording data. For some "empty" elements - such as the <IMG> and <META> elements in HTML - attributes are the only place to hold data. In other cases there may be good reasons to store data in element attributes rather than element content. For example, fragments of XML can be included in the <HEAD> of a HTML document, and will be safely ignored by most client software (eg browsers) *provided the elements have no content*. This syntax trick can be used to embed XML-RDF encoded data safely in current versions of HTML [[RDF-in-HTML](#)].

Future versions of HTML are expected to overcome these limitations by allowing general XML documents to be included [[XHTML](#)]. Nevertheless, there is strong interest in using HTML <META> elements to record data with more structure than normally implied by a plain-text string, in particular to record metadata according to the qualified Dublin Core model [[Q-DC-HTML](#)].

However, the use of element attributes for storing data has some technical limitations:

1. attributes may occur no more than once
2. values are constrained to a set of types which restricts the permissible character-strings [[HTML4](#)] in some contexts. Use of XML's angle-bracket delimiters (<, >) and various other punctuation characters is only valid in certain cases (i.e. when the content type is CDATA), and is only generally reliable using escape-mechanisms (i.e. as *character entities*). In general, strings containing these characters are prone to misinterpretation by some user-agents (e.g. browsers).

Note that there is no intrinsic way to indicate structure within the values of attributes of HTML elements.

Our intention in this recommendation is to define a compact human-readable data-structuring method for HTML attribute values of content type CDATA, avoiding certain punctuation characters which are prone to cause difficulties in some encoding environments. The notation should normally be used only when no other suitable scheme is available. It is based on methods used and found successful elsewhere, but is more generalised than the preceding standards. It may be used as the basis of profiles designed to encode particular data types [[Profiles](#)].

# Structured Values - the DCSV scheme

To allow the recording of generic **Structured Values**, we introduce the Dublin Core Structured Values (**DCSV**) scheme.

We distinguish between two types of substring - *labels* and *values*, where a label is the name of the type of a value, and a value is the data itself. Furthermore, we allow a complete value to be disaggregated into set of *components*, each of which has its own label and value. A value that is comprised of components in this way is called a *structured value*.

Punctuation characters are used in recording a structured value as follows:

- equals-signs (=) separate plain-text labels of structured value-components from the values themselves
- semi-colons (;) separate (optionally labelled) value-components within a list
- dots (.) indicate hierachical structure in labels, if required.

The labels and the component values themselves each consist of a text-string. The intention is that the label will be a word or code corresponding to the name of the value-component. Labels may be absent, in which case the entire sub-string delimited by semi-colons (;) or the end of the string comprise a component value.

The following patterns show how structured values may be recorded in strings using DCSV:

```
"u1; u2; u3"
"cA=v1"
"cA=v1; cB.part1=v2; cB.part2=v3"
"cA=v1; u2; u3"
```

where **u1**, **u2** and **u3** are unlabelled components, **cA** and **cB** are the labels of Structured Value components, **part1** and **part2** are sub-components of **cB**, and **v1**, **v2** and **v3** are values of the components.

The use of specific punctuation characters in DCSV coded values means that care must be exercised if these characters are to be used directly within strings which comprise the content (either labels or values) of the components. For DCSV, therefore, when an equals-sign (=), or a semi-colon (;) is required within the value, the characters are escaped using a backslash, appearing as \= \;. There should be no ambiguity regarding the dot, full-stop or period (.) within strings: when it is part of a label, a dot indicates some hierachy; when part of a value, it has the conventional meaning for the context. This method of escaping special characters largely preserves

readability and the ability to enter DCSV coded metadata values easily using a text-editor if required. Software written to process DCSV coded values must make the necessary substitutions.

Note that in HTML the double-quote (") character can be used directly within a CDATA attribute value if the full string is delimited by single-quotes ('), but in XML the double-quote must be encoded as a character entity in element attributes.

As there is no explicit grouping mechanism, DCSV can only be used to record a list. DCSV is only intended to be used for relatively simple structured values, probably as an interim approach, pending more general support for syntaxes such as XML which allow recording of more complex hierarchical structures. However, it is more compact than the XML equivalent, and is more easily read and constructed in some common contexts, such as within HTML <meta > elements.

## Parsing DCSV

A simple method can be used to parse metadata values recorded according to the DCSV scheme. For a single value recorded using the DCSV scheme:

1. split the text-string into a list of substrings on any unescaped semi-colons (;); if no semi-colon is present, there is a single substring
2. split each substring into its (label,value) on any unescaped equals-signs (=); if no = is present, the label is empty
3. within each value replace the escaped characters with the actual character required.

A short Perl program which performs this parsing operation is included at the end of this recommendation.

## Examples

```
"name.given=Renato; name.family=lannella; employer=DSTC; Contact=Level  
7, Gehrman Labs, The University of Queensland, Qld. 4072, Australia"  
"rows=200; cols=450"
```

The DCSV scheme provides useful support for the representation of complex values for metadata elements in HTML, while remaining fully compatible with all commonly used tools (browsers, editors, metadata harvesters). When used in this way "DCMIDCSV" or the name of one of its derivatives can be noted as the value of the **SCHEME** attribute of the HTML <META> element as shown in the following

examples of qualified Dublin Core metadata:

```
<META NAME="DC.Contributor" SCHEME="DCMIDCSV"
CONTENT="name.given=Eric; name.family=Miller;
employer=OCLC; height=170 cm">
<META NAME="DC.Format" SCHEME="DCMIDCSV"
CONTENT="rows=200; cols=450">
<META NAME="DC.Coverage.spatial" SCHEME="DCMIBOX"
CONTENT="name=Western Australia; northlimit=-13.5;
southlimit=-35.5; westlimit=112.5; eastlimit=129">
<META NAME="DC.Coverage.spatial" SCHEME="DCMIPOINT"
CONTENT="name=Bridgnorth, Shropshire, U.K.; east=372000;
north=293000; units=m; projection=U.K. National Grid">
<META NAME="DC.Date" SCHEME="DCMIPERIOD"
CONTENT="name=Perth International Arts Festival, 2000;
start=2000-01-26; end=2000-02-20;">
```

## Sample Code for parsing DCSV coded values

The following Perl program reads a DCSV coded string entered on stdin, and prints a formatted version of the structured result. This code is provided for demonstration purposes only and contains no error-checking.

```
#!/usr/local/bin/perl

use strict

print "Enter string to be parsed:\n";

my $string = join("<STDIN>");

print "\nString to be parsed is [$string]\n";

# First escape % characters
$string =~ s/%/"%.unpack('C',"%")."%"/eg;

# Next change \ escaped characters to %d% where d is the character's ascii code
$string =~ s/\\(.)/"%.unpack('C',$1)."%"/eg;

print "\nEscaped string is [$string]\n";
```

```
# Now split the string into components
my @components = split(/;/, $string);

print "\nComponents:\n";
foreach $component (@components) {

    my ($label, $value) = split(/=/, $component, 2);

    # if there is no = copy contents of $label into $value and empty $label
    if (!$value) {
        $value = $label;
        $name = "";
    }

    # strip whitespace from name string
    $label =~ s/^\s*(\S+)\s*$/$1/;

    # convert % escaped characters back in label string
    $label =~ s/%(\d+)/pack('C',$1)/eg;

    #convert % escaped characters back in value string
    $value =~ s/%(\d+)/pack('C',$1)/eg;

    print "Label [$label] has value [$value]\n";

}
```

## Acknowledgments

John Kunze encouraged us to write up this proposal formally. Kim Covil wrote the perl code. Eric Miller nagged regarding the overlap with XML. Steve Tolkin convinced us to switch to =.

## References

### [DCMI]

*Dublin Core Metadata Initiative*, OCLC, Dublin Ohio.

<http://dublincore.org/>

### [HTML4]

Dave Raggett, Arnaud Le Hors, Ian Jacobs, 1999, *HTML 4.01 Specification*

<http://www.w3.org/TR/html4/>

[Profiles]

*DCMI Box - specification of the spatial limits of a place, and methods for encoding this in a text string* <http://dublincore.org/documents/dcmi-box/>

*DCMI Point - a point location in space, and methods for encoding this in a text string* <http://dublincore.org/documents/dcmi-point/>

*DCMI Period - specification of the limits of a time interval, and methods for encoding this in a text string* <http://dublincore.org/documents/dcmi-period/>

[Q-DC-HTML]

S. Cox, 2000, *Recording qualified Dublin Core metadata in HTML*  
<http://dublincore.org/documents/dcq-html/>

[RDF-in-HTML]

This uses the most compact form of XML-RDF [RDF-syntax], in which all the data occurs as attribute values. In this form several important capabilities are not available, such as multiple (repeated) values. For an example, see Figure 5 in S.J.D. Cox and K.D. Covil, "A web-based geological information system using metadata", Proc. 3rd IEEE META-DATA Conference,

[http://computer.org/conferen/proceed/meta/1999/papers/7/cox\\_covil.html](http://computer.org/conferen/proceed/meta/1999/papers/7/cox_covil.html)

[URI]

T. Berners-Lee, R. Fielding, L. Masinter, 1998 Uniform Resource Identifiers (URI): Generic Syntax RFC2396

<http://www.ietf.org/rfc/rfc2396.txt>

T. Berners-Lee, L. Masinter, and M. McCahill, 1994 Uniform Resource Locators, RFC1738

<http://www.ietf.org/rfc/rfc1738.txt>

T. Berners-Lee, 1994 Universal Resource Identifiers in WWW: A Unifying Syntax for the Expression of Names and Addresses of Objects on the Network as used in the World-Wide Web, RFC1630

<http://www.ietf.org/rfc/rfc1630.txt>

[vCard]

F. Dawson, T. Howes, vCard MIME Directory Profile RFC2426

<http://www.ietf.org/rfc/rfc2426.txt>.

[W3C-DTF]

M. Wolf, C. Wicksteed, 1997, Date and Time Formats

<http://www.w3.org/TR/NOTE-datetime>

[XHTML]

Steven Pemberton and many others, 1999 XHTML 1.0: The Extensible HyperText Markup Language

<http://www.w3.org/TR/xhtml1/>

See also Dave Raggett, HyperText Markup Language Activity Statement

<http://www.w3.org/MarkUp/Activity.html>

[XML]

Extensible Markup Language

<http://www.w3.org/XML/>



Metadata associated with this resource: <http://dublincore.org/documents/2000/07/28/dcmi-dcsv/index.shtml.rdf>

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## Dublin Core Metadata Initiative

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<b>Title:</b>	<b>A Syntax for Writing a List of Labelled Values in a Text String</b>
<b>Creator:</b>	<a href="#">Simon Cox</a>
<b>Creator:</b>	<a href="#">Renato Iannella</a>
<b>Date Issued:</b>	1999-04-30
<b>Identifier:</b>	<a href="http://dublincore.org/documents/1999/04/30/labelled-values-syntax/">http://dublincore.org/documents/1999/04/30/labelled-values-syntax/</a>
<b>Replaces:</b>	Not Applicable
<b>Is Replaced By:</b>	Not Applicable
<b>Latest version:</b>	<a href="http://dublincore.org/documents/labelled-values-syntax/">http://dublincore.org/documents/labelled-values-syntax/</a>
<b>Status of document:</b>	This is a DCMI <a href="#">Note</a> .
<b>Description of document:</b>	A method for recording lists of labelled values in a text string, called Dublin Core Structured Values, with the label DCSV, is described. The notation is intended for structured information within attribute value strings in markup-languages such as HTML and XML. This is likely to be useful in recording complex element values in metadata systems based on the qualified Dublin Core model.

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- 

## 1. Introduction

Element *attributes* in markup languages, such as HTML [[HTML4](#)] and XML [[XML](#)], provide an alternative position to the element *content* for recording data. For some "empty" elements - such as the <IMG > and <META > elements in HTML - attributes are the only place to hold data. In other cases there may be good reasons to prefer element attributes to element content for data. For example, fragments of XML can be included in the <HEAD> of a HTML document, and will be safely ignored by most client software (eg browsers) provided the elements have no content. This syntax trick can be used to embed XML-RDF encoded data safely in current versions of HTML [[RDF-in-HTML](#)].



Future versions of HTML are expected to overcome these limitations by allowing general XML documents to be included [[XHTML](#)]. Nevertheless, there is strong interest in using HTML <META >elements to record data with more structure than normally implied by a plain-text string, in particular to record metadata according to the qualified Dublin Core model [[Q-DC-HTML](#)].

However, the use of element attributes for storing data has a number of technical limitations:

1. attributes may occur no more than once
2. the data must consist of a text-string including no double-quotes (")

These features mean that there is no built-in way to indicate the structure of the data.

Nevertheless, in certain applications, it is highly desirable to be able to encode structured values within a plain-text string. Some generic methods are in common use. Inheriting conventions from natural languages, commas (,) and semi-colons (;) are frequently used as list separators. Similarly, comma-separated-values (CSV) and tab-separated-values (TSV) are common export formats from spreadsheet and database software. Dots (.) and dashes (-) are sometimes used to imply hierarchies, particularly in thesaurus applications.

A number of specific encoding schemes use punctuation characters within the text string to indicate structure. For example, colons (:) terminate protocol labels, and double slashes (//) act as separators for identifiers coded as URIs [[URI](#)]. Colons (:) separate specified labels from values within a field, and semi-colons (;) separate fields within a personal description according to vCard [[vCard](#)]. Hyphens are one of the many characters used to separate fields in a date according with ISO8601 [[ISO8601](#)]. For some schemes - vCard and ISO8601, for example - the punctuation indicates a very formal structure to the value, and is expected to be parsed automatically.

Our intention in this note is to define a generic, self-describing data-structuring method for text-strings, to be used when no other suitable scheme is available. This is based on methods used and found successful elsewhere, vCard in particular, but is more generalised than the preceding standards.

## 2. Structured Values - the DCSV scheme

To allow the recording of generic **Structured Values**, we introduce the Dublin Core Structured Values (**DCSV**) scheme.

We distinguish between two types of substring - *labels* and *values*, where a label is the name of the type of a value, and a value is the data itself. Furthermore, we allow a complete value to be disaggregated into set of *components*, each of which has its own label and value. A value that is comprised of components in this way is called a *structured value*.

Punctuation characters are used in recording a structured value as follows:

- colons (:) separate plain-text labels of structured value-components from the values themselves
- semi-colons (;) separate (optionally labelled) value-components within a list
- dots (.) indicate hierarchical structure in labels, if required.

The labels and the component values themselves each consist of a text-string. The intention is that the label will be a word or code corresponding to the name of the value-component. Labels may be absent, in which case the entire sub-string delimited by semi-colons (;) or the end of the string comprise the component value.

The following patterns show how structured values may be recorded in strings using DCSV:

```
"u1; u2; u3"  
"cA:v1"  
"cA:v1; cB.part1:v2; cB.part2:v3"  
"cA:v1; u2; u3"
```

where `u1`, `u2` and `u3` are unlabelled components, `cA` and `cB` are the labels of Structured Value components, `part1` and `part2` are sub-components of `cB`, and `v1`, `v2` and `v3` are values of the components.

The use of the specific punctuation characters in DCSV coded values means that these characters cannot be used directly within strings which comprise the content (either labels or values) of the components. For DCSV, therefore, when a period, full-stop or dot (`.`) a colon (`:`), or a semi-colon (`;`) is required within the value, the characters are escaped using a backslash, appearing as `\.`, `\:`, `\;`, and the backslash itself is escaped similarly `\\`. This method of escaping special characters largely preserves readability and the ability to enter DCSV coded metadata values easily using a text-editor if required. Software written to process DCSV coded values must make the necessary substitutions.

Note that, the double-quote (`"`) character is a generic case that cannot be used directly within HTML or XML element attributes.

## 3. Parsing DCSV

A simple method can be used to parse metadata values recorded according to the DCSV scheme. For a single value recorded using the DCSV scheme:

1. split the text-string into a list of substrings on any unescaped semi-colons (`;`);  
if no semi-colon is present, there is a single substring
2. split each substring into its (label,value) on any unescaped colons (`:`);  
if no colon is present, the label is empty
3. within each value replace the escaped characters with the actual character required.

A short Perl program which performs this parsing operation is included at the end of this note.

## 4. Examples

```
"name.given:Renato; name.family:Iannella; employer:DSTC;  
Contact:Level 7, Gehrman Labs, The University of Queensland,  
Qld\ 4072, Australia"  
"rows:200; cols:450"
```

The DCSV scheme adds most of the components required for the representation of the qualified DC model in HTML [[Q-DC-HTML](#)][[Q-DC-RDF](#)], while remaining fully compatible with the HTML-4 [[HTML](#)] standard. It thus supports a recording method for qualified Dublin Core, compatible with tools which rely on HTML (browsers, metadata harvesters), but with a clear route for migrating relatively rich information into fully structured notations when appropriate. In this context, DCSV is noted as the value of the

SCHEME

attribute of the HTML

```
<META >
```

element as shown in the folloowing examples:

```
<META NAME="DC.Creator" SCHEME="DCSV"
      CONTENT="name.given:Simon; name.family:Cox;
employer:CSIRO; height:177 cm">
<META NAME="DC.Language" SCHEME="RFC1766" CONTENT="en-AU">
<META NAME="DC.Contributor" SCHEME="vCard" CONTENT="fn:Simon
Cox; org:CSIRO">
<META NAME="DC.Date" SCHEME="ISO8601" CONTENT="1999-04-30">
<META NAME="DC.Relation" SCHEME="URL"
CONTENT="http://www.foo.bar/explication.html">
<META NAME="DC.Format.media" SCHEME="IMT" CONTENT="image/gif">
<META NAME="DC.Format.size" CONTENT="14 kB">
<META NAME="DC.Format.size" SCHEME="DCSV" CONTENT="rows:200; cols:450">
```

## 5. Sample Code for parsing DCSV coded values

The following Perl program reads a DCSV coded string entered on stdin, and prints a formatted version of the structured result. This code is provided for demonstration purposes only and contains no error-checking.

```
#!/usr/local/bin/perl

print "Enter string to be parsed:\n";

my $string = join(' ', <STDIN>);

print "\nString to be parsed is [$string]\n";

# First escape % characters
$string =~ s/%/"%.unpack('C', "%")."%"/eg;

# Next change \ escaped characters to %d% where d is the
character's ascii code
$string =~ s/\\(.)/"%".unpack('C', $1)."%"/eg;

print "\nEscaped string is [$string]\n";

# Now split the string into components
my @components = split(/;/, $string);

print "\nComponents:\n";
foreach $component (@components) {
    my ($name, $value) = split(/:/, $component, 2);

    # if there is no : $value is empty so copy $name
    into $value and empty $name
    if (!$value) {
```

```
    $value = $name;
    $name = '';
}

# strip whitespace from name string
$name =~ s/^\s*(\S+)\s*$/$1/;

# convert % escaped characters back in value string
$value =~ s/%(\d+)/pack('C',$1)/eg;

print "Name [$name] has value [$value]\n";
}
```

---

## 6. Acknowledgments

John Kunze encouraged us to write up this proposal formally. Kim Covil wrote the perl code.

---

## 7. References

### [HTML4]

Dave Raggett, Arnaud Le Hors, Ian Jacobs, 1998, *HTML 4.0 Specification*  
<http://www.w3.org/TR/REC-html40/>

### [ISO8601]

M. Wolf and C. Wicksteed, 1997, *Date and Time Formats*, <http://www.w3.org/TR/NOTE-datetime>

### [Q-DC-HTML]

S. Cox 1999 *Recording qualified Dublin Core metadata in HTML*  
<http://www.agcrc.csiro.au/projects/3018CO/metadata/qdchtml/NOTE-QDCHTML-19991103.html>

### [Q-DC-RDF]

E. Miller, P. Miller, D. Brickley, 1999. *Guidance on expressing the Dublin Core within the Resource Description Framework (RDF)* <http://www.ukoln.ac.uk/interop-focus/activities/dc/datamodel/>

### [RDF-in-HTML]

This uses the most compact form of XML-RDF [RDF-syntax], in which all the data occurs as attribute values. In this form several important capabilities are not available, such as multiple (repeated) values. For an example, see Figure 5 in S.J.D. Cox and K.D. Covil, "A web-based geological information system using metadata", *Proc. 3rd IEEE META-DATA Conference*, [http://computer.org/conferen/proceed/meta/1999/papers/7/cox\\_covil.html](http://computer.org/conferen/proceed/meta/1999/papers/7/cox_covil.html)

### [URI]

T. Berners-Lee, R. Fielding, L. Masinter, 1998 *Uniform Resource Identifiers (URI): Generic Syntax* RFC2396 <http://info.internet.isi.edu/in-notes/rfc/files/rfc2396.txt>

T. Berners-Lee, L. Masinter, and M. McCahill, 1994 *Uniform Resource Locators*, RFC1738  
<http://info.internet.isi.edu/in-notes/rfc/files/rfc1738.txt>.

T. Berners-Lee, 1994 *Universal Resource Identifiers in WWW: A Unifying Syntax for the Expression of Names and Addresses of Objects on the Network as used in the World-Wide Web*,

RFC1630 <http://info.internet.isi.edu/in-notes/rfc/files/rfc1630.txt>.

**[vCard]**

F. Dawson, T. Howes, 1998 *vCard MIME Directory Profile* RFC2426 <http://info.internet.isi.edu/in-notes/rfc/files/rfc2426.txt>

**[XHTML]**

Steven Pemberton and many others, 1999 *XHTML 1.0: The Extensible HyperText Markup Language* <http://www.w3.org/TR/WD-html-in-xml/>

See also Dave Raggett, *HyperText Markup Language Activity Statement* <http://www.w3.org/MarkUp/Activity.html>

**[XML]**

Extensible Markup Language <http://www.w3.org/XML/>



Metadata associated with this resource: <http://dublincore.org/documents/1999/04/30/labelled-values-syntax/index.shtml.rdf>

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## Title:

# DCMI Point Encoding Scheme: a point location in space, and methods for encoding this in a text string

## Creator:

[Simon Cox](#)

## Date Issued:

2000-07-28

## Identifier:

<http://dublincore.org/documents/2000/07/28/dcml-point/>

## Replaces:

<http://dublincore.org/documents/2000/07/11/dcml-point/>

## Is Replaced By:

Not Applicable

## Latest version:

<http://dublincore.org/documents/dcml-point/>

## Status of document:

This is a DCMI [Recommendation](#).

## Description of document:

We introduce DCMI Point for identifying a point in space using its geographic coordinates. Components of the value correspond to the location coordinates in north and east directions, plus optionally elevation, and also allow the coordinate system and units to be specified, and a name if desired. We describe a method for encoding DCMI Point in a text-string, as a profile of DCSV. This notation is intended for recording the value of the DCES element **Coverage**, particularly when using HTML meta elements. We also show an alternative encoding for DCMI Point using XML.

## NOTICE TO IMPLEMENTORS:

The syntax examples included in this document are provisional, and are currently under review as part of the DCMI work on recommending coordinated syntax recommendations for HTML, XML, and RDF. These recommendations and minor editorial changes in this document can be expected to take place in the near future. **Note that the use of "=" as a separator in the DCMI-DCSV encoding is a change from earlier versions of this specification which used ":" in the same position.**

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- [2. Identifying a place - the DCMI Point scheme](#)
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## 1. Introduction

Several methods are available to indicate a *place*. These include, but are not limited to:

- a **name**, normally defined in an identifiable enumeration such as a gazetteer or list of jurisdictional localities
- a unique **geocode**, such as a postal code
- the coordinates of a **point**, using geographic values or some well-defined projection and units
- a set of arcs or faces describing the **polygon** or **polyhedron** comprising the perimeter of the place

- the **limits** of a regular shaped container which encompasses the place, typically a rectangular **box** in two or three dimensions, using geographic values or some well-defined projection and units

The Dublin Core Metadata Element Set [DCMES] includes an element, **Coverage**, the value of which may contain an identifier for a place. If a name or geocode is used then the scheme from which that is selected determines valid values. However, there are no simple, commonly used, notations for the identifiers which use coordinates. Here we define DCMI Point, an identifier which specifies the coordinates of the point location of a place, and describe methods for encoding DCMI Point, as a profile of DCSV [DCSV], and using a fragment of XML [XML]. If an identifier corresponding to an extensive *region* is required, then DCMI Box [BOX] is available for rectangular regions.

## 2. Identifying a place - the DCMI Point scheme

We identify a place using a point location, described using coordinates in an identified cartesian system. The point may correspond to some place within an extensive region, such as the areal or volumetric centroid, but we do not specify the nature of the relationship in this document.

We define the following components to describe the point:

Component	Definition	Default <sup>1</sup>
east	The value of the coordinate of the location measured in the east direction <sup>2</sup>	+/- INF <sup>3</sup>
north	The value of the coordinate of the location measured in the north direction <sup>2</sup>	+/- INF <sup>3</sup>
elevation	The value of the coordinate of the location measured in the vertical direction <sup>2</sup>	+/- INF <sup>3</sup>
units	The units applying to unlabelled numeric values of north, east	signed decimal degrees
zunits	The units applying to unlabelled numeric values of elevation	metres
projection	The name of the projection used with any parameters required, such as ellipsoid parameters, datum, standard parallels and meridians, zone, etc	geographic coordinates on Earth for north, east; height above mean-sea-level for elevation.
name	A name for the place <sup>4</sup>	-

<sup>1</sup> All components are optional.

<sup>2</sup> Values are expressed as a text-string representing a number. Units should be included using conventional (SI) notation, unless the relevant **units** or **zunits** component is present. However, if units are given as part of any value, then for this component these override those given by **units** or **zunits**.

<sup>3</sup> If this component is absent then the value is undefined. Processors performing numeric comparisons are recommended to set values corresponding to maximally inclusive matching, i.e. the location is a line if one coordinate is missing, and a plane if two are missing.

<sup>4</sup> In this context the name is non-normative. In the case of a conflict, the place identified by the coordinate values takes precedence. The name is provided for user convenience only.

## 3. Encoding DCMI Point

The components of a DCMI Point identifier have no meaning when disaggregated, since in any particular instance it is the complete set which acts as the *identifier*. Thus, use of DCMI Point to identify a place requires that the components are linked together. For systems in which data is encoded using a limited character set, this is conveniently accomplished by packaging the components into a single text-string. Various serialisation syntaxes are available, including DCSV [DCSV] and XML [XML].

In normal usage, the unadorned token "DCMI Point" should be taken to refer to the encoding using DCSV.

### 3.1 DCSV encoding

Writing DCMI Point using DCSV notation is straightforward, using the component names defined above. A DCMI Point value appears as follows:

```
east=v1; north=v2; elevation=v3; units=v4; zunits=v5; projection=v6; name=v7
```

where v1 - v7 are values as defined in the table above.

All components are optional but may not be repeated, and the ordering is not significant.

### 3.2 XML encoding

DCMI Point may be written in XML. Given the flexibility of XML many alternative notations are possible. One form looks like this:

```
<Point projection="v6" name="v7">
  <east units="v4a">v1</east>
  <north units="v4b">v2</north>
  <elevation zunits="v5">v3</elevation>
</Point>
```

defined by the DTD fragment:

```
<!ELEMENT   Point      (east?,north?,elevation?)>
<!ATTLIST   Point
            projection   CDATA      "geographic, height relative to mean-sea-level"
            name          CDATA      #IMPLIED >
<!ELEMENT   east        (#PCDATA)>
<!ATTLIST   east         units      CDATA "signed decimal degrees">
<!ELEMENT   north        (#PCDATA)>
<!ATTLIST   north        units      CDATA "signed decimal degrees">
<!ELEMENT   elevation     (#PCDATA)>
<!ATTLIST   elevation     zunits     CDATA "m">
```

The values here are equivalent to the values in the DCSV profile. Note that:

1. We have defined an XML *element* Point. Instances of this would occur within a complete XML *document*.
2. The content model for Point is a conventionally ordered (x,y,z) sequence of (optional) coordinate elements. This is a cleaner representation of the information required to specify the "point" structure than is possible in DCSV. All other components of DCMI Box occur as *attributes*
3. **units** and **zunits** are recorded in an XML *attribute*. Since these are associated directly with the local coordinate element, it is possible to express different components in different units if desired.

## 4. Examples



**Perth, Western Australia:**

```
name=Perth, W.A.; east=115.85717; north=-31.95301
```

```
<Point name="Perth, W.A.">
    <east>115.85717</east>
    <north>-31.95301</north>
</Point>
```

**Bridgnorth, Shropshire, U.K.:**

```
east=372000; north=293000; units=m; projection=U.K. National Grid
```

```
<Point projection="U.K. National Grid" name="Bridgnorth">
    <east units="m">372000</east>
    <north units="m">293000</north>
</Point>
```

**The Greenwich Meridian:**

```
east=0;
```

```
<Point>
    <east>0</east>
</Point>
```

**The highest point in Australia, illustrating the use of 3-D coordinates (and how flat Australia is):**

```
east=148.26218; north=-36.45746; elevation=2228; name=Mt. Kosciusko
```

```
<Point name="Mt. Kosciusko">
    <east>148.26218</east>
    <north>-36.45746</north>
    <elevation>2228</elevation>
</Point>
```

---

## 5. References

[BOX]

S. Cox, 2000. DCMI Box Encoding Scheme- specification of the spatial limits of a place, and methods for encoding this in a text string <http://dublincore.org/documents/dcmi-box/>

[DCMES]

1999. Dublin Core Metadata Element Set, Version 1.1: Reference Description

<http://dublincore.org/documents/dces/>

[DCMI]

Dublin Core Metadata Initiative, OCLC, Dublin Ohio.

<http://dublincore.org/>

[DCSV]

S. Cox, R. Iannella, 2000. A syntax for writing a list of labelled values in a text string

<http://dublincore.org/documents/dcmi-dcsv/>

[XML]

Extensible Markup Language

<http://www.w3.org/XML/>



Metadata associated with this resource: <http://dublincore.org/documents/2000/07/28/dcmi-point/index.shtml.rdf>

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# Title: DCMI Period Encoding Scheme: specification of the limits of a time interval, and methods for encoding this in a text string

**Creator:** [Simon Cox](#)

**Date Issued:** 2000-07-28

**Identifier:** <http://dublincore.org/documents/2000/07/28/dcmi-period/>

**Replaces:** <http://dublincore.org/documents/2000/07/11/dcmi-period/>

**Is Replaced By:** Not Applicable

**Latest version:** <http://dublincore.org/documents/dcmi-period/>

**Status of document:** This is a DCMI [Recommendation](#).

**Description of document:** We introduce DCMI Period for identifying a single time interval using its limits. Components of the value correspond to the start and end of the interval, either of which may be omitted in the case of a single-ended interval. We describe a method for encoding DCMI Period in a text-string, as a profile of DCSV. This notation is intended for recording the value of the DCMES elements **Coverage** and **Date**, particularly when using HTML meta elements. We also show an alternative encoding for DCMI Period using XML.

**NOTICE TO IMPLEMENTORS:** The syntax examples included in this document are provisional, and are currently under review as part of the DCMI work on recommending co-ordinated syntax recommendations for HTML, XML, and RDF. These recommendations and minor editorial changes in this document can be expected to take place in the near future. **Note that the use of "=" as a separator in the DCMI-DCSV encoding is a change from earlier versions of this specification which used ":" in the same position.**

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- [2. Identifying a time interval - the DCMI Period scheme](#)
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## 1. Introduction

Several methods are available to indicate a time interval. These include, but are not limited to:

- a **name**, normally defined in an enumeration such as a list of artistic, cultural, historical, archaeological, geological or cosmological eras or periods, a list of ruler's names, families or dynasties, etc.
- the **limits** of the interval, using either numeric or named values, the latter optionally including qualifiers such as

**start of, end of, middle of**, etc.

The Dublin Core Metadata Element Set [DCMES] includes two elements, **Coverage** and **Date**, the values of which may contain an identifier for a time interval.

If a name is used then the scheme from which it is selected determines the meaning.

The W3C profile of the ISO8601 standard for dates and times [W3C-DTF] is generally useful for identifying time instants, and also includes a method for specifying complete intervals by joining two instants with a "/" character. However, there is a need for a richer model for use in some cases, for three reasons:

1. open intervals, i.e. those with only a start or an end, are not included in the specification
2. the syntax cannot be adapted for use with other spatio-temporal dimensions, which would be desirable for consistency of use with the DCMES Coverage element
3. the identification of the start and end of the interval is implicit - relying in the position within a string - and therefore error-prone, rather than explicitly labelled.

The W3C recommendation *Mathematical Markup Language* [MathML] includes an [XML binding for intervals](#) which permits quite general intervals to be described, using both numeric and non-numeric bounds. This is a syntax-specific notation which, in order to be consistent with other parts of the bigger specification of which it is a part, includes features which are relatively obscure for the simple goal here. It is also unclear how to specify this extract from a much larger standard, and since it is presented as an XML notation, other serialisations would need to be specified separately in any case.

Here we define DCMI Period, an identifier which uses a simple model to specify the limits of a time interval, and describe methods for encoding DCMI Period, as a profile of DCSV [DCSV], and using a fragment of XML [XML]. DCMI Period has been designed to be similar to DCMI Box [BOX] used for identifying a place, and thus allows consistent encoding of spatio-temporal information in the DCMES element **Coverage**, as well as consistency between **Coverage** and **Date**. The components of DCMI Period re-use the W3C-DTF syntax where possible.

DCMI Period identifies a single time *interval*. If an identifier corresponding to a time instant is required, then W3C-DTF [W3C-DTF] is available. For multiple disjoint intervals, repeated instances of DCMI Period may be used. DCMI Period is unsuited for identification of recurring and periodic time intervals.

## 2. Identifying a time interval - the DCMI Period scheme

We identify a time interval by specifying the start and end of the interval.

We define the following components to describe the interval:

Component	Definition	Default <sup>1</sup>
start	The instant corresponding to the commencement of the time interval	-INF <sup>2</sup>
end	The instant corresponding to the termination of the time interval	INF <sup>2</sup>
scheme	The encoding used for the representation of the time-instants in the start and end components <sup>3</sup>	W3C-DTF
name	A name for the time interval <sup>4</sup>	-

<sup>1</sup>All components are optional.

<sup>2</sup>If either start or end is absent, then this implies an interval unbounded on that side. Thus, a DCMI Period with a single component start="2000-01-26" would identify the interval starting at the beginning of Australia Day in the year 2000 C.E. and continuing from that time.

<sup>3</sup>If a non-numeric encoding is used then matching is maximally inclusive: i.e. if a start component is expressed as a named era then the interval being identified starts at the beginning of the era, and conversely for an end component the interval ends at the end of the named era.

<sup>4</sup>In this context the name is non-normative. In the case of a conflict, the interval identified by the start and end values takes precedence. The name is provided for user convenience only.

## 3. Encoding DCMI Period

The components of a DCMI Period identifier have no meaning when disaggregated, since in any particular instance it is the complete set which acts as the *identifier*. Thus, use of DCMI Period to identify a time interval requires that the components are linked together. For systems in which data is encoded using a limited character set, this is conveniently accomplished by packaging the components into a single text-string. Various serialisation syntaxes are available, including DCSV [[DCSV](#)] and XML [[XML](#)].

In normal usage, the unadorned token "DCMI Period" should be taken to refer to the encoding using DCSV.

### 3.1 DCSV encoding

Writing DCMI Period using DCSV notation is straightforward, using the component names defined above. A DCMI Period value appears as follows:

```
start=v1; end=v2; scheme=v3; name=v4;
```

where v1 - v4 are values as defined in the table above.

All components are optional but may not be repeated. The ordering is not significant.

### 3.2 XML encoding

DCMI Period may be written in XML. Given the flexibility of XML many alternative notations are possible. One form looks like this:

```
<Period name="v4">
  <start scheme="v3a">v1</start>
  <end scheme="v3b">v2</end>
</Period>
```

defined by the DTD fragment:

```
<!ELEMENT   Period      (start?,end?)>
<!ATTLIST   Period
            name          CDATA #IMPLIED >
<!ELEMENT   start      (#PCDATA)>
<!ATTLIST   start      scheme      CDATA "W3C-DTF">
<!ELEMENT   end        (#PCDATA)>
<!ATTLIST   end        scheme      CDATA "W3C-DTF">
```

The values here are equivalent to the values in the DCSV profile. Note that:

1. We have defined an XML *element* Period. Instances of this would occur within a complete XML *document*.
2. The content model for Period is an ordered pair of elements (**start**,**end**), either of which may be omitted. All other components of Period occur as *attributes*
3. The **scheme** used to represent the component time-instants is recorded in an XML *attribute*. Since these are associated directly with either the **start** or **end** element, it is possible to express different components using different notations if desired.

## 4. Examples

### The Great Depression:

name=The Great Depression; start=1929; end=1939;

```
<Period name="The Great Depression">
    <start>1929</start>
    <end>1939</end>
</Period>
```

### Perth International Arts Festival, 2000:

name=Perth International Arts Festival, 2000; start=2000-01-26; end=2000-02-20;

```
<Period name="Perth International Arts Festival 2000">
    <start>2000-01-26</start>
    <end>2000-02-20</end>
</Period>
```

### 1999 AFL Grand Final:

start=1999-09-25T14:20+10:00; end=1999-09-25T16:40+10:00; scheme=W3C-DTF;

```
<Period name="1999 AFL Grand Final">
    <start scheme="W3C-DTF">1999-09-25T14:20+10:00</start>
    <end scheme="W3C-DTF">1999-09-25T16:40+10:00</end>
</Period>
```

### The Phanerozoic Eon:

start=Cambrian period; scheme=Geological timescale; name=Phanerozoic Eon;

```
<Period name="Phanerozoic Eon">  
  
    <start scheme="Geological timescale">Cambrian period</start>  
  
</Period>
```

---

## 5. References

### [BOX]

S. Cox, 2000, DCMI Box - specification of the spatial limits of a place, and methods for encoding this in a text string  
<http://dublincore.org/documents/dcmi-box/>

### [DCMES]

1999. Dublin Core Metadata Element Set, Version 1.1: Reference Description  
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### [DCMI]

Dublin Core Metadata Initiative, OCLC, Dublin Ohio. <http://dublincore.org/>

### [DCSV]

S. Cox, R. Iannella, 2000. A syntax for writing a list of labelled values in a text string  
<http://dublincore.org/documents/dcmi-dcsv/>

### [MathML]

Mathematical Markup Language (MathML) 1.01 Specification  
<http://www.w3.org/TR/REC-MathML/>

### [W3C-DTF]

M. Wolf, C. Wicksteed, 1997, Date and Time Formats  
<http://www.w3.org/TR/NOTE-datetime>

### [XML]

Extensible Markup Language  
<http://www.w3.org/XML/>

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**Title:**

# DCMI Box Encoding Scheme: specification of the spatial limits of a place, and methods for encoding this in a text string

**Creator:**

[Simon Cox](#)

**Date Issued:**

2000-07-28

**Identifier:**

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**Is Replaced By:**

Not Applicable

**Latest version:**

<http://dublincore.org/documents/dcml-box/>

**Status of document:**

This is a DCMI [Recommendation](#).

**Description of document:** The DCMI Box encoding scheme is a method for identifying a region of space using its geographic limits. Components of the value correspond to the bounding coordinates in north, south, east and west directions, plus optionally up and down, and also allow the coordinate system and units to be specified, and a name if desired. A method for encoding DCMI Box in a text-string, as a profile of DCSV is described. This notation is intended for recording the value of the DCMES element **Coverage**, particularly when using HTML meta elements. An alternative encoding for DCMI Box using XML is also shown.

**NOTICE TO IMPLEMENTORS:**

The syntax examples included in this document are provisional, and are currently under review as part of the DCMI work on recommending coordinated syntax recommendations for HTML, XML, and RDF. These recommendations and minor editorial changes in this document can be expected to take place in the near future. **Note that the use of "=" as a separator in the DCMI-DCSV encoding is a change from earlier versions of this specification which used ":" in the same position.**

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- [4. Examples](#)
- [5. References](#)

## 1. Introduction

Several methods are available to indicate a place. These include, but are not limited to:

- a **name**, normally defined in an identifiable enumeration such as a gazetteer or list of jurisdictional localities
- a unique **geocode**, such as a postal code
- the coordinates of a **point**, using geographic values or some well-defined projection and units
- a set of arcs or faces describing the **polygon** or **polyhedron** comprising the perimeter of the place



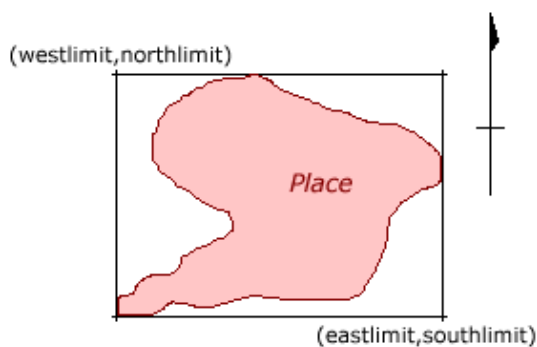
- the **limits** of a regular shaped container which encompasses the place, typically a rectangular **box** in two or three dimensions, using geographic values or some well-defined projection and units

The Dublin Core Metadata Element Set [DCMES] includes an element, **Coverage**, the value of which may contain an identifier for a place. If a name or geocode is used then the scheme from which that is selected determines valid values. However, there are no simple, commonly used, notations for the identifiers which use coordinates. Here we define DCMI Box, an identifier which specifies the geographic limits of a place, and describe methods for encoding DCMI Box, as a profile of DCSV [DCSV], and using a fragment of XML [XML].

In the simplest usage DCMI Box approximates the extent of a place using a container with a regular shape. For a more precise representation of an irregular shape it is possible to use the approach of "tiling" the place with a set of simple regions defined using DCMI Box. Alternatively, another notation describing a polygon or polyhedron may be used. If an identifier corresponding to a *point* is required, then DCMI Point [POINT] is available.

## 2. Identifying a place - the DCMI Box scheme

We identify a place by considering the minimal rectangular box which fully encloses the place, whose faces are aligned parallel with the axes of an identified cartesian coordinate system [Figure].



We define the following components to describe the box:

Component	Definition	Default <sup>1</sup>
northlimit	The value of the constant coordinate for the northernmost face or edge <sup>2</sup>	INF <sup>3</sup>
eastlimit	The value of the constant coordinate for the easternmost face or edge <sup>2</sup>	INF <sup>3</sup>
southlimit	The value of the constant coordinate for the southernmost face or edge <sup>2</sup>	-INF <sup>3</sup>
westlimit	The value of the constant coordinate for the westernmost face or edge <sup>2</sup>	-INF <sup>3</sup>
uplimit	The value of the constant coordinate for the uppermost face or edge <sup>2</sup>	INF <sup>3</sup>
downlimit	The value of the constant coordinate for the lowermost face or edge <sup>2</sup>	-INF <sup>3</sup>
units	The units applying to unlabelled numeric values of northlimit, eastlimit, southlimit, westlimit	signed decimal degrees
zunits	The units applying to unlabelled numeric values of uplimit, downlimit	metres

projection	The name of the projection used with any parameters required, such as ellipsoid parameters, datum, standard parallels and meridians, zone, etc	geographic coordinates on Earth for northlimit, eastlimit, southlimit, westlimit; height above mean-sea-level for uplimit, downlimit.
name	A name for the place <sup>4</sup>	-

<sup>1</sup>All components are optional. If any \*limit component is absent, then this implies an interval unbounded on that side. Thus, a DCMI Box with a single component northlimit="0" would identify the entire southern hemisphere.

<sup>2</sup>Values are expressed as a text-string representing a number. Units should be included using conventional (SI) notation, unless the relevant units or zunits component is present. However, if units are given as part of any value, then for this component these override those given by units or zunits.

<sup>3</sup>If this component is absent then the value is undefined. Processors performing numeric comparisons are recommended to set values corresponding to maximally inclusive matching.

<sup>4</sup>In this context the name is non-normative. In the case of a conflict, the place identified by the coordinate values takes precedence. The name is provided for user convenience only.

## 3. Encoding DCMI Box

The components of a DCMI Box identifier have no meaning when disaggregated, since in any particular instance it is the complete set which acts as the *identifier*. Thus, use of DCMI Box to identify a place requires that the components are linked together. For systems in which data is encoded using a limited character set, this is conveniently accomplished by packaging the components into a single text-string. Various serialisation syntaxes are available, including DCSV [[DCSV](#)] and XML [[XML](#)].

In normal usage, the unadorned token "DCMI Box" should be taken to refer to the encoding using DCSV.

### 3.1 DCSV encoding

Writing DCMI Box using DCSV notation is straightforward, using the component names defined above. A DCMI Box value appears as follows:

```
northlimit=v1; eastlimit=v2; southlimit=v3; westlimit=v4; uplimit=v5;
downlimit=v6; units=v7; zunits=v8; projection=v9; name=v10
```

where v1 - v10 are values as defined in the table above.

All components are optional but may not be repeated, and the ordering is not significant.

### 3.2 XML encoding

DCMI Box may be written in XML. Given the flexibility of XML many alternative notations are possible. One form looks like this:

```
<Box projection="v9" name="v10">
  <northlimit units="v7a">v1</northlimit>
  <eastlimit units="v7b">v2</eastlimit>
  <southlimit units="v7c">v3</southlimit>
  <westlimit units="v7d">v4</westlimit>
  <uplimit zunits="v8a">v3</uplimit>
  <downlimit zunits="v8b">v4</downlimit>
</Box>
```

defined by the DTD fragment:

```
<!ELEMENT   Box   (northlimit?,eastlimit?,southlimit?,westlimit?,uplimit?,downlimit?)>
<!ATTLIST   Box
            projection CDATA "geographic, height relative to mean-sea-level"
            name       CDATA #IMPLIED >
<!ELEMENT   northlimit   (#PCDATA)>
<!ATTLIST   northlimit   units   CDATA "signed decimal degrees">
<!ELEMENT   eastlimit    (#PCDATA)>
<!ATTLIST   eastlimit    units   CDATA "signed decimal degrees">
<!ELEMENT   southlimit   (#PCDATA)>
<!ATTLIST   southlimit   units   CDATA "signed decimal degrees">
<!ELEMENT   westlimit    (#PCDATA)>
<!ATTLIST   westlimit    units   CDATA "signed decimal degrees">
<!ELEMENT   uplimit      (#PCDATA)>
<!ATTLIST   uplimit      zunits   CDATA "m">
<!ELEMENT   downlimit    (#PCDATA)>
<!ATTLIST   downlimit    zunits   CDATA "m">
```

The values here are equivalent to the values in the DCSV profile. Note that:

1. We have defined an XML *element* Box. Instances of this would occur within a complete XML *document*.
2. The content model for Box is a (clockwise) sequence of (optional) \*limit elements. This is a cleaner representation of the information required to specify the "box" structure than is possible in DCSV. All other components of Box occur as *attributes*
3. units and zunits are recorded in an XML *attribute*. Since these are associated directly with the local \*limit element, it is possible to express different components in different units if desired.

## 4. Examples

### Western Australia:

```
name=Western Australia; northlimit=-13.5; southlimit=-35.5;
westlimit=112.5; eastlimit=129

<Box name="Western Australia">
<northlimit>-13.5</northlimit>
<eastlimit>129</eastlimit>
<southlimit>-35.5</southlimit>
<westlimit>112.5</westlimit>
</Box>
```

**Lake Jindabyne:**

```
northlimit=5980000; westlimit=644000; eastlimit=647000; southlimit=5966000;
units=m; projection=UTM zone 55 south
<Box projection="UTM zone 55 south" name="Lake Jindabyne">
<northlimit units="m">5980000</northlimit>
<eastlimit units="m">647000</eastlimit>
<southlimit units="m">5966000</southlimit>
<westlimit units="m">644000</westlimit>
</Box>
```

**The Western Hemisphere:**

```
westlimit=180; eastlimit=0

<Box>
<eastlimit>0</eastlimit>
<westlimit>180</westlimit>
</Box>
```

**The Tropics:**

```
northlimit=23.5; southlimit=-23.5

<Box>
<northlimit>23.5</northlimit>
<southlimit>-23.5</southlimit>
</Box>
```

**A mine, illustrating the use of 3-D coordinates:**

```
northlimit=-21.3; southlimit=-21.4; westlimit=139.8; eastlimit=139.9;
uplimit=400; downlimit=-100; name=Duchess copper mine

<Box name="Duchess copper mine">
<northlimit>-21.3</northlimit>
<eastlimit>139.9</eastlimit>
<southlimit>-21.4</southlimit>
<westlimit>139.8</westlimit>
```

```
<uplimit>400</uplimit>  
  
<downlimit>-100</downlimit>  
  
</Box>
```

---

## 5. References

[DCMES]

1999. Dublin Core Metadata Element Set, Version 1.1: Reference Description

<http://dublincore.org/documents/dces/>

[DCMI]

Dublin Core Metadata Initiative, OCLC, Dublin Ohio. <http://dublincore.org>

[POINT]

S. Cox, 2000. DCMI Point - a point location in space and methods for encoding this in a text string,

<http://dublincore.org/documents/dcmi-point/>

[DCSV]

S. Cox, R. Iannella, 2000. A syntax for writing a list of labelled values in a text string

<http://dublincore.org/documents/dcmi-dcsv/>

[XML]

Extensible Markup Language <http://www.w3.org/XML/>

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Metadata associated with this resource: <http://dublincore.org/documents/2000/07/28/dcmi-box/index.shtml.rdf>

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## Dublin Core Metadata Initiative

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### Title: **Library Application Profile**

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**Status of Document:** This is a DCMI [Working Draft](#).

**Description of Document:** This document proposes a possible application profile that clarifies the use of the Dublin Core Metadata Element Set in libraries and library-related applications and projects. It was prepared by the DCMI-Libraries Application Profile drafting committee, a subset of the DCMI-Libraries Working Group.

# DC-Library Application Profile (DC-Lib)

## I. Introduction

The concept of *application profiles* (see [Application profiles: mixing and matching metadata schemas](#)) has emerged within the Dublin Core Metadata Initiative as a way to declare which elements from which namespaces are used in a particular application or project. Application profiles are defined as schemas which consist of data elements drawn from one or more namespaces, combined together by implementors, and optimised for a particular local application.

The DCMI-Libraries Working Group has explored various uses of the Dublin Core Metadata Element Set in library and related applications and has envisioned the following possible uses:

- to serve as an interchange format between various systems using different metadata standards/formats
- to use for harvesting metadata from data sources within and outside of the library domain
- to support simple creation of library catalog records for resources within a variety of systems
- to expose MARC data to other communities (through a conversion to DC)
- to allow for acquiring resource discovery metadata from non-library creators using DC

A *library application profile* will be a specification that defines the following:

- required elements
- permitted Dublin Core elements
- permitted Dublin Core qualifiers
- permitted schemes and values (e.g. use of a specific controlled vocabulary or encoding scheme)
- library domain elements (to be approved)
- library domain qualifiers (to be approved)
- additional elements/qualifiers from other application profiles that may be used (e.g. DC-Education: Audience)
- refinement of standard definitions

This document proposes a possible application profile that clarifies the use of the Dublin Core Metadata Element Set in libraries and library-related applications and projects. It was prepared by the DCMI-Libraries Application Profile drafting committee, a subset of the DCMI-Libraries Working Group.

## 2. Namespaces and Format of entries

The DC-Library Application Profile consists of several

## namespaces:

- Dublin Core Metadata Element Set, Version 1.1  
[<http://purl.org/dc/elements/1.1/>]
- Dublin Core Qualifiers [<http://purl.org/dc/terms/>]
- DC-Library Metadata Element Set (DC-LMES)
- DC-Library Metadata Element Set Qualifiers (DC-LMES Qualifiers)

### Format of entries:

<b>Name</b>	The unique token assigned to the qualifier
<b>Label</b>	The human-readable label assigned to the qualifier.
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a> , <a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> , or <a href="http://purl.org/dc/dcmitype/">http://purl.org/dc/dcmitype/</a> or DC-Library Metadata Element Set = DC-LMES, DC-Library Metadata Element Set Qualifiers = DC-LMES Qualifiers
<b>DC Refinement(s)</b>	DC Element Refinements used in DC-Lib: These qualifiers make the meaning of an element narrower or more specific. A refined element shares the meaning of the unqualified element, but with a more restricted scope.
<b>DC-Lib Refinement(s)</b>	DC-Library refinement, see above; these are domain-specific refinements for DC-Lib.
<b>DC Encoding Scheme(s)</b>	<p>These qualifiers identify schemes that aid in the interpretation of an element value. These schemes include controlled vocabularies and formal notations or parsing rules. A value expressed using an encoding scheme will thus be a token selected from a controlled vocabulary (e.g., a term from a classification system or set of subject headings) or a string formatted in accordance with a formal notation (e.g., "2000-01-01" as the standard expression of a date). If an encoding scheme is not understood by a client or agent, the value may still be useful to a human reader.</p> <p>In some cases, encoding schemes not yet registered that are needed for DC-Lib are indicated. These will be registered as DC Encoding Schemes in the future.</p>



<b>DC-Lib Encoding Scheme(s)</b>	DC-Library encoding scheme; these are only for domain-specific elements or qualifiers.
<b>Form of Obligation</b>	In this application profile the obligation can be: mandatory ( <b>M</b> ), mandatory if applicable ( <b>MA</b> ), strongly recommended ( <b>R</b> ) or optional ( <b>O</b> ). Mandatory "M" ensures that some of the elements are always supported and mandatory if applicable "MA" means that this element must be supported if the information is available. An element with a mandatory "M" obligation must have a value. The strongly recommended and the optional elements should be filled with a value if the information is appropriate to the given resource but if not, they may be omitted.
<b>DC Definition</b>	Dublin Core definition of metadata field
<b>DC Comment</b>	Dublin Core comments to this metadata field
<b>DC-Lib Definition</b>	DC-Library definition of metadata field
<b>DC-Lib Comment</b>	DC-Library comments to this metadata field
<b>Best practice</b>	Recommendations of best use of this element for DC-Lib
<b>Open questions</b>	Problems, notes, open questions regarding this field

### 3. Table of Contents

[General](#) notes, open questions regarding all/some elements, ...

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- [Creator](#)
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### General notes regarding all elements:

- Either a Title or Identifier are mandatory (Identifier is mandatory if applicable).
- If the record is expressed in a format (e.g., HTML) that allows each element/qualifier/scheme value to be assigned a language attribute (e.g., the HTML tag lang="en"), the use of the attribute is permitted for any or all DC elements as desired.
- All elements may be used as unqualified. If using qualified Dublin Core, additional guidelines are given
- Encoding schemes are indicated as DC Encoding Schemes even if not currently approved; they will be registered when the mechanism is available. In some cases only one table has been provided for several schemes to be registered.

## 4. DC-Library Application Profile

### [Title](#)

<b>Name</b>	<b>Title</b>
<b>Label</b>	Title
<b>Choice of Namespace:</b>	http://purl.org/dc/elements/1.1/
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>M</b>
<b>DC Definition</b>	A name given to the resource.

<b>DC Comment</b>	Typically, a title will be a name by which the resource is formally known.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	A parallel/transliterated title is considered a main title, i.e. the Title element is repeated.
<b>Best practice</b>	<p>Either a Title or an Identifier is mandatory. If no title is available, best practice is to give a constructed title, derive a title from the resource or supply <i>[no title]</i>. If using qualified Dublin Core, an element refinement for titles other than the main title(s) should be included.</p> <p>Retain initial articles and use local sorting algorithms based on language. A language qualifier may be used to indicate language of title if appropriate. (For example, see: <a href="#">Initial Definite and Indefinite Articles</a> for a list of articles in various languages)</p>

<b>Name</b>	<b>Title   alternative</b>
<b>Label</b>	Title   Alternative
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Alternative
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	Any form of the title used as a substitute or alternative to the formal title of the resource.
<b>DC Comment</b>	This qualifier can include Title abbreviations as well as translations.
<b>DC-Lib Definition</b>	-

<b>DC-Lib Comment</b>	Assigned title such as uniform or key title is Title Alternative.
<b>Best practice</b>	<p>Best practice is to use this element refinement for titles other than the main title.</p> <p>Retain initial articles and use local sorting algorithms based on language. A language qualifier may be used to indicate language of title if appropriate. (For example, see: <a href="#">Initial Definite and Indefinite Articles</a> for a list of articles in various languages)</p>

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## Creator

<b>Name</b>	<b>Creator</b>
<b>Label</b>	Creator
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	An entity primarily responsible for making the content of the resource.
<b>DC Comment</b>	Examples of a Creator include a person, an organisation, or a service. Typically, the name of a Creator should be used to indicate the entity.
<b>DC-Lib Definition</b>	An entity with a primary role in the creation of the intellectual or artistic content of the resource.
<b>DC-Lib Comment</b>	

<b>Best practice</b>	Creator and Contributor may be conflated if desired by the application. In that case, Contributor.Creator may be used if desired.
----------------------	---

<b>Name</b>	<b>Creator   role</b>
<b>Label</b>	Creator   Role
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (Proposed)
<b>DC Refinement(s)</b>	Role: all values in designated scheme are element refinements for Creator (e.g. Creator Illustrator)
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">MARC Relator Codes</a> (a value from this scheme may be selected as an element refinement)
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Designation of a function that describes the relationship between a Creator and a resource.
<b>DC Comment</b>	"Role" above is not actually used as the element refinement; rather, a value from the specified list is used to refine this element (e.g. Creator.Illustrator).
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Creator and Contributor may be conflated if desired by the application. In that case, Contributor.Creator may be used if desired.
<b>Best practice</b>	
<b>Open questions</b>	Use of role refinements needs discussion by DC-Agents WG. Syntactical issues need to be resolved by DC-Architecture WG. See <a href="#">proposal</a> on agent roles.

<b>Name</b>	<b>Creator: DCMI Agent Detail</b>
<b>Label</b>	Creator   DCMI Agent Detail
<b>Choice of Namespace</b>	http://purl.org/dc/terms/ (Proposed)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#"><u>DCMI Agent Detail</u></a>
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Contains additional information about the agent in its capacity as Creator, Contributor or Publisher of the resource being described. It is not intended to describe the agent.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	
<b>Open questions</b>	Use of these structured values needs discussion by DC-Agents WG. Syntactical issues need to be resolved by DC-Architecture WG. These have been submitted for discussion.

### [Contributor](#)

<b>Name</b>	<b>Contributor</b>
<b>Label</b>	Contributor
<b>Choice of Namespace</b>	
<b>DC Refinement(s)</b>	See below
<b>DC-Lib Refinement(s)</b>	

<b>DC Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	An entity responsible for making contributions to the content of the resource.
<b>DC Comment</b>	Examples of a Contributor include a person, an organisation, or a service. Typically, the name of a Contributor should be used to indicate the entity.
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Creator and Contributor may be conflated if desired by the application.
<b>Best practice</b>	

<b>Name</b>	<b>Contributor   role</b>
<b>Label</b>	Contributor   Role
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (Proposed)
<b>DC Refinement(s)</b>	Role: all values in designated scheme are element refinements for Creator (e.g. Contributor Illustrator)
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">MARC Relator Codes</a> (a value from this scheme may be selected as an element refinement)
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Designation of a function that describes the relationship between a Contributor and a resource.
<b>DC Comment</b>	"Role" above is not actually used as the element refinement; rather, a value from the specified list is used to refine this element.
<b>DC-Lib Definition</b>	

<b>DC-Lib Comment</b>	
<b>Best practice</b>	
<b>Open questions</b>	Use of role refinements needs discussion by DC-Agents WG. Syntactical issues need to be resolved by DC-Architecture WG. See <a href="#">proposal</a> on agent roles.

<b>Name</b>	<b>Contributor   DCMIAgentDetail</b>
<b>Label</b>	Contributor   DCMI Agent Detail
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (Proposed)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">DCMIAgentDetail</a>
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Contains additional information about the agent in its capacity as Creator, Contributor or Publisher of the resource being described. It is not intended to describe the agent.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	
<b>Open questions</b>	Use of these structured values needs discussion by DC-Agents WG. Syntactical issues need to be resolved by DC-Architecture WG. These have been submitted for discussion.

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**Publisher**

<b>Name</b>	<b>Publisher</b>
<b>Label</b>	Publisher
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	An entity responsible for making the resource available.
<b>DC Comment</b>	Examples of a Publisher include a person, an organisation, or a service. Typically, the name of a Publisher should be used to indicate the entity.
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Although some applications may wish to conflate Creator, Contributor and Publisher, DC-Lib maintains the distinction between Creator and Contributor (which may be conflated) and Publisher. If the elements are conflated and Publisher used as an element refinement for Contributor or Creator, the resulting element would be mapped to DC.Publisher.
<b>Open questions</b>	Use of element refinement for role as indicated above for Creator and Contributor needs to be determined; possibly the value "Distributor" may be submitted for approval as a refinement (from MARC Relator codes list). This needs further discussion by DCMI Agent WG.

<b>Name</b>	<b>Publisher : DCMI AgentDetail</b>
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<b>Label</b>	Publisher   DCMI Agent Detail
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (Proposed)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#"><u>DCMI Agent Detail</u></a>
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Contains additional information about the agent in its capacity as Creator, Contributor or Publisher of the resource being described. It is not intended to describe the agent.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	
<b>Open questions</b>	Use of these structured values needs discussion by DC-Agents WG. Syntactical issues need to be resolved by DC-Architecture WG. These have been submitted for discussion.

## Subject

<b>Name</b>	<b>Subject</b>
<b>Label</b>	Subject
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-

<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	The topic of the content of the resource.
<b>DC Comment</b>	Typically, a Subject will be expressed as keywords, key phrases or classification codes that describe a topic of the resource. Recommended best practice is to select a value from a controlled vocabulary or formal classification scheme.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	If a geographic or temporal aspect is recorded use the element Coverage. It may also be repeated in Subject if desired. If there is a subject string with elements in addition to a geographic, include the entire string in Subject with geographic element also in Coverage.
<b>Best practice</b>	It is highly recommended that either freetext or controlled vocabulary be included in the metadata where appropriate and feasible. It is also recommended that a controlled vocabulary be used with encoding scheme specified. If no encoding scheme is specified, it is treated as keyword.

<b>Name</b>	<b>Subject   DC encoding scheme(s)</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	LCSH, <a href="#">MeSH</a> , <a href="#">DDC</a> , <a href="#">LCC</a> , <a href="#">UDC</a>

<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	
<b>DC Comment</b>	
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	<p>Note: This table is used for encoding schemes currently defined by DCMI. As additional schemes are registered, they will be included.</p> <p>Additional encoding schemes will be registered for those used in the library domain based on the MARC list of <a href="#">subject</a> and <a href="#">classification</a> schemes. Including an identifier to link to a registry where all encoding schemes are defined (e.g. based on RSLP schema) needs to be explored.</p>
<b>Best practice</b>	If using qualified DC, always use the encoding scheme(s) for terms from a controlled vocabulary.

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## Description

<b>Name</b>	<b>Description</b>
<b>Label</b>	Description
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	

<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	An account of the content of the resource.
<b>DC Comment</b>	Description may include but is not limited to: an abstract, table of contents, reference to a graphical representation of content or a free-text account of the content.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	It is permitted to link one or more external descriptions using a URI, but to facilitate keyword indexing of the content of the description, it is recommended that a text description also be included.

<b>Name</b>	<b>Description   URI</b>
<b>Label</b>	Description   URI
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	Description   URI
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	
<b>DC Comment</b>	
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Description   abstract</b>
<b>Label</b>	Description   Abstract
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	An account of the content of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use text (and not only a URL) to describe the resource.

<b>Name</b>	<b>Description   tableOfContents</b>
<b>Label</b>	<b>Description   Table Of Contents</b>
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	A list of subunits of the content of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-

<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use text (and not only a URL) to describe the resource.

<b>Name</b>	<b>Description   version</b>
<b>Label</b>	Description   Version
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	Version
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Information designating the version or edition of a work.
<b>DC-Lib Comment</b>	Being able to specify the version or edition of a given work is often critical to successful resource discovery and identification to determine whether a resource is the same as another one. This is particularly important for resources that change frequently. This is not to be used for versions in the sense of different physical formats (e.g. the PDF version of a textual resource).
<b>Best practice</b>	This element refinement will generally not be repeated. Element should be included if necessary for identification.

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**Date**

<b>Name</b>	<b>Date</b>
<b>Label</b>	Date
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	A date associated with an event in the life cycle of the resource.
<b>DC Comment</b>	Typically, date will be associated with the creation or availability of the resource. Recommended best practice for encoding the date value is defined in a profile of ISO 8601 [W3CDTF] and follows the YYYY-MM-DD format.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	
<b>Best practice</b>	<p>Recommend use of an element refinement for type of Date. Recommend that dates be encoded 1) using W3C-DTF or ISO 8601 without hyphens or 2) supplied as free text that does not take the form of a string of numerals (with or without hyphens).</p> <p>It is acceptable to use widely-recognized practice such as day-month-year where the day and year are represented with numerals and month with a name or standard abbreviation (e.g., "1 January 2002" or "1 Jan 2002"). Avoid the use of potentially ambiguous date representations such as DD/MM/YY or MM/DD/YY (e.g., "04/05/05")</p>



<b>Open issues</b>	It may be desirable to establish a DC-Lib encoding scheme or profile of ISO 8601 to cover B.C.E. dates, questionable and approximate dates. This will require additional work.
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<b>Name</b>	<b>Date   created</b>
<b>Label</b>	Date   Created
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Created
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Date of creation of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	Use for the creation of the intellectual content.
<b>Best practice</b>	This qualified element should not be repeated except when giving date created using more than one encoding scheme.

<b>Name</b>	<b>Date   valid</b>
<b>Label</b>	Date   Valid
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Valid

<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Date (often a range) of validity of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Date   available</b>
<b>Label</b>	Date   Available
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Available
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Date (often a range) that the resource will become or did become available.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Date   issued</b>
<b>Label</b>	Date   Issued
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Issued
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Date of formal issuance (e.g. publication) of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use for the instantiation.

<b>Name</b>	<b>Date   modified</b>
<b>Label</b>	Date   Modified
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Modified
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	Date on which the resource was changed.
<b>DC Comment</b>	-

<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Date   copyright</b>
<b>Label</b>	Date   Copyright
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	Copyright
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Date of copyright statement.
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Recommend use if: 1) the value is different from Date.Issued or Date.Created, or 2) the copyright date is known but no value is supplied for Date.Issued or Date.Created. If same date is used for issued and copyright date, use only Date.Issued.

<b>Name</b>	<b>Date   submitted</b>
<b>Label</b>	Date   Submitted
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	

<b>DC-Lib Refinement(s)</b>	Submitted
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Date of submission of the resource (e.g. thesis, articles, etc.).
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Recommended for theses and dissertations.

<b>Name</b>	<b>Date   accepted</b>
<b>Label</b>	Date   Accepted
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	Accepted
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Date of acceptance of the resource (e.g. of thesis by university department/institution, of article by journal, etc.).
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Recommended for theses or dissertations.

<b>Name</b>	<b>Date   captured</b>
<b>Label</b>	Date   Captured
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	Captured
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Date that the resource was captured.
<b>DC-Lib Comment</b>	This includes the date the resource was digitized or a subsequent snapshot was taken (particularly for dynamic resources) if different from Date.Created.
<b>Best practice</b>	Best practice is to use as a machine-processible date (ISO 8601 without hyphens or W3CDTF).

<b>Name</b>	<b>Date   ISO 8601</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	ISO 8601
<b>Form of Obligation</b>	<b>MA</b>

<b>DC Definition</b>	This encoding scheme represents the alternative provided in ISO 8601 that does not include hyphens as separators between year, month, and day.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	Rules for encoding: ISO 8601 has alternatives, with or without the hyphen (i.e. 2001-08-07 or 20010807). W3C-DTF includes hyphens and is the only encoding scheme currently approved. Alternative using no hyphen needs to be registered as an encoding scheme, since it is well established in the library community.
<b>Best practice</b>	DC-Lib recommends use without the hyphen. If use of hyphen is preferred use W3C-DTF as encoding scheme.

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## Type

<b>Name</b>	<b>Type</b>
<b>Label</b>	Resource Type
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The nature or genre of the content of the resource.

<b>DC Comment</b>	Type includes terms describing general categories, functions, genres, or aggregation levels for content. Recommended best practice is to select a value from a controlled vocabulary (for example, the list of DCMI Types). To describe the physical or digital manifestation of the resource, use the Format element.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use a controlled list and identify the source with encoding scheme.

<b>Name</b>	<b>Type   DCMIType</b>
<b>Label</b>	Type   DCMI Type Vocabulary
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/dcmitype/">http://purl.org/dc/dcmitype/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	DCMIType, see <a href="http://dublincore.org/documents/dcmi-type-vocabulary/">http://dublincore.org/documents/dcmi-type-vocabulary/</a>
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A list of types used to categorize the nature or genre of the content of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Recommended that at least one value from DCMI-Type be supplied for a high level category; Type may be repeated for a more specific type from another specified scheme.



<b>Name</b>	<b>Type : DC encoding scheme(s)</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	http://purl.org/dc/terms/ (to be registered)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	Values from <a href="#">MARC list of sources</a> to be registered as encoding schemes
<b>DC-Lib Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Use a controlled list and identify the source with encoding scheme.
<b>Open questions</b>	Consider registering values defined in the <a href="#">MARC list of sources</a> as encoding schemes as well as any others that are identified as useful.

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## Format

<b>Name</b>	<b>Format</b>

<b>Label</b>	Format
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The physical or digital manifestation of the resource.
<b>DC Comment</b>	Typically, Format may include the media-type or dimensions of the resource. Format may be used to determine the software, hardware or other equipment needed to display or operate the resource. Examples of dimensions include size and duration. Recommended best practice is to select a value from a controlled vocabulary (for example, the list of Internet Media Types [MIME] defining computer media formats).
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Use this element primarily for IMT.

<b>Name</b>	<b>Format   IMT</b>
<b>Label</b>	Format   IMT
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	IMT
<b>Form of Obligation</b>	<b>R</b>

<b>DC Definition</b>	The Internet media type of the resource.
<b>DC Comment</b>	See also: <a href="http://www.isi.edu/in-notes/iana/assignments/media-types/media-types">http://www.isi.edu/in-notes/iana/assignments/media-types/media-types</a>
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Recommended for electronic resources.

<b>Name</b>	<b>Format   extent</b>
<b>Label</b>	Format   Extent
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Extent
<b>DC-Lib Refinement(s)</b>	see below
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The size or duration of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Format   medium</b>
<b>Label</b>	Format   Medium
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Medium

<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The material or physical carrier of the resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Used to specify the medium of the physical carrier of a resource. Format without an element refinement qualifier should be used to specify the electronic format of the resource, using the encoding scheme IMT. Format should be repeated if both are applicable (e.g. a PDF file on CD).

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## Identifier

<b>Name</b>	<b>Identifier</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	An unambiguous reference to the resource within a given context.

<b>DC Comment</b>	Recommended best practice is to identify the resource by means of a string or number conforming to a formal identification system. Example of formal identification systems include the Uniform Resource Identifier (URI) (including the Uniform Resource Locator (URL)), the Digital Object Identifier (DOI) and the International Standard Book Number (ISBN).
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	
<b>Best practice</b>	<p><i>Standard identifier:</i> Provide at least one standard identifier from a standard scheme (e.g., URL, ISBN, etc.) if one or more standard identifiers have been assigned to the resource and are known to the metadata agency.</p> <p><i>Unique-resource identifier:</i> Provide applicable identifiers assigned to one-of-a-kind resources (such as accession numbers assigned to items in a museum collection) if one or more of this class of identifiers have been assigned to the resource and are known to the metadata agency. If the structure of the identifier (e.g., all numerals) is potentially ambiguous it is recommended that the associated agencies' name be included as part of the identifier element.</p> <p><i>Citation:</i> Provide a citation if no standard identifier is assigned and a formal citation is a common means of identifying the resource being described (e.g., a journal article).</p> <p>Use the element Identifier on a more abstract level; identifier for local library holdings like call number could be put into the DC-Lib element Holding Location.</p>

<b>Name</b>	<b>Identifier : URI</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>

<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	URI
<b>Form of Obligation</b>	MA
<b>DC Definition</b>	
<b>DC Comment</b>	
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Recommended best practice is to identify the resource by means of a string or number conforming to a formal identification system.

<b>Name</b>	<b>Identifier   DC encoding scheme(s)</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">SICI</a> , <a href="#">ISBN</a> , <a href="#">ISSN</a> , <a href="#">DOI</a> , (if not expressed as URI)
<b>Form of Obligation</b>	MA
<b>DC Definition</b>	SICI: Serial Item and Contribution Identifier; ISBN: International Standard Book Number; ISSN: International Standard Serial Number; DOI: Digital Object Identifier
<b>DC Comment</b>	To be registered as encoding schemes (these may also be expressed as URIs).

<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	OpenURL may be registered as an encoding scheme after completion of the standard.
<b>Best practice</b>	

<b>Name</b>	<b>Identifier   Citation</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	http://purl.org/dc/terms/ (Proposed)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	Citation
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	
<b>DC Comment</b>	
<b>DC-Lib Definition</b>	Bibliographic citation information for a journal article, or similar bibliographic resource
<b>DC-Lib Comment</b>	This element refinement is proposed by the DCMI Citation Working Group and is under review. See: A <a href="#">Citation Element Refinement for dc:identifier</a> .
<b>Best practice</b>	

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## Source

Name	Source
<b>Label</b>	Source
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A Reference to a resource from which the present resource is derived.
<b>DC Comment</b>	The present resource may be derived from the Source resource in whole or in part. Recommended best practice is to reference the resource by means of a string or number conforming to a formal identification system.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	A constructed or derived ID of a local nature may be supplied, including a specification of the supplying organisation, in the absence of a globally unique one.
<b>Best practice</b>	Use only when the described resource is the result of digitization of non-digital originals. Otherwise, use Relation.

Name	Source <sup>1</sup> URI
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	



<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	URI
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A URI uniform resource identifier.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	In the absence of a globally unique Identifier, a constructed or derived one of a local nature can be supplied, including a specification of the supplying organisation.
<b>Best practice</b>	

<b>Name</b>	<b>Source   DC encoding scheme(s)</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">SICI</a> , <a href="#">ISBN</a> , <a href="#">ISSN</a> , <a href="#">DOI</a> , (if not expressed as URI)
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	SICI: Serial Item and Contribution Identifier; ISBN: International Standard Book Number; ISSN: International Standard Serial Number; DOI: Digital Object Identifier
<b>DC Comment</b>	To be registered as encoding schemes (these may also be expressed as URIs).
<b>DC-Lib Definition</b>	

<b>DC-Lib Comment</b>	<p>In the absence of a globally unique Identifier, a constructed or derived one of a local nature can be supplied, including a specification of the supplying organisation.</p> <p>Consider registering OpenURL as an encoding scheme after completion of the standard.</p>
<b>Best practice</b>	
<b>Open questions</b>	It is not clear whether DOI could be assigned to a non-digital resource, which is how DC-Lib uses this element.

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## Language

Name	Language
<b>Label</b>	Language
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	A language of the intellectual content of the resource.

<b>DC Comment</b>	Recommended best practice for the values of the Language element is defined by RFC 1766 which includes a two-letter Language Code (taken from the ISO 639 standard), followed optionally, by a two-letter Country Code (taken from the ISO 3166 standard). For example, en for English, fr for French, or en-uk for English used in the United Kingdom.
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Language code may be used as a value for the Language qualifier to any DCMES element.
<b>Best practice</b>	Recommend codes rather than text, taken from ISO 639-2 bibliographic codes. Mandatory if applicable means if there is any spoken or written text, supply.

<b>Name</b>	<b>Language   ISO639-2</b>
<b>Label</b>	Language   ISO 639-2
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	ISO 639-2
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	A language of the intellectual content of the resource.
<b>DC Comment</b>	Recommended best practice for the values of the Language element is defined by RFC 1766 which includes a two-letter Language Code (taken from the ISO 639 standard), followed optionally, by a two-letter Country Code (taken from the ISO 3166 standard). For example, en for English, fr for French, or en-uk for English used in the United Kingdom.
<b>DC-Lib Definition</b>	Use the bibliographic codes from ISO 639-2. ISO 639-2 is a DCMI approved encoding scheme.

<b>DC-Lib Comment</b>	The language code may be used as a value for the Language qualifier to any DCMES element.
<b>Best practice</b>	Use codes rather than text. Mandatory if applicable means if there is any spoken or written text, supply.

<b>Name</b>	<b>Language   RFC 1766</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	RFC 1766
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A language of the intellectual content of the resource.
<b>DC Comment</b>	Recommended best practice for the values of the Language element is defined by RFC 1766 which includes a two-letter Language Code (taken from the ISO 639 standard), followed optionally, by a two-letter Country Code (taken from the ISO 3166 standard). For example, en for English, fr for French, or en-gb for English used in Great Britain.
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use of the ISO 639-2 bibliographic code is preferred. A mapping between both codes is available at <a href="http://lcweb.loc.gov/standards/iso_639-2/englangn.html">http://lcweb.loc.gov/standards/iso_639-2/englangn.html</a> .
<b>Open questions</b>	Note that RFC 1766 has been replaced by RFC 3066, which allows for a code from ISO 639-2 when there is no corresponding ISO 639-1 code. RFC 3066 is being registered as a DCMI approved scheme.

<b>Name</b>	<b>Language   RFC 3066</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	http://purl.org/dc/terms/
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	RFC 3066
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A language of the intellectual content of the resource.
<b>DC Comment</b>	Recommended best practice for the values of the Language element is defined by RFC 1766 which includes a two-letter Language Code (taken from the ISO 639 standard), followed optionally, by a two-letter Country Code (taken from the ISO 3166 standard). For example, en for English, fr for French, or en-gb for English used in Great Britain.
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Use of the ISO 639-2 bibliographic code is preferred. A mapping between both codes is available at <a href="http://lcweb.loc.gov/standards/iso_639-2/englangn.html">http://lcweb.loc.gov/standards/iso_639-2/englangn.html</a> .
<b>Open questions</b>	RFC 3066 replaces RFC 1766, which allows for a code from ISO 639-2 when there is no corresponding ISO 639-1 code. RFC 3066 is being registered as a DCMI approved scheme.

## Relation

<b>Name</b>	<b>Relation</b>
<b>Label</b>	Relation
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A reference to a related resource.
<b>DC Comment</b>	Recommended best practice is to reference the resource by means of a string or number conforming to a formal identification system.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	<p>Relation without qualifier is optional; where it is qualified the recommendation for the qualifier should be followed.</p> <p>If using qualifiers, use the most specific one that is applicable.</p> <p>When no Identifier is available, a bibliographic description may be constructed. Future work will involve developing guidelines.</p>
<b>Best practice</b>	<p>Recommended use with qualifiers in certain situations:</p> <ul style="list-style-type: none"> <li>- When documents in hand are parts of "host documents" (e.g. journal, monographic series) and when there is no citation information in DC identifier (if used by Citation WG).</li> <li>- When documents in hand are revisions or reformatted issues of earlier publications and information on these are readily available.</li> </ul>

<b>Name</b>	<b>Relation   isVersionOf</b>
<b>Label</b>	Relation   Is Version Of
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	IsVersionOf
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The described resource is a version, edition, or adaptation of the referenced resource. Changes in version implies substantive changes in content rather than differences in format.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	Do not include qualifier HasVersion, since this implies that it is clear which came first.
<b>Best practice</b>	
<b>Open questions</b>	Future work includes possibly identifying a need for HasVersion.

<b>Name</b>	<b>Relation   isFormatOf</b>
<b>Label</b>	Relation   Is Format Of
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	IsFormatOf
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below

<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The described resource is the same intellectual content of the referenced resource, but presented in another format.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	Use when there are alternative formats and it is not clear which preceded the other.
<b>Best practice</b>	

<b>Name</b>	<b>Relation   hasFormat</b>
<b>Label</b>	Relation   Has Format
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	HasFormat
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The described resource pre-existed the referenced resource, which is essentially the same intellectual content presented in another format.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Use only when the described resource references alternative physical formats. Example is the metadata for a home page for a dissertation that references that dissertation in various alternative formats (e.g. PDF, Postscript, etc.)
<b>Best practice</b>	



<b>Name</b>	<b>Relation   isReplacedBy</b>
<b>Label</b>	Relation   Is Replaced By
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	IsReplacedBy
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The described resource is supplanted, displaced, or superceded by the referenced resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Used for succeeding version.
<b>Best practice</b>	

<b>Name</b>	<b>Relation   Replaces</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Replaces, further refinements see below and above
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>

<b>DC Definition</b>	The described resource supplants, displaces, or supersedes the referenced resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	Used for preceding version.
<b>Best practice</b>	

<b>Name</b>	<b>Relation   IsPartOf</b>
<b>Label</b>	Relation   Is Part Of
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	IsPartOf
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The described resource is a physical or logical part of the referenced resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	Recommended use when documents in hand are parts of "host documents" (e.g. journal, monographic series) and when there is no citation information in DC identifier (if used by Citation WG).

<b>Name</b>	<b>Relation   hasPart</b>

<b>Label</b>	Relation   Has Part
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	HasPart
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The described resource includes the referenced resource either physically or logically.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Relation   requires</b>
<b>Label</b>	Relation   Requires
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Requires
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>R</b>
<b>DC Definition</b>	The described resource requires the referenced resource to support its function, delivery, or coherence of content.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-

<b>DC-Lib Comment</b>	-
<b>Best practice</b>	

<b>Name</b>	<b>Relation   isReferencedBy</b>
<b>Label</b>	Relation   Is Referenced By
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	IsReferencedBy
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The described resource is referenced, cited, or otherwise pointed to by the referenced resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	May be of limited use in terms of later resources referencing the initial resource, but may be useful to link to a major review or assessing essay.

<b>Name</b>	<b>Relation   References</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	References
<b>DC-Lib Refinement(s)</b>	-

<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The described resource references, cites, or otherwise points to the referenced resource.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	May be of limited use except for other resources that are far reaching or thorough criticisms. Not appropriate, for example, to include all references from the bibliography of the described resource in repeated Relation.References tags
<b>Best practice</b>	

<b>Name</b>	<b>Relation   URI</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	see above
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	URI
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	A URI uniform resource identifier.
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	In the absence of a globally unique Identifier, a constructed or derived one of a local nature can be supplied, including a specification of the supplying organisation.

<b>Best practice</b>	
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<b>Name</b>	<b>Relation   DC encoding scheme(s)</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	http://purl.org/dc/terms/ (to be registered)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	<a href="#">SICI</a> , <a href="#">ISBN</a> , <a href="#">ISSN</a> , <a href="#">DOI</a> , (if not expressed as URI)
<b>DC-Lib Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	SICI: Serial Item and Contribution Identifier; ISBN: International Standard Book Number; ISSN: International Standard Serial Number; DOI: Digital Object Identifier
<b>DC Comment</b>	To be registered as encoding schemes (these may also be expressed as URIs).
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	OpenURL may be registered as an encoding scheme after completion of the standard.
<b>Best practice</b>	

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## Coverage

<b>Name</b>	<b>Coverage</b>
<b>Label</b>	Coverage
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	see below
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	The extent or scope of the content of the resource
<b>DC Comment</b>	Coverage will typically include spatial location (a place name or geographic coordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity). Recommended best practice is to select a value from a controlled vocabulary (for example, the Thesaurus of Geographic Names [TGN]) and that, where appropriate, named places or time periods be used in preference to numeric identifiers such as sets of coordinates or date ranges.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	
<b>Best practice</b>	Use Coverage with qualifier Spatial or Temporal; use of unqualified Coverage is discouraged.

<b>Name</b>	<b>Coverage   Spatial</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>
<b>DC Refinement(s)</b>	Spatial

<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	DCMI Point, ISO 3166, DCMI Box, TGN MARC Geographic Area Codes, MARC Country Codes
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Spatial characteristics of the intellectual content of the resource.
<b>DC Comment</b>	Coverage will typically include spatial location (a place name or geographic coordinates), temporal period (a period label, date, or date range) or jurisdiction (such as a named administrative entity).  Recommended best practice is to select a value from a controlled vocabulary (for example, the Thesaurus of Geographic Names [TGN]) and that, where appropriate, named places or time periods be used in preference to numeric identifiers such as sets of coordinates or date ranges.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	Use this element for geographic coverage. The value of this element may also be included in Subject if desired.  There is a need to evaluate DCMI Box and DCMI Point as for their usefulness for libraries and how they relate to current library practices for recording cartographic data.
<b>Best practice</b>	Use Coverage with qualifier Spatial or Temporal.

<b>Name</b>	<b>Coverage   temporal</b>
<b>Label</b>	Coverage   Temporal
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a>



<b>DC Refinement(s)</b>	Temporal
<b>DC-Lib Refinement(s)</b>	-
<b>DC Encoding Scheme(s)</b>	DCMI Period, W3C-DTF
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	Temporal characteristics of the intellectual content of the resource.
<b>DC Comment</b>	Coverage will typically include temporal period ... Recommended best practice is to select a value from a controlled vocabulary ...
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	The value of this element may also be included in Subject if desired.
<b>Best practice</b>	Prefer standard representation of date/time values in DC.Date and dc.coverage.temporal, although textual descriptions may also be used.

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## Rights

<b>Name</b>	<b>Rights</b>
<b>Label</b>	Rights
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	

<b>DC Encoding Scheme(s)</b>	-
<b>Form of Obligation</b>	<b>R</b> if applicable (if there are encumbrances)
<b>DC Definition</b>	Information about rights held in and over the resource.
<b>DC Comment</b>	Typically, a Rights element will contain a rights management statement for the resource, or reference a service providing such information. Rights information often encompasses Intellectual Property Rights (IPR), Copyright, and various Property Rights. If the Rights element is absent, no assumptions can be made about the status of these and other rights with respect to the resource.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	
<b>Best practice</b>	
<b>Open questions</b>	Need to determine how to use for library applications; there is ongoing discussion on rights metadata in various applications.

<b>Name</b>	<b>Rights   URI</b>
<b>Label</b>	...
<b>Choice of Namespace</b>	<a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> (to be registered)
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	URI
<b>DC-Lib Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>R</b> if applicable (if there are encumbrances)
<b>DC Definition</b>	A URI uniform resource identifier.

<b>DC Comment</b>	...
<b>DC-Lib Definition</b>	
<b>DC-Lib Comment</b>	
<b>Best practice</b>	

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## Audience

<b>Name</b>	<b>audience</b>
<b>Label</b>	Audience
<b>Choice of Namespace</b>	http://purl.org/dc/terms/ (domain-specific for DC-Ed)
<b>DC Refinement(s)</b>	
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	
<b>DC-Lib Encoding Scheme(s)</b>	
<b>Form of Obligation</b>	<b>O</b>
<b>DC Definition</b>	DC-Ed definition: A class of entity for whom the resource is intended or useful.
<b>DC Comment</b>	DC-Ed comment: A class of entity may be determined by the creator or the publisher or by a third party.
<b>DC-Lib Definition</b>	-
<b>DC-Lib Comment</b>	
<b>Best practice</b>	

<b>Open questions</b>	<p>Need to evaluate whether any refinements or encoding scheme(s) are appropriate for DC-Lib use. MARC target audience codes may be considered.</p> <p>Suggest elevating this element to cross domain status.</p>
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## Holding Location

<b>Name</b>	<b>holdingLocation</b>
<b>Label</b>	Holding Location
<b>Choice of Namespace</b>	DC-LMES
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	-
<b>DC-Lib Encoding Scheme(s)</b>	see below
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Identifies ownership of and/or the organization responsible for access to the resource.

<b>DC-Lib Comment</b>	Use for a physical location that allows the user to retrieve the item when a URI is not appropriate (e.g. for physical items not available electronically). This also facilitates access if the URI doesn't retrieve anything or only a poor substitute.
<b>Best practice</b>	

<b>Name</b>	<b>holdingLocation   DC-Lib encoding scheme(s)</b>
<b>Label</b>	Holding Location
<b>Choice of Namespace</b>	DC-LMES Qualifiers
<b>DC Refinement(s)</b>	-
<b>DC-Lib Refinement(s)</b>	
<b>DC Encoding Scheme(s)</b>	-
<b>DC-Lib Encoding Scheme(s)</b>	MARC Code list for Organizations
<b>Form of Obligation</b>	<b>MA</b>
<b>DC Definition</b>	-
<b>DC Comment</b>	-
<b>DC-Lib Definition</b>	Identifies ownership of and/or the organization responsible for access to the resource.
<b>DC-Lib Comment</b>	Use for a physical location that allows the user to retrieve the item when a URI is not appropriate (e.g. for physical items not available electronically). This also facilitates access if the URI doesn't retrieve anything or only a poor substitute.
<b>Best practice</b>	
<b>Open questions</b>	Need to evaluate other encoding schemes, possibly a URI to an entry in an authority file.

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## 5. Acknowledgements

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Priscilla Caplan (Florida Center for Library Automation)  
Warwick Cathro (National Library of Australia)  
Ann Chapman (UKOLN)  
Hsueh-hua Chen (National Taiwan University)  
Eric Childress (OCLC)  
Robina Clayphan (British Library)  
Monika Cremer (University of Goettingen)  
Stina Degerstedt (Koniglige Bibliotek, Sweden)  
Ricky Erway (Research Libraries Group)  
Carolyn Guinchard (University of Alberta)  
Rebecca Guenther (Library of Congress)  
Susan Haigh (National Library of Canada)  
Sten Hedberg (Uppsala University Library)  
Rachel Heery (UKOLN)  
Christel Hengel (Deutsch Bibliothek)  
Diane Hillmann (Cornell University)  
Noriko Kando (NII)  
Wei Liu (Shanghai Library)  
Lynn Marko (University of Michigan)  
Heike Neuroth (University of Goettingen)  
Trudi Noordermeer (Royal Library of the Netherlands)  
Marianne Peereboom (Royal Library of the Netherlands)  
Shigeo Sugimoto (University of Library and Information Science, Japan)

Stuart Weibel (DCMI)

Robin Wendler (Harvard University)

Mary Woodley (California State University, Northridge)

## 6. Major changes since last update

This list includes major changes.

- **General**
  - DC-Lib encoding scheme deleted in tables except for Holding Location (domain-specific element); all other encoding schemes listed under DC encoding scheme
  - Most open questions deleted or changed to recommendations
  - Specification of mandatory element(s) added
  - Use of encoding schemes explained
  - Changed namespace references to reflect recommended [Namespace Policy for the Dublin Core Metadata Initiative](#)
- **Title**
  - Best practice statements added
  - Title|Alternative made recommended
- **Creator and Contributor**
  - Creator made optional; allows using separate CCP elements or conflating if desired
  - Best practice statement changed
  - DC-Lib definition added for Creator
  - Method for using role values as element refinements specified
  - DCMIAgentDetail added as encoding scheme
  - Type removed (part of DCMIAgentDetail proposal)
- **Publisher**
  - Made optional
  - Best practice statement changes
  - Open questions added
  - Publisher|DCMIAgentDetail added
- **Subject**
  - Allows geographics in Subject if desired (and also in Coverage)
  - Best practice note changed
- **Description**
  - Description|Version changed to Recommended
- **Date**
  - Best practice statement revised
  - Date|Created: best practice statement added

- Date|Captured added
- **Format:**
  - Format|Medium: Best practice added
- **Identifier**
  - Changed to Mandatory if applicable
  - Best practice statements added
  - Identifier|DC encoding scheme(s): added DC-Lib comment about OpenURL
  - Identifier|Citation added
- **Source**
  - Added DC-Lib Comment
  - Source|URI added
  - Source|DC encoding scheme(s) added
- **Language:**
  - Added unqualified Language table
  - Added RFC 3066 table
- **Relation**
  - Added DC-Lib comments
  - Added Relation|Has Format with DC-Lib comment
  - Relation|isReferencedBy: added DC-Lib comment
  - Relation|References: added DC-Lib comment
  - Relation|DC encoding scheme(s) added
- **Coverage**
  - Added unqualified Coverage table
  - Coverage|Spatial obligation changed to mandatory if applicable; comment changed
  - Coverage|Temporal: added DC-Lib comment and Best practice statement
- **Audience:** Namespace, definition, comment revised based on DCMI Usage Board decisions for DC-Ed.
- **Holding Location:** holdingLocation|DC-Lib encoding scheme(s) added

[back to DC-Lib Application Profile: Introduction](#)

Last update: April 27, 2002

[Rebecca S. Guenther](#)





Metadata associated with this resource: <http://dublincore.org/documents/2002/04/16/library-application-profile/index.shtml.rdf>

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**Date:** Mon, 7 Oct 2002 09:24:05 +0200  
**Reply-To:** A mailing list for the Dublin Core Metadata Initiative's Usage Board <DC-USAGE@JISCMail.AC.UK>  
**Sender:** A mailing list for the Dublin Core Metadata Initiative's Usage Board <DC-USAGE@JISCMail.AC.UK>  
**From:** [Thomas Baker](#) <[thomas.baker@BI.FHG.DE](mailto:thomas.baker@BI.FHG.DE)>  
**Subject:** [Proposal for Agent Roles in Florence](#)  
**Comments:** cc: Jose Borbinha <[jose.borbinha@bn.pt](mailto:jose.borbinha@bn.pt)>, John Kunze <[jak@ckm.ucsf.edu](mailto:jak@ckm.ucsf.edu)>  
**Content-Type:** text/plain; charset=us-ascii  
**Content-Disposition:** inline

Dear all,

I have attached the Agent Role proposal in its most recent incarnation. It looks to me like the proposal enjoys strong support, solves the problem at hand, and stands a good chance of passing in Florence.

Rebecca, do you want to take over this document for further changes before Florence, or should we put this into the Agenda as is? (If possible I would like to finalize the Agenda today so that I can prepare the usual PDF meeting packet in time for everyone to print it out and bring.)

Although this proposal in effect supersedes Rebecca's original <http://www.loc.gov/marc/dc/Agent-roles.html>, I will keep the older proposal in the packet for context.

Tom

-----

**Title:** Proposal: Agent Roles for DCMES  
**Date:** 2002-10-07

Step 1. Declare dc:creator to be a refinement of dc:contributor.

## Step 2. Approve MARC Relator terms as refinements of dc:contributor.

- 2.1. The Library of Congress would need to assign and maintain a set of URIs for the Relator terms in an LoC namespace. It would need to document those URIs, together with other relevant information (labels and definitions), on the Web. The entire set of Relator terms to be approved would ideally be defined within just one namespace -- i.e., identified by one URI.
- 2.2. Usage Board approval would relate to an entire set of Relator terms (i.e., one namespace URI). Terms within that set would not be discussed or approved on an individual basis. The Usage Board would say, in effect: "terms from this list can be used as refinements for dc:contributor".
- 2.3. LoC would be the sole agency responsible for the maintenance of the Relator terms. DCMI Usage Board approval would extend to new terms as they are added by LoC on an ongoing basis. Ideally, the Library of Congress would maintain these terms in accordance with principles generally compatible with the DCMI Namespace Policy [1] with regard to permanence and semantic stability over time.
- 2.4. Since this declaration with regard to a non-DCMI namespace would set a precedent that presumably could apply to other such vocabularies, the Usage Board would need to clarify in general what status to assign to such a decision (Recommended, Conforming, or something else); decide how to declare and document such a decision in its Web pages; and articulate processes by which other such vocabularies might be considered in the future.
- 2.5. In cooperation with the maintainers of schemas expressing DCMI terms formally (e.g., in RDF), the Usage Board would need to understand how the Usage Board approval of a non-DCMI vocabulary would be modeled.
- 2.6. Possibly, declare the existing MARC Relator term "creator" to be equivalent to dc:creator.

Step 3. Possibly, ask the DC-Architecture working group to develop recommendations for appropriate syntax for expressing these element refinements.

## Discussion

-- Library of Congress would hold and maintain the terms in the context of a namespace URI we could cite (perhaps something along the lines of <http://www.loc.gov/standards/marcrelators/>) and give each term its own URI on that basis (e.g., <http://www.loc.gov/standards/marcrelators/ill> for "Illustrator").

-- The Usage Board would simply say, in effect: "The terms defined in <http://www.loc.gov/standards/marcrelators/> can be used as refinements of <http://purl.org/dc/elements/1.1/contributor>". The only thing the DCMI Usage Board would need to maintain and document is this statement itself; Library of Congress alone would maintain the vocabulary and its URIs.

--

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**Date:** Tue, 8 Oct 2002 09:27:24 +0200  
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**Sender:** A mailing list for the Dublin Core Metadata Initiative's Usage Board <DC-USAGE@JISCMail.AC.UK>  
**From:** Thomas Baker <thomas.baker@BI.FHG.DE>  
**Subject:** Re: Proposal for Agent Roles in Florence  
**In-Reply-To:** <200210072158.XAA05272@scarlett.mathematik.Uni-Osnabrueck.DE>  
**Content-Type:** text/plain; charset=us-ascii  
**Content-Disposition:** inline

On Mon, Oct 07, 2002 at 11:58:37PM +0200, Roland Schwaenzl wrote:

> > On Mon, Oct 07, 2002 at 09:24:05AM +0200, Thomas Baker wrote:

> > > 2.6. Possibly, declare the existing MARC Relator term

> > > "creator" to be equivalent to dc:creator.

> >

> > As an addendum to the Agent Roles proposal, here are the two

> > definitions of Creator:

> >

> > In <http://www.loc.gov/marc/dc/Agent-roles.html>, the MARC Relator:

> > | Creator

> > | Use for a person or corporate body responsible for the intellectual

> > | or artistic content of a work.

> >

> > In <http://dublincore.org/usage/terms/dc/>:

> > | Label: Creator

> > | Definition: An entity primarily responsible for making the content

> > | of the resource.

> > | Comment: Examples of a Creator include a person, an organisation,

> > | or a service. Typically, the name of a Creator should

> > | be used to indicate the entity.

>

> Thought we're talking about

> <http://lcweb.loc.gov/marc/sourcecode/relators/relators.html>

>

> It also has a notion of contributor and publisher.

> How marc:redactor could be understood as refinement of

> dc:contributor ?

Okay, comparing...:

| "marc:redactor - Use for a person who writes or develops the  
| framework for an item without being intellectually responsible  
| for its content."

| "dc:contributor -- An entity responsible for making  
| contributions to the content of the resource."

Hmm, at first glance, marc:redactor seems to me to be in scope... Even if we're not sure we agree about this particular term, I think we can agree that there is plenty of room in these definitions for discussion -- e.g., framework versus content; intellectual responsibility versus contribution, etc. Do we really want to go there?

I would prefer that we not get into a discussion of specific relators unless we see something that is unambiguously a problem -- something that simply does not fit with the notion of a dc:contributor.

This raises a further question: If we are not reviewing the 175 terms individually, do we want to assert that the individual terms are refinements of dc:contributor or do we want to make a blanket statement about all of the Relators? My personal preference would be to make a statement covering all of the Relators as a block and then perhaps to add some Comments as necessary.

For example, I might want to comment on the following:

| marc:contributor - Use for one whose work has been contributed  
| to a larger work, such as an anthology, serial publication, or  
| other compilation of individual works. Do not use for someone  
| whose sole function in relation to a work is as author, editor,  
| compiler or translator.

This is clearly much more specific than dc:contributor -- but the fact that they happen both to be called Contributor is not a fundamental problem in my view; distinguishing such meanings is what namespaces are for in the first place. I have no problem with marc:contributor being declared a refinement of dc:contributor. We could perhaps draw attention to this in a note.

Marc:publisher is not defined, so "by definition" there is no particular problem there.

If we were to issue a blanket statement covering all terms in the MARC Relators, we should give some consideration to how that statement would translate into RDF, which seems no longer to have the constructs that could express this idea directly.

Does this mean we would have to make assertions about each of the 175 terms, citing each by name? Would it matter to us that this a different way to say approximately the same thing?

Tom

--

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# Proposal: Agent roles in DCMES

5 April 2002

This proposal is submitted by Rebecca Guenther for review by the DC-Agents and DC-Libraries Working Groups. It proposes establishing element refinements for the Dublin Core elements Creator and Contributor to express a role in relation to the resource. A second proposal has been submitted by Robina Clayphan for a proposed DCMI Agent Detail Encoding Scheme.

---

## 1. Background.

The need to express a role for the "Agent" elements (Creator, Contributor, and, to a lesser extent, Publisher) in the Dublin Core element Set has been expressed for many years. There have been a number of proposals for how to handle this, but currently there are no approved element refinements for these three Dublin Core elements. A role is a term that further refines the contribution of the agent to the resource described; an example is "illustrator" as a refinement to the element Contributor when that person provided, for example, illustrations to the resource rather than being entirely responsible for all aspects of the intellectual content.

Over the years suggestions have been made to add a "role" qualifier for the Agent elements which would contain a value, preferably from a controlled list. [A proposal](#) was presented in December 1999 which suggested that "role" be what was then called a "value component" of the elements. Subsequent to this, before the voting commenced, the proposal was revised to include a short list of roles (a subset of the MARC relator list) that were put forward as element refinements to the three elements (see below). However, when the Dublin Core Usage Committee conducted its vote on Dublin Core qualifiers, this proposal was rejected and no qualifiers were approved for Creator, Contributor, and Publisher because of the feeling by some members that all qualifiers (including "value components") be approved as a package.

The DCMI Usage Board discussed the issue further in Sept. and Oct. 2001 and agreed (again) that the role values are properly element refinements. The group also generally agreed that deprecating Creator and Publisher in favor of Contributor should be considered; the role values Creator and Publisher could be used to refine Contributor if needed. This consensus is what is reflected in the October 2001 version of the [DC-Libraries Application Profile](#). However, it was recognized that the idea needed further discussion particularly by the Agent Working Group.



Meetings of the DCMI-Agents Working Group over the last few years have continued to discuss the need for roles, although more attention has been given to an Agent element set. After the October 2001 meeting, the group included a deliverable in its work plan to develop a proposal for CCP qualifiers. This proposal is a result of that deliverable (assigned to Rebecca Guenther and Robina Clayphan).

The DC-Libraries Application Profile is in the process of revision. The need for expressing the relation between the contributor and the resource is clear and will be included in the profile. It is important that the Agent Working Group discuss the issue so that a formal proposal can be submitted to the Usage Board to finally approve qualifiers for Creator, Contributor, and Publisher.

In a meeting of the DC-Libraries Application Profile drafting committee held in January 2002 consensus was reached that rather than specify a subset of the LC Relators list terms, that any term be available for expressing the relation of the agent to the work. There are about 175 terms on the list, so it would be difficult to submit proposals for each term as an element refinement. The feeling was that users not be constrained to a small list when their applications may require more specificity, and a fuller list is readily available and a well-accepted standard. Additional terms could be added as needed by submitting requests to the Library of Congress.

## **2. Proposal for a small set of relator terms as element refinements.**

The following was submitted to the DCMI Usage Board in October 2002:

### **Proposal for including Roles for Creator/Contributor/Publisher in Dublin Core**

The Agent Working Group has discussed the elements Creator, Contributor and Publisher and how to allow for expressing attributes of agents associated with a resource. In addition it has in its charge looking at element refinements for these elements. It seems unlikely that this group will make substantial progress both on the Agent Core (the main topic of their agenda at DC-9) and element refinements, particularly for roles.

There is general consensus (particularly among members of the Usage Board as well as in previous discussions within the DCMI) that agent roles are attributes of the agent in relation to the resource described, so thus they should be expressed as element refinements of the agent elements. In addition, the Usage Board has discussed the possible deprecation of Creator and Publisher in favor of using Contributor for all agents associated with a resource.

This proposal suggests that element refinements be approved for Contributor to indicate the role of the contributor in relation to the resource. The following roles and

definitions come from the MARC Code List for Relators (with some minor revisions to make the definitions more generally applicable). Role terms would be approved for use with the element, although applications could use the appropriate code if preferred (some, such as Open Ebook are already using relator codes with DCMES). Note that Creator and Publisher are already defined as roles; these would be used with Contributor and would be equivalent to using the element Creator or Publisher, respectively.

The following is essentially what was proposed to DCMI as element refinements in early 2000 (with a few changes), but was not approved because of the perceived need to consider all aspects of CCP element refinements and structured values separately. Other element refinements indicating roles could be approved if needed; they should be taken from the MARC list with the official semantics.

It is proposed that the Library of Congress maintain this list in conjunction with the larger MARC Code List of Relators. Thus, LC would define a subset of the larger list and maintain that documentation on the Web. These role terms would also be registered as element refinements of Contributor in the DCMI registry. This would enable LC to be able to maintain consistency with the complete list. If users require a role not on the LC list, they can apply for a new code/term; if approved, it would be included both on the officially maintained list at LC and in the DCMI registry.

An alternative is to allow for any of the role terms on the list to be used, but that would require all to be defined as element refinement for Contributor. Since the list includes many codes designed for use with very specific types of applications, this does not seem appropriate for a cross domain **element set such as Dublin Core**.

Proposed Relators list for general applications (Dublin Core)

Principles for inclusion:

- The term is not specific to a material type.
- Only general creator/author terms are used, rather than specific ones.
- Usage is for general application only; the broadest terms are included.

Term	Code	Comment
Adapter	adp	
Contributor	ctb	Probably not necessary to use
Creator	cre	Used with Contributor
Distributor	dst	

Editor	edt	
Illustrator	ill	
Performer	prf	
Publisher	pbl	Used with Contributor
Sponsor	spn	
Translator	trl	

### Terms with definitions:

**Adapter [adp]** Use for a person who 1) reworks a musical composition, usually for a different medium, or 2) rewrites novels or stories for motion pictures or other audiovisual medium.

**Contributor [ctb]** Use for one whose work has been contributed to a larger work, such as an anthology, serial publication, or other compilation of individual works.

**Creator [cre]** Use for a person or corporate body responsible for the intellectual or artistic content of a work.

**Distributor [dst]** Use for an agent or agency that has exclusive or shared marketing rights for an item.

**Editor [edt]** Use for a person who prepares for publication a work not primarily his/her own, such as by elucidating text, adding introductory or other critical matter, or technically directing an editorial staff.

**Illustrator [ill]** Use for the person who conceives, and perhaps also implements, a design or illustration.

**Performer [prf]** Use for a person who exhibits musical or acting skills in a musical or dramatic presentation or entertainment.

**Publisher [pbl]** Use for an entity responsible for making the resource available (Note: the definition of publisher is not given in MARC Relators list)

**Sponsor [spn]** Use for the person or agency that issued a contract or under the auspices of which a work has been written, printed, published, etc.

**Translator [trl]** Use for a person who renders a text from one language into another, or from an older form of a language into the modern form.

See also the [full MARC Relator list](#).

### **3. Proposal for use of the full list of terms for relators.**

As mentioned above, the DC-Libraries Application Profile drafting committee meeting resulted in consensus that users not be constrained by a small list of elements and that the entire list of relator terms be available. In addition, the group recommended retaining the three CCP elements and leaving it to the application as to whether it wishes to combine Creator and Contributor (or all three).

The following are notes from that meeting (full notes are available).

#### **Creator/Contributor/Publisher.**

*Elements.* DC-Lib AP currently suggests combining these three elements and using only Contributor. This possibility had been discussed by the DCMI Usage Board recently. However, this approach has not been officially approved by either the DCMI-Agents Working Group or the Usage Board. Thus, the group preferred to retain the three elements and allow for an institution to collapse them if desired. (For instance, NLM prefers to use only Contributor for both Creator and Contributor but retain Publisher.) It was recognized that for many uses it was necessary in library applications to distinguish publisher separately. Stu Weibel thought that it made implementations more complicated to throw out some elements, and that there may be little payoff to doing that. In any case there is an expectation that at least Creator and Contributor (perhaps also Publisher) would be indexed together anyhow, and there may be no benefit to throwing some of them out. Roles can be used for an application that desires to conflate all or some of the elements, such as Contributor.Creator.

*Decision:* Allow for using all three elements, but applications can conflate them if desired.

*Reason:* This allows more flexibility with existing records and there is not a big payoff in conflating them. Systems can still index them together if desired.

*Roles.* It is desirable to define a vocabulary to be used with a role qualifier. DC-Lib AP will specify the use of the MARC relator code list; other lists could also be used if defined. If a subset of that list is desired it may be necessary to define what that subset is (either through DCMI-Agents WG or the AP). If the subset is found to be constraining, any value on the list should be possible. Robina Clayphan will contact Andy Powell to discuss the question of syntax and element refinement versus

structured value.

*Decision:* Use MARC relator list and allow for any value from that list; explore how to do this syntactically.

*Reason:* Users should not be constrained by a subset list since applications may vary.

The remaining issue was how to express this syntactically. An exchange with Andy Powell concerning possible syntax is available at in the archives of the DC-Libraries-AP list.

This brought up the issue of namespaces if a DC term from another namespace was being used as an element refinement. However, it is possible that an agreement could be reached between DCMI and the Library of Congress on how to work out these issues so that the relator terms could be reference as part of a DC namespace while the list could be maintained by the Library of Congress.

#### **4. Current Proposal**

The following is proposed for establishing qualifiers for Creator and Contributor.

1. Allow for the use of any term on the MARC relator list to be used with Creator or Contributor.
  - Note that Publisher is being excluded; the only term that is appropriate for use with that element is perhaps Distributor, which could be considered as a refinement itself.
  - This approach would probably involve establishing a token and URI for each relator term. The token could be the code already defined in the list, while the human readable label could be the term itself.
  - It is possible that other controlled lists of relator terms could be used; this would require submission of such to the DCMI-Usage Board.
2. Ask the DCMI-Architecture working group to develop recommendations for appropriate syntax for expressing these element refinements.
3. Resolve the namespace issues of using terms from an externally maintained scheme in a DCMI namespace.

# Relators Terms and Codes

## Network Development and MARC Standards Office Library of Congress

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### Contents

- [Relators Terms](#)
  - [Relators Codes](#)
  - [Code Maintenance](#)
- 

### Relators Terms

#### **Actor [act]**

*Use for a person who principally exhibits acting skills in a musical or dramatic presentation or entertainment.*

#### **Adapter [adp]**

*Use for a person who 1) reworks a musical composition, usually for a different medium, or 2) rewrites novels or stories for motion pictures or other audiovisual medium.*

#### **Annotator [ann]**

*Use for a person who writes manuscript annotations on a printed item.*

#### **Applicant [app]**

Appraiser

USE

Expert

#### **Architect [arc]**

#### **Arranger [arr]**

*Use for a person who transcribes a musical composition, usually for a different medium from that of the original; in an arrangement the musical substance remains essentially unchanged.*

#### **Artist [art]**

*Use for a person (e.g., a painter) who conceives, and perhaps also implements, an original graphic design or work of art, if specific codes (e.g., [egr], [etr]) are not desired. For book illustrators, prefer Illustrator [ill].*

UF

Graphic technician

**Assignee [asg]**

*Use for a person or organization to whom a license for printing or publishing has been transferred.*

**Associated name [asn]**

*Use as a general relator for a name associated with or found in an item or collection, or which cannot be determined to be that of a Former owner [fmo] or other designated relator indicative of provenance.*

**Attributed name [att]**

*Use to relate an author, artist, etc. to a work for which there is or once was substantial authority for designating that person as author, creator, etc. of the work.*

UF

Supposed name

**Auctioneer [auc]**

*Use for a person or corporate body in charge of the estimation and public auctioning of goods, particularly books, artistic works, etc.*

**Author [aut]**

*Use for a person or corporate body chiefly responsible for the intellectual or artistic content of a work, usually printed text. This term may also be used when more than one person or body bears such responsibility.*

UF

Joint author

**Author in quotations or text extracts [aqt]**

*Use for a person whose work is largely quoted or extracted in a work to which he or she did not contribute directly. Such quotations are found particularly in exhibition catalogs, collections of photographs, etc.*

**Author of afterword, colophon, etc. [aft]**

*Use for a person or corporate body responsible for an afterword, postface, colophon, etc. but who is not the chief author of a work.*

**Author of dialog [aud]**

*Use for a person or corporate body responsible for the dialog or spoken commentary for a screenplay or sound recording.*

**Author of introduction, etc. [aui]**

*Use for a person or corporate body responsible for an introduction, preface, foreword, or other critical introductory matter, but who is not the chief author.*

**Author of screenplay, etc. [aus]**

*Use for a person or corporate body responsible for a motion picture screenplay, dialog, spoken commentary, etc.*

**Bibliographic antecedent [ant]**

*Use for the author responsible for a work upon which the work represented by the catalog record is based. This may be appropriate for adaptations, sequels, continuations, indexes, etc.*

**Binder [bnd]**

**Binding designer [bdd]**

UF

Designer of binding

**Book designer [bkd]**

*Use for the person or firm responsible for the entire graphic design of a book, including arrangement of type and illustration, choice of materials, and process used.*

UF

Designer of book

**Book producer [bkp]**

*Use for the person or firm responsible for the production of books and other print media, if specific codes (e.g., [bkd], [egr], [tyd], [prt]) are not desired.*

UF

Producer of book

**Bookjacket designer [bjd]**

UF

Designer of bookjacket

**Bookplate designer [bpd]**

UF

Designer of bookplate

**Bookseller [bsl]**

Bowdlerizer

USE

Censor

**Calligrapher [cll]**

**Cartographer [ctg]**

**Censor [cns]**

*Use for a censor, bowdlerizer, expurgator, etc., official or private.*

UF

Bowdlerizer

Expurgator

**Choreographer [chr]**

*Use for a person who composes or arranges dances or other movements (e.g., "master of swords") for a musical or dramatic presentation or entertainment.*

**Client [cli]**

*Use for a person or organization for whom another person or organization is acting.*

**Collaborator [clb]**

*Use for a person or corporate body that takes a limited part in the elaboration of a work of another person or corporate body that brings complements (e.g., appendices, notes) to the work.*

**Collector [col]**

*Use for a person who has brought together material from various sources, which has been arranged, described, and cataloged as a collection. The collector is neither the creator of the material nor the person to whom*



*manuscripts in the collection may have been addressed.*

**Collotyper [clt]**

**Commentator [cmm]**

*Use for a person who provides interpretation, analysis, or a discussion of the subject matter on a recording, motion picture, or other audiovisual medium.*

**Commentator for written text [cwt]**

*Use for a person or corporate body responsible for the commentary or explanatory notes about a text. For the writer of manuscript annotations in a printed book, use Annotator [ann].*

**Compiler [com]**

*Use for a person who produces a work or publication by selecting and putting together material from the works of various persons or bodies.*

**Complainant [cpl]**

*Use for the party who applies to the courts for redress, usually in an equity proceeding.*

**Complainant-appellant [cpt]**

*Use for a complainant who takes an appeal from one court or jurisdiction to another to reverse the judgment, usually in an equity proceeding.*

**Complainant-appellee [cpe]**

*Use for a complainant against whom an appeal is taken from one court or jurisdiction to another to reverse the judgment, usually in an equity proceeding.*

**Composer [cmp]**

*Use for a person who creates a musical work, usually a piece of music in manuscript or printed form.*

**Compositor [cmt]**

UF

Typesetter

**Conceptor [ccp]**

*Use for a person or corporate body responsible for the original idea on which a work is based, this includes the scientific author of an audio-visual item and the conceptor of an advertisement.*

**Conductor [cnd]**

*Use for a person who directs a performing group (orchestra, chorus, opera, etc.).*

**Consultant [csl]**

*Use for the person called upon for professional advice or services in a specialized field of knowledge or training.*

**Consultant to a project [csp]**

*Use for a person or corporate body engaged specifically to provide an intellectual overview of a strategic or operational task and by analysis, specification, or instruction, to create or propose a cost-effective course of action or solution.*

**Contestant [cos]**

*Use for the party who opposes, resists, or disputes, in a court of law, a claim, decision, result, etc.*

**Contestant-appellant [cot]**

*Use for a contestant who takes an appeal from one court of law or jurisdiction to another to reverse the judgment.*

**Contestant-appellee [coe]**

*Use for a contestant against whom an appeal is taken from one court of law or jurisdiction to another to reverse the judgment.*

**Contestee [cts]**

*Use for the party defending a claim, decision, result, etc. being opposed, resisted, or disputed in a court of law.*

**Contestee-appellant [ctt]**

*Use for a contestee who takes an appeal from one court or jurisdiction to another to reverse the judgment.*

**Contestee-appellee [cte]**

*Use for a contestee against whom an appeal is taken from one court or jurisdiction to another to reverse the judgment.*

**Contractor [ctr]**

*Use for the person or corporate body who enters into a contract with another person or corporate body to perform a specific task.*

**Contributor [ctb]**

*Use for one whose work has been contributed to a larger work, such as an anthology, serial publication, or other compilation of individual works. Do not use for someone whose sole function in relation to a work is as author, editor, compiler or translator.*

**Copyright claimant [cpc]**

*Use for the person listed as a copyright owner at the time of registration. Copyright can be granted or later transferred to another person or agent, at which time the claimant becomes the copyright holder.*

**Copyright holder [cph]**

**Corrector [crr]**

*Use for a corrector of manuscripts, such as the scriptorium official who corrected the work of a scribe. For printed matter, use Proofreader [pfr].*

**Correspondent [crp]**

*Use for a person or organization who was either the writer or recipient of a letter or other communication.*

**Costume designer [cst]**

*Use for a person who designs or makes costumes, fixes hair, etc., for a musical or dramatic presentation or entertainment.*

**Counterfeiter**

USE

Forger

**Creator [cre]**

*Use for a person or corporate body responsible for the intellectual or artistic*

*content of a work.*

**Curator of an exhibition [cur]**

*Use for a person who is responsible for conceiving and organizing an exhibition.*

**Dancer [dnc]**

*Use for a person who principally exhibits dancing skills in a musical or dramatic presentation or entertainment.*

**Dedicatee [dte]**

*Use for a person or organization to whom a book, manuscript, etc., is dedicated (not the recipient of a gift).*

**Dedicator [dto]**

*Use for the author of a dedication, which may be a formal statement or in epistolary or verse form.*

**Defendant [dfd]**

*Use for the party defending or denying allegations made in a suit and against whom relief or recovery is sought in the courts, usually in a legal action.*

**Defendant-appellant [dft]**

*Use for a defendant who takes an appeal from one court or jurisdiction to another to reverse the judgment, usually in a legal action.*

**Defendant-appellee [dfe]**

*Use for a defendant against whom an appeal is taken from one court or jurisdiction to another to reverse the judgment, usually in a legal action.*

**Degree grantor [dgg]**

*Use for the corporate body granting a degree for which the thesis or dissertation described was presented.*

**Delineator [dln]**

*Use for a person or organization executing technical drawings from others' designs.*

**Deponent**

USE

Witness

**Depositor [dpt]**

*Use for a person or organization placing material in the physical custody of a library or repository without transferring the legal title.*

**Designer [dsr]**

*Use for a person or organization responsible for design if specific codes (e.g., [bkd], [tyd]) are not desired.*

**Designer of binding**

USE

Binding designer

**Designer of book**

USE

Book designer

**Designer of bookjacket**

USE

Bookjacket designer

Designer of bookplate

USE

Bookplate designer

Designer of type

USE

Type designer

**Director [drt]**

*Use for a person who is responsible for the general management of a work or who supervises the production of a performance for stage, screen, or sound recording.*

**Dissertant [dis]**

*Use for a person who presents a thesis for a university or higher-level educational degree.*

**Distributor [dst]**

*Use for an agent or agency that has exclusive or shared marketing rights for an item.*

**Donor [dnr]**

*Use for the donor of a book, manuscript, etc., to its present owner. Donors to previous owners are designated as Former owner [fmo] or Inscriber [ins].*

**Draftsman [drm]**

*Use for the person who prepares technical or mechanical drawings.*

UF

Technical draftsman

**Dubious author [dub]**

*Use for a person or corporate body to which authorship has been dubiously or incorrectly ascribed.*

**Editor [edt]**

*Use for a person who prepares for publication a work not primarily his/her own, such as by elucidating text, adding introductory or other critical matter, or technically directing an editorial staff.*

**Electrotyper [elt]**

**Engineer [eng]**

*Use for a person or organization that is responsible for technical planning and design, particularly with construction.*

**Engraver [egr]**

**Etcher [etr]**

**Expert [exp]**

*Use for a person in charge of the description and appraisal of the value of goods, particularly rare items, works of art, etc.*

UF

Appraiser

Eyewitness

USE

Witness

Expurgator

USE

Censor

**Facsimilist [fac]**

*Use for the person or body that executed the facsimile.*

UF

Copier

**Film editor [flm]**

*Use for an editor of a motion picture film. This term is used regardless of the medium upon which the motion picture is produced or manufactured (e.g., acetate film, video tape).*

UF

Motion picture editor

**Forger [frg]**

UF

Copier

Counterfeiter

**Former owner [fmo]**

*Use for the person or organization who owned an item at any time in the past. Includes those to whom the material was once presented. The person or organization giving the item to the present owner is designated as Donor [dnr]*

**Funder [fnd]**

*Use for the person or agency that furnished financial support for the production of the work.*

Graphic technician

USE

Artist

*[Relator term "Graphic technician" (coded [grt]) used before March 1988 only.]*

**Honoree [hnr]**

*Use for the person in memory or honor of whom a book, manuscript, etc. is donated.*

UF

Memorial

**Host [hst]**

*Use for the person who is invited or regularly leads a program (often broadcast) that includes other guests, performers, etc. (e.g., talk show host).*

**Illuminator [ilu]**

**Illustrator [ill]**

*Use for the person who conceives, and perhaps also implements, a design or illustration, usually to accompany a written text.*

Imprimatur

USE

Licensors

**Inscriber [ins]**

*Use for the person who signs a presentation statement.*

**Instrumentalist [itr]**

*Use for a person who principally plays an instrument in a musical or dramatic presentation or entertainment.*

**Interviewee [ive]**

**Interviewer [ivr]**

**Inventor [inv]**

**Investigator**

USE

Originator

**Joint author**

USE

Author

**Landscape architect [lsa]**

*Use for the person or organization whose work involves coordinating the arrangement of existing and proposed land features and structures.*

**Lender [len]**

*Use for a person or organization permitting the temporary use of a book, manuscript, etc., such as for photocopying or microfilming.*

**Libelant [lil]**

*Use for the party who files a libel in an ecclesiastical or admiralty case.*

**Libelant-appellant [lit]**

*Use for a libelant who takes an appeal from one ecclesiastical court or admiralty to another to reverse the judgment.*

**Libelant-appellee [lie]**

*Use for a libelant against whom an appeal is taken from one ecclesiastical court or admiralty to another to reverse the judgment.*

**Libelee [lel]**

*Use for the party against whom a libel has been filed in an ecclesiastical court or admiralty.*

**Libelee-appellant [let]**

*Use for a libelee who takes an appeal from one ecclesiastical court or admiralty to another to reverse the judgment.*

**Libelee-appellee [lee]**

*Use for a libelee against whom an appeal is taken from one ecclesiastical court or admiralty to another to reverse the judgment.*

**Librettist [lbt]**

*Use for the writer of the text of an opera, oratorio, etc.*

**Licensee [lse]**

*Use for the original recipient of the right to print or publish.*

**Licensors [lso]**

*Use for the signer of the license, imprimatur, etc.*

UF

Imprimatur

**Lithographer [ltg]**

*Use for the person who prepares the stone or plate for lithographic printing, including a graphic artist creating a design directly on the surface from which printing will be done.*

**Lyricist [lyr]**

*Use for the writer of the text of a song.*

Memorial

USE

Honoree

**Metadata contact [mdc]**

*Use for the person or organization primarily responsible for compiling and maintaining the original description of a metadata set (e.g., geospatial metadata set).*

**Metal-engraver [mte]**

**Moderator [mod]**

*Use for the person who leads a program (often broadcast) where topics are discussed, usually with participation of experts in fields related to the discussion.*

**Monitor [mon]**

*Use for a person or organization that supervises compliance with the contract and is responsible for the report and controls its distribution. Sometimes referred to as the grantee, or controlling agency.*

Motion picture editor

USE

Film editor

**Musician [mus]**

*Use for the person who performs music or contributes to the musical content of a work when it is not possible or desirable to identify the function more precisely.*

**Narrator [nrt]**

*Use for the speaker who relates the particulars of an act, occurrence, or course of events.*

Observer

USE

Witness

Onlooker

USE

Witness

**Opponent [opn]**

*Use for the person or corporate body responsible for opposing a thesis or dissertation.*

**Organizer of meeting [orm]**

*Use for the person or corporate body responsible for organizing a meeting for*

*which an item is the report or proceedings.*

**Originator [org]**

*Use for the author or agency performing the work, i.e., the name of a person or organization associated with the intellectual content of the work. This category does not include the publisher or personal affiliation, or sponsor except where it is also the corporate author. Includes a person designated in the work as investigator or principal investigator.*

UF

Principal investigator

**Other [oth]**

*Use for relator codes from other lists which have no equivalent in the MARC list or for terms which have not been assigned a code.*

**Owner [own]**

*Use for the person or organization that currently owns an item or collection.*

**Papermaker [ppm]**

**Patent applicant [pta]**

*Use for the person or corporate body that applied for a patent.*

**Patent holder [pth]**

*Use for the person or corporate body that was granted the patent referred to by the item.*

UF

Patentee

Patentee

USE

Patent holder

**Patron [pat]**

*Use for the person responsible for commissioning a work. Usually a patron uses his or her means or influence to support the work of artists, writers, etc. This includes those who commission and pay for individual works.*

**Performer [prf]**

*User for a person who exhibits musical or acting skills i a musical or dramatic presentation or entertainment, if specific codes for those functions ([act], [dnc], [itr], [voc], etc.) are not used. If specific codes are used, [prf] is used for a person whose principal skill is not known or specified.*

Performer of research

USE

Researcher

**Photographer [pht]**

*Use for the person or organization responsible for taking photographs, whether they are used in their original form or as reproductions.*

**Plaintiff [ptf]**

*Use for the party who complains or sues in court in a personal action, usually in a legal proceeding.*

**Plaintiff-appellant [ptt]**



*Use for a plaintiff who takes an appeal from one court or jurisdiction to another to reverse the judgment, usually in a legal proceeding.*

**Plaintiff-appellee [pte]**

*Use for a plaintiff against whom an appeal is taken from one court or jurisdiction to another to reverse the judgment, usually in a legal proceeding.*

**Platemaker [plt]**

Plates, Printer of

USE

Printer of Plates

Principal investigator

USE

Originator

**Printer [prt]**

*Use for the person or organization who prints texts, whether from type or plates.*

**Printer of plates [pop]**

*Use for the person or organization who prints illustrations from plates.*

UF

Plates, Printer of

**Process contact [prc]**

*Use for a person or organization primarily responsible for performing or initiating a process, such as is done with the collection of metadata sets.*

**Producer [pro]**

*Use for a person who is responsible for the making of a motion picture, including business aspects, management of the productions, and the commercial success of the work.*

Producer of book

USE

Book producer

**Production personnel [prd]**

*Use for a person who is associated with the production (props, lighting, special effects, etc.) of a musical or dramatic presentation or entertainment.*

**Programmer [prg]**

*Use for a person or corporate body responsible for the creation and/or maintenance of computer program design documents, source code, and machine-executable digital files and supporting documentation.*

Promoter

USE

Thesis advisor

**Proofreader [pfr]**

*Use for a person who corrects printed matter. For manuscripts, use Corrector [crr].*

**Publisher [pbl]**

**Publishing director [pbd]**

*Use for a person who presides over the elaboration of a collective work to*

*ensure its coherence or continuity. This includes editors-in-chief, literary editors, editors of series, etc.*

**Recipient [rcp]**

*Use for the person to whom correspondence is addressed.*

**Recording engineer [rce]**

*Use for a person who supervises the technical aspects of a sound or video recording session.*

**Redactor [red]**

*Use for a person who writes or develops the framework for an item without being intellectually responsible for its content.*

**Renderer [ren]**

*Use for the draftsman who prepares drawings of architectural designs (i.e., renderings) in accurate, representational perspective to show what the project will look like when completed.*

**Research team head [rth]**

*Use for the person or corporate body that directed or managed a research project.*

**Research team member [rtm]**

*Use for the person or corporate body that participated in a research project but whose role did not involve direction or management of it.*

**Researcher [res]**

*Use for the person or corporate body responsible for performing research.*  
UF

Performer of research

**Respondent [rsp]**

*Use for the party who makes an answer to the courts pursuant to an application for redress, usually in an equity proceeding.*

**Respondent-appellant [rst]**

*Use for a respondent who takes an appeal from one court or jurisdiction to another to reverse the judgment, usually in an equity proceeding.*

**Respondent-appellee [rse]**

*Use for a respondent against whom an appeal is taken from one court or jurisdiction to another to reverse the judgment, usually in an equity proceeding.*

**Reviewer [rev]**

*Use for a person or corporate body responsible for the review of book, motion picture, performance, etc.*

**Rubricator [rbr]**

**Scenarist [sce]**

*Use for the author of a motion picture screenplay.*

**Scientific advisor [sad]**

*Use for a person who brings scientific, pedagogical, or historical competence to the conception and realization on a work, particularly in the case of audio-visual items.*

**Scribe [scr]**

*Use for an amanuensis and for a writer of manuscripts proper. For a person who makes pen-facsimiles, use Facsimilist [fac].*

**Sculptor [scl]**

*Use when the more general term Artist [art] is not desired.*

**Secretary [sec]**

*Use for a recorder, redactor, or other person responsible for expressing the views of a corporate body.*

**Signer [sgn]**

*Use for the person whose signature appears without a presentation or other statement indicative of provenance. When there is a presentation statement, use Inscriber [ins].*

**Singer [sng]**

*Use for a person who uses his or her voice with or without instrumental accompaniment to produce music. A singer's performance may or may not include actual words.*

**Speaker [spk]**

*Use for a person who participates in a program (often broadcast) and makes a formalized contribution or presentation generally prepared in advance.*

**Sponsor [spn]**

*Use for the person or agency that issued a contract or under the auspices of which a work has been written, printed, published, etc.*

**Standards body [stn]**

*Use for a corporate body or agency responsible for the development or enforcement of a standard.*

**Stereotyper [str]**

Supposed name

USE

Attributed name

**Surveyor [srv]**

*Use for a person or organization who does measurements of tracts of land, etc. to determine location, forms, and boundaries.*

Technical draftsman

USE

Draftsman

Testifier

USE

Witness

**Thesis advisor [ths]**

*Use for the person under whose supervision a degree candidate develops and presents a thesis, mémoire, or text of a dissertation.*

UF Promoter

**Transcriber [trc]**

*Use for a person who prepares a handwritten or typewritten copy from original material, including from dictated or orally recorded material. For*

*makers of pen-facsimiles, use Facsimilist [fac].*

**Translator [trl]**

*Use for a person who renders a text from one language into another, or from an older form of a language into the modern form.*

**Type designer [tyd]**

*Use for the person who designed the type face used in a particular item.*

UF

Designer of type

Typesetter

USE

Compositor

**Typographer [tyg]**

*Use for the person primarily responsible for choice and arrangement of type used in an item. If the typographer is also responsible for other aspects of the graphic design of a book (e.g., Book designer [bkd]), codes for both functions may be needed.*

**Vocalist [voc]**

*Use for a person who principally exhibits singing skills in a musical or dramatic presentation or entertainment.*

**Witness [wit]**

*Use for a person who verifies the truthfulness of an event or action.*

UF

Deponent

Eyewitness

Observer

Onlooker

Testifier

**Wood-engraver [wde]**

*User for a person who makes prints by cutting the image in relief on the end-grain of a wood block.*

**Woodcutter [wdc]**

*User for a person who makes prints by cutting the image in relief on the plank side of a wood block.*

**Writer of accompanying material [wam]**

*Use for a person who writes significant material which accompanies a sound recording or other audiovisual material.*

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## Relators Codes

<b>act</b>	Actor
<b>adp</b>	Adapter
<b>aft</b>	Author of afterword, colophon, etc.
<b>ann</b>	Annotator
<b>ant</b>	Bibliographic antecedent
<b>app</b>	Applicant
<b>aqt</b>	Author in quotations or text abstracts
<b>arc</b>	Architect
<b>arr</b>	Arranger
<b>art</b>	Artist
<b>asg</b>	Assignee
<b>asn</b>	Associated name
<b>att</b>	Attributed name
<b>auc</b>	Auctioneer
<b>aud</b>	Author of dialog
<b>aui</b>	Author of introduction
<b>aus</b>	Author of screenplay
<b>aut</b>	Author
<b>bdd</b>	Binding designer
<b>bjd</b>	Bookjacket designer
<b>bkd</b>	Book designer
<b>bkp</b>	Book producer

<b>bnd</b>	Binder
<b>bpd</b>	Bookplate designer
<b>bsl</b>	Bookseller
<b>ccp</b>	Conceptor
<b>chr</b>	Choreographer
<b>clb</b>	Collaborator
<b>cli</b>	Client
<b>cll</b>	Calligrapher
<b>clt</b>	Collotyper
<b>cmm</b>	Commentator
<b>cmp</b>	Composer
<b>cmt</b>	Compositor
<b>cnd</b>	Conductor
<b>cns</b>	Censor
<b>coe</b>	Contestant-appellee
<b>col</b>	Collector
<b>com</b>	Compiler
<b>cos</b>	Contestant
<b>cot</b>	Contestant-appellant
<b>cpc</b>	Copyright claimant
<b>cpe</b>	Complainant-appellee
<b>cph</b>	Copyright holder

<b>cpl</b>	Complainant
<b>cpt</b>	Complainant-appellant
<b>cre</b>	Creator
<b>crp</b>	Correspondent
<b>crr</b>	Corrector
<b>csl</b>	Consultant
<b>csp</b>	Consultant to a project
<b>cst</b>	Costume designer
<b>ctb</b>	Contributor
<b>cte</b>	Contestee-appellee
<b>ctg</b>	Cartographer
<b>ctr</b>	Contractor
<b>cts</b>	Contestee
<b>ctt</b>	Contestee-appellant
<b>cur</b>	Curator
<b>cwt</b>	Commentator for written text
<b>dfd</b>	Defendant
<b>dfe</b>	Defendant-appellee
<b>dft</b>	Defendant-appellant
<b>dgg</b>	Degree grantor
<b>dis</b>	Dissertant
<b>dln</b>	Delineator

<b>dnc</b>	Dancer
<b>dnr</b>	Donor
<b>dpt</b>	Depositor
<b>drm</b>	Draftsman
<b>drt</b>	Director
<b>dsr</b>	Designer
<b>dst</b>	Distributor
<b>dte</b>	Dedicatee
<b>dto</b>	Dedicator
<b>dub</b>	Dubious author
<b>edt</b>	Editor
<b>egr</b>	Engraver
<b>elt</b>	Electrotyper
<b>eng</b>	Engineer
<b>etr</b>	Etcher
<b>exp</b>	Expert
<b>fac</b>	Facsimilist
<b>flm</b>	Film editor
<b>fmo</b>	Former owner
<b>fnd</b>	Funder
<b>frg</b>	Forger
<b>-grt</b>	Graphic technician



<b>hnr</b>	Honoree
<b>hst</b>	Host
<b>ill</b>	Illustrator
<b>ilu</b>	Illuminator
<b>ins</b>	Inscriber
<b>inv</b>	Inventor
<b>itr</b>	Instrumentalist
<b>ive</b>	Interviewee
<b>ivr</b>	Interviewer
<b>lbt</b>	Librettist
<b>lee</b>	Libelee-appellee
<b>lel</b>	Libelee
<b>len</b>	Lender
<b>let</b>	Libelee-appellant
<b>lie</b>	Libelant-appellee
<b>lil</b>	Libelant
<b>lit</b>	Libelant-appellant
<b>lsa</b>	Landscape architect
<b>lse</b>	Licensee
<b>lso</b>	Licenser
<b>ltg</b>	Lithographer
<b>lyr</b>	Lyricist

<b>mdc</b>	Metadata contact
<b>mod</b>	Moderator
<b>mon</b>	Monitor
<b>mte</b>	Metal-engraver
<b>mus</b>	Musician
<b>nrt</b>	Narrator
<b>opn</b>	Opponent
<b>org</b>	Originator
<b>orm</b>	Organizer of meeting
<b>oth</b>	Other
<b>own</b>	Owner
<b>pat</b>	Patron
<b>pbd</b>	Publishing director
<b>pbl</b>	Publisher
<b>pfr</b>	Proofreader
<b>pht</b>	Photographer
<b>plt</b>	Platemaker
<b>pop</b>	Printer of plates
<b>ppm</b>	Papermaker
<b>prc</b>	Process contact
<b>prd</b>	Production personnel
<b>prf</b>	Performer

<b>prg</b>	Programmer
<b>pro</b>	Producer
<b>prt</b>	Printer
<b>pta</b>	Patent applicant
<b>pte</b>	Plaintiff-appellee
<b>ptf</b>	Plaintiff
<b>pth</b>	Patent holder
<b>ptt</b>	Plaintiff-appellant
<b>rbr</b>	Rubricator
<b>rce</b>	Recording engineer
<b>rcp</b>	Recipient
<b>red</b>	Redactor
<b>ren</b>	Renderer
<b>res</b>	Researcher
<b>rev</b>	Reviewer
<b>rse</b>	Respondent-appellee
<b>rsp</b>	Respondent
<b>rst</b>	Respondent-appellant
<b>rth</b>	Research team head
<b>rtm</b>	Research team member
<b>sad</b>	Scientific advisor
<b>sce</b>	Scenarist

<b>scr</b>	Scribe
<b>scl</b>	Sculptor
<b>sec</b>	Secretary
<b>sgn</b>	Signer
<b>sng</b>	Singer
<b>spk</b>	Speaker
<b>spn</b>	Sponsor
<b>srv</b>	Surveyor
<b>stn</b>	Standards body
<b>str</b>	Stereotyper
<b>ths</b>	Thesis advisor
<b>trc</b>	Transcriber
<b>trl</b>	Translator
<b>tyd</b>	Type designer
<b>tyg</b>	Typographer
<b>voc</b>	Vocalist
<b>wam</b>	Writer of accompanying material
<b>wdc</b>	Woodcutter
<b>wde</b>	Wood-engraver
<b>wit</b>	Witness

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## Code Maintenance

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## Dublin Core Metadata Initiative

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# DCMI Government Working Group Proposal: Access Rights qualifier for Rights element

<b>Name:</b>	accessRights
<b>Label:</b>	Access Rights
<b>Definition:</b>	Defining which user-groups can access the resource.
<b>Comment:</b>	For describing which user-groups have access to the resource. Can contain information on the resource's status regarding access for users under any information access or privacy laws or regulation.
<b>Examples:</b>	<p>Examples:</p> <ul style="list-style-type: none"> <li>• accessRights="public"</li> <li>• accessRights="internal"</li> <li>• accessRights="department"</li> </ul>
<b>Type of Term:</b>	Element refinement
<b>Term Qualified:</b>	rights
<b>Why Needed:</b>	A user, particularly in a government information situation, may be looking specifically for items only available to a particular user group, or denied to a user group. Another user finds by searching a reference to a resource. If the user cannot access the resource, the user can see who can.
<b>Proposal Status:</b>	Conforming

<b>Related DCMI Terms:</b>	None
<b>Related non-DCMI Terms:</b>	Similar could be GILS metadata element "Access constraints. General Access Constraints" ( <a href="http://www.gils.net/prof_v2.html#annex_e">www.gils.net/prof_v2.html#annex_e</a> ) and MoReq metadata element "User group access" ( <a href="http://www.cornwell.co.uk/moreq.html">www.cornwell.co.uk/moreq.html</a> )
<b>Impact on Applications:</b>	Some or minor impact. But benefits are enhanced interoperability.
<b>About the Proposers:</b>	DC-Government Working Group: <a href="http://www.dublincore.org/groups/government/">http://www.dublincore.org/groups/government/</a> DC-Government Working Group Discussion List Archive: <a href="http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html">http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html</a>

## Issues [\[top\]](#)

Security classification and access rights are not the same. Security classification deals with any official security "stamp" to give a particular status to the resource. Only some resources will have such a stamp. Access rights do not need official stamps and can be used more loosely for the handling of the resource, e.g. a resource marked "public" in a content management system can be published, a resource marked "not-public" will not be, although metadata about the resource could be published). The "nature" of the two qualifiers is different, but the values could be related, e.g. if the security classification = "Top secret" then access rights should contain a value reflecting this. The difference between accessRights and audience is that audience contains values stating which segment of the user-group the information in the resource is created for. accessRights states which user-group has permission to access the resource, it does not say anything about the content (which audience does).

For full implementation of this refinement, a namespace is needed. Inclusion in DC will mean the availability of a practical, usable namespace.

## Public Comment Period Summary [\[top\]](#)

[The summary of the discussion during the Public Comment Period is to be supplied by the Usage Board shepherd before discussion and decision by the Usage Board.]

# Remarks about qualifier from DC GOV community 2001.08.01-2002.08.01

14 sept 2001 Nancy Brodie

There is a need to indicate access rights for resources that are not "open" and these possible access limitations are not based on copyright. So it is a good idea to specify some other rights. Achieving generic terminology here will be difficult since rights are most often based on national legislation.

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Metadata associated with this resource:

<http://dublincore.org/groups/government/accessRights.shtml.rdf>

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# DCMI Government Working Group Proposal: Acquired qualifier for Date element

<b>Name:</b>	acquired
<b>Label:</b>	Acquired
<b>Definition:</b>	Date on which the resource was received into the organisation.
<b>Comment:</b>	
<b>Examples:</b>	WC3-DTF: 2002-08-01:09:18:40
<b>Type of Term:</b>	Element refinement
<b>Term Qualified:</b>	date
<b>Why Needed:</b>	In a resource discovery process (Search & Retrieval) for resources in a specific agency, users (e.g. journalist) can have a need for knowing exactly when the agency was aware of the content of a specific resource. The status of a resource can change when it is submitted by one authority to another (e.g. in legislative procedures) without necessarily any change being made to the content of that resource.
<b>Proposal Status:</b>	Conforming
<b>Related DCMI Terms:</b>	<p>DCMI Term: accepted Approval Decision: <a href="http://dublincore.org/usage/decisions/2002/2002-02.accepted.shtml">http://dublincore.org/usage/decisions/2002/2002-02.accepted.shtml</a></p> <p>Definition: "Date of acceptance of the resource (e.g. of thesis by university department, of article by journal, etc.)."</p>

<b>Related non-DCMI Terms:</b>	DC.Date.Accepted (Dissertation Online Project)
<b>Impact on Applications:</b>	Some or minor impact. But benefits are enhanced interoperability
<b>About the Proposers:</b>	DC-Government Working Group: <a href="http://www.dublincore.org/groups/government/">http://www.dublincore.org/groups/government/</a> DC-Government Working Group Discussion List Archive: <a href="http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html">http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html</a>

## Issues [\[top\]](#)

While it might appear that there is overlap between the proposed 'dateAccepted' and the DCMI refinement 'dateAcquired', the two terms serve different purposes. Date.Acquired is about the resource itself being received, 'dateAccepted' is about the content of the resource being approved. One resource may have different values for dateAcquired and dateAccepted, so two refinements are needed. for example a resource arrives in an organisation on a given date, but cannot be formally accepted until it has been reviewed by a committee. Its status changes when it is accepted. At no point does the content of the resource change during this process.

## Public Comment Period Summary [\[top\]](#)

[The summary of the discussion during the Public Comment Period is to be supplied by the Usage Board shepherd before discussion and decision by the Usage Board.]

## Remarks about the qualifier from the DC GOV community 2001.08.01-2002.08.01

21 march 2002

Chris Croome:

Acquisition Date. Should this work like a DCMI Period [2], initially with just a start date and then an end date for when the organisation gets reorganised and renamed and the resource gets passed on? Perhaps AquiredDate and AquiredBy might make sense as refinements of Publisher? I don't know if this was ever considered? But with the confusing speed at which UK government departments get renamed and reorganised more flexibly might make sense for the Date Acquired?

21 feb 2002

Douglas Campell

Date.acquired - shouldn't the encoding scheme be "W3CDTF" instead of "ISO 8601" to match the Date encoding scheme in DC Qualifiers?

28 sept 2001

John Roberts

Date/Acquired - We are unsure as to whether this is in fact discovery metadata or management metadata.



Metadata associated with this resource:

<http://dublincore.org/groups/government/acquired.shtml.rdf>

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# DCMI Government Working Group Proposal: Security Classification qualifier for Rights element

<b>Name:</b>	protectiveMarking
<b>Label:</b>	SecurityClassification
<b>Definition:</b>	The classification allocated to the resource indicating its official security status or other restrictions on its availability.
<b>Comment:</b>	The purpose of this qualifier is to facilitate proper and appropriate management of sensitive or security classified records.
<b>Examples:</b>	<p>Example of values (Australian):</p> <ul style="list-style-type: none"> <li>• protectiveMarking="Top Secret"</li> <li>• protectiveMarking="Secret"</li> <li>• protectiveMarking="Confidential"</li> <li>• protectiveMarking="Restricted"</li> </ul> <p>Example of values (Danish):</p> <ul style="list-style-type: none"> <li>• protectiveMarking="Yderst hemmeligt"</li> <li>• protectiveMarking="Hemmeligt"</li> <li>• protectiveMarking="Fortroligt"</li> </ul> <p>Example of values (UK):</p> <ul style="list-style-type: none"> <li>• protectiveMarking="Top secret"</li> <li>• protectiveMarking="Commercial in confidence"</li> <li>• protectiveMarking="Staff in confidence"</li> </ul> <p>A citizen-user finds a reference to a classified resource.</p>

	The protective marking tells the user why access is not possible. A user employed in an agency finds a reference to a protectively marked resource. This user needs to see how the resource is classified.
<b>Type of Term:</b>	Element refinement
<b>Term Qualified:</b>	rights
<b>Why Needed:</b>	Protective markings are needed e.g. on intranets where resources with a variety of classifications will be stored but also on metadata databases designed to indicate that an information resource exists even if it is not actually available to the public. Such databases can be needed to meet access to information legislation requirements.
<b>Proposal Status:</b>	Conforming
<b>Related DCMI Terms:</b>	None
<b>Related non-DCMI Terms:</b>	Similar could be GILS metadata element: "Access Constrains. Security Classification Control" ( <a href="http://www.gils.net/prof_v2.html#annex_e">www.gils.net/prof_v2.html#annex_e</a> ) and MoReq metadata element: "security category" ( <a href="http://www.cornwell.co.uk/moreq.html">www.cornwell.co.uk/moreq.html</a> )
<b>Impact on Applications:</b>	Some or minor impact. But benefits are enhanced interoperability
<b>About the Proposers:</b>	DC-Government Working Group: <a href="http://www.dublincore.org/groups/government/">http://www.dublincore.org/groups/government/</a> DC-Government Working Group Discussion List Archive: <a href="http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html">http://www.jiscmail.ac.uk/lists/DC-GOVERNMENT.html</a>

## Issues [\[top\]](#)

For full implementation of this refinement, a namespace is needed. Inclusion in DC will mean the availability of a practical, usable namespace.

## Public Comment Period Summary [\[top\]](#)

[The summary of the discussion during the Public Comment Period is to be supplied

by the Usage Board shepherd before discussion and decision by the Usage Board.]

## Remarks about qualifier from DC GOV community 2001.08.01-2002.08.01 [\[top\]](#)

Correspondents have questioned the name of this resource, asking if 'Security classification' would be more widely understood. Protective marking is a more generic term, This is because things like 'commercial-in-confidence' or 'personal' aren't security classifications in the strictest sense, but do control access to the resource and it's logical to put them in this refinement.

6 sept 2001. John Roberts:

In respect of the 'Protective marking' refinement for Rights, we agree with the refinement, but question the label suggested. The meaning of 'Protective marking' is not readily understood to a New Zealand user - why was this term preferred to, for example, 'Security classification'?

6 sept 2001 Diane Boehr

:B.3 Rights: Why not call "Protective marking" "Security Classification"? Isn't that clearer?

14 sept 2001 Nancy Brodie

There is a need to indicate access rights for resources that are not "open" and these possible access limitations are not based on copyright. So it is a good idea to specify some other rights. Achieving generic terminology here will be difficult since rights are most often based on national legislation. I agree with other comments that "Protective marking" is a bit obscure. "classification" or "level of protection" are more meaningful terms to us. We use ATI (Access to Information) not FOI although FOI is understood by specialists.



Metadata associated with this resource:

<http://dublincore.org/groups/government/securityClassification.shtml.rdf>

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# DCMI-Government Working Group

<b>Title:</b>	<b>DC-GOV APPLICATION PROFILE</b>
<b>Creator:</b>	Maewyn Cumming
<b>Creator:</b>	Andrew Wilson
<b>Creator:</b>	Palle Aagaard
<b>Date Issued:</b>	2001-03-14
<b>Identifier:</b>	<a href="http://www.dublincore....">http://www.dublincore....</a>
<b>Replaces:</b>	none
<b>Is Replaced By:</b>	Not Applicable
<b>Latest version:</b>	<a href="http://www.dublincore.org/groups/government/profile-200111.shtml">http://www.dublincore.org/groups/government/profile-200111.shtml</a>
<b>Status of document:</b>	This is a Dublin Core Metadata Initiative Government Working Group final proposal for submitting to the DCMI Usage Board after agreement in DC Government WG.
<b>Description of document:</b>	<p>Dublin Core is already being used by practically all governments that are attempting to improve access to their information. However, though seen as the ideal starting point, it is not sufficient for varied and specialised needs.</p> <p>This proposal propose new qualifiers to the Dublin Core recommendation for making the Dublin Core Government Application Profile. This proposal also suggest some encoding schemes connected to certain elements. This proposal assumes that the element “Audience” is functioning as the 16<sup>th</sup> Dublin Core element.</p> <p>This “DC-DOV Application Profile” is intended to be used by governments who will set up their own national metadata Application Profile using Dublin Core.</p>

## Element Qualifier Proposal: Date Acquired

<b>Qualified element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Qualified element Name</b>	date
<b>Element Qualifier Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Qualifier Name</b>	acquired
<b>Element Qualifier Label</b>	Acquired
<b>Element Qualifier Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Element Qualifier Definition</b>	Date on which the resource was received into the organisation
<b>Element Qualifier Comment</b>	This qualifier is important for resource discovery as well as ERM
<b>Element Qualifier Encoding Schemes</b>	W3CDTF
<b>Element Qualifier Examples</b>	<p>In a resource discovery process (Search &amp; Retrieval) for resources in a specific agency, users (e.g. journalist) can have a need for knowing exactly when the agency was aware of the content of a specific resource.</p> <p>The status of a resource can change when it is submitted by one authority to another ( e.g. in legislative procedures) without necessarily any change being made to the content of that resource.</p>



## Element Qualifier Proposal: Rights SecurityClassification

<b>Qualified element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Qualified element Name</b>	rights
<b>Element Qualifier Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Qualifier Name</b>	securityClassification
<b>Element Qualifier Label</b>	Security Classification
<b>Element Qualifier Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Element Qualifier Definition</b>	The classification allocated to the resource indicating its official security status
<b>Element Qualifier Comment</b>	This classification is part of the description of the resource. In a resource discovery context it is vital information for the user about the possibility for access to the resource.
<b>Element Qualifier Encoding Schemes</b>	Local (e.g. national or agency) encoding schemes can be used. Free text can be used. No DCMI value qualifier is proposed.
<b>Element Qualifier Examples</b>	<p>Will be needed e.g. on intranets where resources with a variety of classifications will be stored but also on metadata databases designed to indicate that an information resource exists even if it is not actually available to the public. This can be needed to meet access to information legislation requirements.</p> <p>A citizen-user finds by search a reference to a classified resource. The classification status tells the user why access is not possible</p> <p>A non-citizen-user, e.g. employed in an agency, finds by search a reference to a security classified resource. This user can have a need to see how the resource is security classified.</p>

## Element Qualifier Proposal: Rights Access Rights

<b>Qualified element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Qualified element Name</b>	rights
<b>Element Qualifier Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Qualifier Name</b>	accessRights
<b>Element Qualifier Label</b>	Access Rights
<b>Element Qualifier Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Element Qualifier Definition</b>	Defining which user-groups can access the resource
<b>Element Qualifier Comment</b>	<p>For describing which user-groups have access to the resource, e.g. public, e.g. internal, e.g. department.</p> <p>Can contain information on the resource's status regarding access for users under any information access or privacy laws or regulation.</p> <p>Note that this differs from the official security marking given in the 'security classification' refinement. But 'Access Rights' can be related to 'Security Classification'.</p>
<b>Element Qualifier Encoding Schemes</b>	Local (e.g. national or agency) encoding schemes can be used. Free text can be used. No DCMI value qualifier is proposed.
<b>Element Qualifier Examples</b>	<p>A user finds by search a reference to a resource. If the user can not access the resource, the user can see who can.</p> <p>A user, particularly in a government information situation, may be looking specifically for items only available to a particular user group, or denied to a user group.</p>

## Element Qualifier Proposal: Subject Classification

<b>Qualified element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Qualified element Name</b>	subject
<b>Element Qualifier Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Qualifier Name</b>	classification
<b>Element Qualifier Label</b>	Classification
<b>Element Qualifier Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Element Qualifier Definition</b>	Term or code from a controlled vocabulary or scheme designed to aid browsing and search by subject matter
<b>Element Qualifier Comment</b>	<p>Typically taken from a high-level subject scheme or encoded classification system.</p> <p>Differs from Subject Keyword in that it requires a broad heading not a specific subject descriptor. It should be possible to use Keyword and Classification in conjunction. Data in this refinement can also be used as the basis of a 'push' system, to classify documents for current awareness services.</p>
<b>Element Qualifier Encoding Schemes</b>	Local (e.g. national or agency) encoding schemes – e.g. category lists or classification schemes - can be used. No DCMI value qualifier is proposed for eGovernment.
<b>Element Qualifier Examples</b>	<p>A user want to perform a ‘broader search’. This user is not familiar with proper names of classification schemes.</p> <p>It is possible to make a specific search input field – based on Subject Classification - at search engines, which then facilitates ‘broader search’.</p> <p>This means the mentioned user can use such a field for ‘broader search’ without knowing anything about the names and nature of the schemes.</p> <p>Classification can be used to create dynamic browsing menus, of the type popularised by Yahoo. Electronic systems can identify the correct resources for each subject heading by locating it in this space.</p> <p>Combining a search on Classification values and other subject terms (metadata or free text) can give much more accurate search results.</p>

## Element Qualifier Proposal: Subject Keyword

<b>Qualified element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Qualified element Name</b>	subject
<b>Element Qualifier Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Qualifier Name</b>	keyword
<b>Element Qualifier Label</b>	Keyword
<b>Element Qualifier Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Element Qualifier Definition</b>	Terms describing the specific subjects of the resource
<b>Element Qualifier Comment</b>	Will be used, in conjunction with subject classification. Will be terms or phrases. Can be used for coordinated indexing of resources.
<b>Element Qualifier Encoding Schemes</b>	Local (e.g. national or agency) encoding schemes – e.g. thesauri or controlled vocabularies - can be used. Uncontrolled terms can also be used. No DCMI value qualifier is proposed for eGovernment.
<b>Element Qualifier Examples</b>	<p>A user wants to perform a narrow or ‘specific search’.</p> <p>It is possible to make a specific search input field – based on Subject Keyword - at search engines, which then facilitates ‘narrow search’.</p> <p>This means the mentioned user can use such a field for ‘narrow search’ without knowing anything about the names and nature of the schemes.</p>

## Scheme Proposal for: Element Audience

<b>Element Namespace</b>	<a href="http://purl.org/dc/terms">http://purl.org/dc/terms</a>
<b>Element Name</b>	Audience
<b>Element Label</b>	Audience
<b>Scheme Name</b>	Life-cycle
<b>Scheme Definition</b>	A category of user for whom the resource is intended
<b>Scheme Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Scheme Comment</b>	<p>Creators and publishers of government resources can explicitly state the category of user for whom the resource is intended.</p> <p>Can also be used for automatic linking into a menu at a public information web-site. These web-sites can be arranged according to a 'life-situation' ("what to do when I have a child?", "what to do when I will get married?" etc.).</p> <p>The 'life-situation' or 'life-cycle' perspective is often used in connection with public information</p>
<b>Values of Encoding Scheme</b>	Local (e.g. national or agency) encoding schemes for the 'Life-cycle' can be used. Only a DCMI Scheme name is proposed for eGovernment at the moment.
<b>Examples Scheme Example</b>	<p>A citizen wants to find public information about rules for schools.</p> <p>A citizen's parent is dead. What to do then?</p> <p>Business has to be closed. What to do then?</p> <p>Web-related public information is by some government agencies arranged according to a 'life-cycle' approach.</p> <p>Below is examples of some life-situations for citizens and for business. These life-situations are arranged in a scheme called 'Life-cycle':</p> <p>Citizen situation</p> <ul style="list-style-type: none"> <li>• For those who are going to have a child</li> <li>• For those who shall use kindergarten</li> <li>• For those who will know about schools</li> <li>• For those who will take an education</li> <li>• For those who are moving from home</li> <li>• For those who need work-related information</li> <li>• For those who need information about marriage and</li> </ul>

	<p>related</p> <ul style="list-style-type: none"> <li>• For those who need information about elderly people and related</li> <li>• For those who need information connected to death in the family and related</li> </ul> <p>Business situation</p> <ul style="list-style-type: none"> <li>• For those who starts business</li> <li>• For those who need information about relations with government</li> <li>• For those who are closing down</li> </ul>
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# DCMI Type Vocabulary

## Scheme Proposal for: Element Type

<b>Element Namespace</b>	<a href="http://purl.org/dc/elements/1.1/">http://purl.org/dc/elements/1.1/</a>
<b>Element Name</b>	type
<b>Element Label</b>	Type
<b>Scheme Name</b>	Aggregation-level
<b>Scheme Definition</b>	The resource's level or position in a hierarchy. Shows the extent to which the resource is part of a larger resource or collection
<b>Scheme Status</b>	Domain-specific: Dublin Core Government Application Profile
<b>Scheme Comment</b>	<p>Used for describing the resources. If it is e.g. a single document or e.g. the access to a complete library.</p> <p>The definition of the value 'collection' is similar to same value in the original "DCMI Type Vocabulary".</p>
<b>Values of Encoding Scheme</b>	<ul style="list-style-type: none"><li>• Document (a single document, e.g. a letter)</li><li>• Folder (a 'case'-file)</li><li>• Volume (a subdivision of a file or folder - MoReq definition)</li><li>• Bibliographic item</li><li>• Collection (e.g. an archive, a library)</li></ul>
<b>Examples</b>	When the user by search finds references to resources, the user will get information about if it is e.g. the reference to a single page (e.g. web-page) or the homepage of a complete library



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TO:      Palle Aagaard, Co-chair, DC-Government Working Group  
            Andrew Wilson, Co-chair, DC-Government Working Group

FROM: DCMI Usage Board

DATE: 23 November 2001

RE:      [UB Decision No. 2] Usage Board decisions on DC-Government  
            proposal

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The DCMI Usage Board reviewed the DC-Government proposal and application profile at a meeting in Tokyo on Monday, 22 October 2001. Members present were Tom Baker (chair), Diane Hillmann, Traugott Koch, Haruki Nagata, Andy Powell, Roland Schwaenzl, and Stuart Sutton (designated shepherd of the DC-Government proposal). This memo holds our official response to the DC-Government Working Group. It includes both comments on the DC-Government application profile as a whole and a response on proposals contained therein for new DCMI metadata terms.

As discussed below, the Board is asking the DC-Government Working Group to resubmit a number of its DCMI term proposals for re-consideration. In preparing such proposals, please refer to the appropriate sections of the Usage Board Administrative Process document at <http://www.dublincore.org/usage/documents/process/> (especially sections 3.2 and 3.3).

As this was just the second proposal of an application profile to come before the Usage Board, we were obliged to clarify our processes and evaluation criteria in this regard. This proposal reached us just four days before the meeting, so we could not prepare as well as we would have liked. As discussed below, more explicit guidelines for evaluating application profile proposals are under development. We ask you to please bear with us as we work this out together.

## **1. Proposals for new DCMI metadata terms**



<b>Proposed Qualifier</b>	<b>Usage Board Decision</b>
<b>acquired (for Date)</b>	No recommendation issued
<b>isBasedOn (for Relation)</b>	Request to clarify and resubmit
<b>isBasisFor (for Relation)</b>	Request to clarify and resubmit
<b>accessRights (for Rights)</b>	Request to clarify and resubmit
<b>accessMarking (for Rights)</b>	Request to clarify and resubmit
<b>copyright (for Rights)</b>	Request to clarify and resubmit
<b>previousAccessMarking (for Rights)</b>	No recommendation issued
<b>previousAccessMarkingChangeDate (for Rights)</b>	No recommendation issued
<b>category (for Subject)</b>	No recommendation issued
<b>keyword (for Subject)</b>	Request to clarify and resubmit
<b>aggregationLevel (for Type)</b>	No recommendation issued
<b>dossierType (for Type)</b>	No recommendation issued
<b>itemType (for Type)</b>	No recommendation issued

As the Digest of Usage Board DCMI Namespace Decisions above indicates, the Board's decisions fall into two categories: (1) requests for clarification and resubmission, and (2) instances where no DCMI recommendation was issued.

## **1.1. Requests to clarify and resubmit**

The profile submitted by the DC-Government Working Group followed the model provided by the draft profile of the DC-Libraries Working Group; the guidelines for application profiles under development will be roughly consistent with this. As presented, however, the proposal did not provide enough documentation to support a full review of metadata term proposals. For the following proposed terms, therefore, additional information (as outlined in Parts 3.2 and 3.3 of <http://www.dublincore.org/usage/documents/process/>) has been requested. In several instances, the Board has requested information beyond that required by the Process document.

### **1.1.1. isBasedOn and isBasisFor (for Relation)**

The Board recognizes both "isBasedOn" and "isBasisFor" as valid refinements of "Relation". However, it finds the definition to be imprecise and inconsistent with the examples provided. The Board believes there is likelihood of confusion between the proposed pair of qualifiers and the existing pair "hasVersion" and "isVersionOf". The Board therefore asks the Working Group to provide a new and clearer definition of the "isBasedOn" set or perhaps to propose changes in the wording of "isVersionOf" and "hasVersion" to better convey the distinction that the Working Group intends. Such an exploration should engage the broader DCMI community -- perhaps through discussions on DC-General.

Finally, as noted by the Working Group in its best practice statement, the Board has some concerns over potential confusion of these proposed "Relation" qualifiers and the "Source" element. In its resubmission, the Working Group may wish to expand its best practice statement that these proposed "Relation" qualifiers are preferred over the use of "Source."

### **1.1.2. accessRights, accessMarking, and copyright (for Rights)**

All three appear to be acceptable qualifiers of the "Rights" element. However, the information provided was insufficient to support a DCMI recommendation -- hence the request for clarification and resubmission with close attention to Parts 3.2 and 3.3 of <http://dublincore.org/usage/documents/process/>. The proposed DC-Libraries profile may contain a "copyright" qualifier for "Date", so DC-Government Working Group should perhaps liaise with this other Working Group on possible overlap. The

resubmission should make very clear the appropriate sorts of literal values expected for "copyright."

### **1.1.3. keyword (for Subject)**

The Board finds the proposal a bit confusing as presented. First, DDC is listed as an example but does not embody keywords as defined in the proposal. The Board felt that a new definition was needed. An additional and perhaps larger concern for the Board is the need for the Working Group to clarify the differences between an unqualified use of "Subject" and the proposed keyword refinement.

## **1.2. No DCMI Recommendation issued**

Under Part 4.6 (Categories of recommendation) of <http://dublincore.org/usage/documents/process/>, the Board may issue a recommendation for a metadata term with one of three statuses: Cross-Domain, Domain-Specific, or Obsolete. There is no status for terms that are not recommended -- in essence, the Board either issues a recommendation or it does not. Where the Board does not issue a recommendation, an explanation of its decision is provided.

### **1.2.1. acquired (for Date)**

The Board sees "acquired" as a valid refinement of the concept "Date". However, it sees this refinement as administrative in nature as opposed to discovery-oriented, and (as such) as outside the current scope of DCMI. The Board sees several alternatives available to the DC-Government Working Group: (1) to use a term for "acquired" from a different existing (non-DCMI) namespace; (2) to create a new (non-DCMI) namespace to be referenced in the DC-Government application profile; and/or (3) to liaise with the DCMI Administration Working Group as it addresses the issue of administrative metadata within the mission of DCMI.

### **1.2.3. previousAccessMarking (for Rights)**

The Board sees "previousAccessMarking" as administrative in nature and not intended for resource discovery. As such, it is beyond the mission of DCMI. The Board suggests that the DC-Government Working Group liaise with the DCMI Administration Working Group, as above.

### **1.2.4. previousAccessMarkingChangeDate (for Rights)**

While a case might be made that "previousAccessMarkingChangeDate" could function as a refinement of the "Date" element, the Board does not see it as a valid refinement of the "Rights" element.

### **1.2.5. category (for Subject)**

The Board sees "category" as potentially a valid refinement of the "Subject" element. However, the Usage Board generally prefers to see such needs met by using encoding schemes, e.g., qualifiers for domain-specific vocabularies (see Appendix A below).

### **1.2.6. aggregationLevel, dossierType, and itemType (for Type)**

The Board sees these as valid refinements to "Type". Given the examples provided, however, it appears to the Board that the need could be handled through using one or more domain-specific value encoding schemes.

## **2. The DC-Government Application Profile**

As noted above, the Usage Board does not yet have formal guidelines for evaluating application profiles, but the DC-Government proposal has provided useful input towards their formulation. Since the Board assumes that the DC-Government Working Group will be submitting a revised application profile in the near future, it offers the following words as informal advice. The discussion begins with several general observations applicable to most of the element and qualifiers cited in the proposal and concludes with brief comments on each term individually. Attached in Appendix B are further discussion notes from our meeting in Tokyo.

### **2.1. Element and qualifier definitions**

The formal guidelines for application profiles will detail the ways in which a term used from a vocabulary may be annotated with application-specific comments that specify how a term is used in a particular application or domain. At present, there is ongoing discussion about whether it is helpful or misleading to call these annotations "definitions"; in principle, an application profile should at any rate not re-"define" metadata terms in ways that violate the scope or intention of the terms as defined originally.

### **2.2. Element and qualifier comments**

"Comments" are taken to be statements regarding the application of the element or qualifier as defined. Where an application profile does not narrow the original definition of an element or qualifier, there is no need for a domain-specific comment. Where domain-specific comments were provided in the DC-Government application profile in the absence of a domain-specific narrowing of the definition, the text would be best put into the Best Practices section of the table.

### **2.3. Permissible values**

Many of the encoding schemes of use to DCMI-based applications will be registered with DCMI using the processes outlined in the draft Guidelines for Vocabulary and Encoding Scheme Qualifiers at <http://www.dublincore.org/usage/documents/vocabulary-guidelines/>. Practice communities registering an application profile with DCMI should promote schemes that are formally registered in order to promote consistent use of scheme names across DCMI-based applications.

#### 2.4. Comments on elements and qualifiers cited in the profile

<b>Element Element Qualifier</b>	<b>Comment</b>
<b>Audience</b>	The application profile puts forward an "Audience" element as a new DCMI element. There is no need to do so since the Board approved an "Audience" element for the <a href="http://purl.org/dc/terms/">http://purl.org/dc/terms/</a> namespace.
<b>Contributor</b>	Satisfactory (subject to the general comments)
<b>Spatial</b>	Satisfactory (subject to the general comments)
<b>Temporal</b>	Satisfactory (subject to the general comments)
<b>Creator</b>	Satisfactory (subject to the general comments) While the comments suggest administrative goals well beyond discovery, it appears that any possible literals would not be inappropriate.
<b>Date</b>	Satisfactory (subject to the general comments)
<b>Description</b>	Satisfactory (subject to the general comments)
<b>Format</b>	Satisfactory (subject to the general comments)
<b>Identifier</b>	Satisfactory (subject to the general comments) Note: ISBN and ISSN should be registered.
<b>Language</b>	Satisfactory (subject to the general comments)
<b>Publisher</b>	Publisher Satisfactory (subject to the general comments) Note: Move the DC-Government definition to "Best Practice" and possibly change 'is' to 'may be'
<b>Relation</b>	Satisfactory (subject to the general comments) Note: Remove reference to "aggregationLevel" in DC-Government definition since no recommendation has been issued.

<b>isPartOf</b>	Satisfactory (subject to the general comments) Note: Remove reference to "aggregationLevel" since no recommendation issued.
<b>Rights</b>	Satisfactory (subject to the general comments)
<b>Source</b>	Satisfactory (subject to the general comments)
<b>Subject</b>	Satisfactory (subject to the general comments)
<b>Title</b>	Satisfactory (subject to the general comments) Note: Liaise with DC-Libraries Working Group regarding the dropping of initial articles in titles since their proposal is conflicting with yours.
<b>Type</b>	Satisfactory (subject to the general comments)

## APPENDIX A: A DRAFT DECISION TREE FOR ASSESSING THE NEED FOR NEW METADATA TERMS

In addition to the criteria for evaluation of DCMI namespace proposals as set out in the Usage Board Administrative Processes document, the Usage Board is considering the following Action Chart (or decision tree) in assessing alternative ways for a practice community to meet a clearly defined metadata resource discovery need. The Chart sets out a series of conditions starting from the least disruptive condition for metadata interoperability and ending with the most disruptive. Thus, Condition 1 is to be preferred over Condition 2 and Condition 2 over Condition 3, etc. Only when the need cannot be solved through one of Conditions 1 through 3 should a community of practice propose a new domain-specific element and element qualifiers.

### ACTION CHART (DECISION TREE)

Condition 1: Can the community of practice's need be solved with a value qualifier (i.e., through a domain-specific vocabulary) for an existing DCMI element or element qualifier?

*If so, do that; else...*

Condition 2: Can the community of practice's need be solved through an application profile that references an element or element qualifier from an existing and recognized non-DCMI namespace?

*If so, do that; else ...*

Condition 3: Can the community of practice's need be solved with a new domain-specific qualifier for an existing DCMI element?

*If so, do that; else ...*

Condition 4: Create a new domain-specific DCMI element (and, if necessary, element and value qualifiers) to meet community of practice's need.

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## **APPENDIX B: SOME DRAFT THOUGHTS ON USAGE BOARD REVIEW OF APPLICATION PROFILES, BASED ON DISCUSSION IN TOKYO**

Review of an application profile will be limited to two aspects:

1. whether the application profile as a whole is "well-formed" according to a formal definition (yet to be finalized);
2. whether any new terms put forward for inclusion under the DCMI namespace adhere to DCMI principles and criteria. Beyond these two matters, the Usage Board will generally defer to the expertise of the practice community. An application profile that meets the criteria of such a limited review will be formally "registered" with DCMI (not "recommended").

This process suggests that a community of practice wishing to put forward an application profile must distinguish between a new DCMI namespace proposal and a proposed application profile that uses those terms. Therefore, an application profile proposal that includes proposals for new DCMI terms will need to present these proposals separately. These could be presented at the same time so long as the supporting documentation for the two different types of proposals were complete.

As of 23 November, the latest draft Usage Board Process, which details the information needed for a DCMI term proposal, can be found at <http://128.253.121.110/DC-UB/DC-UBprocess4.html>. This document is currently undergoing extensive revision and expansion and will eventually include guidelines for application profiles -- a more detailed presentation of the ideas outlined here.

In general, application profiles may reference elements from established non-DCMI vocabularies. The Board encourages the reuse of established non-DCMI elements where this meets the needs of a practice community. However, the Usage Board considers recommendation of non-DCMI terms as beyond its jurisdiction per se. Rather, it will generally defer in such cases to the expertise of the practice community.

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Metadata associated with this resource:

<http://dublincore.org/usage/decisions/2001/government-02.shtml.rdf>

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# DC-Government Application Profile

<b>Title</b>	Government Application Profile
<b>Creator</b>	Maewyn Cumming
<b>Contributor</b>	Palle Aargaard; Makx Dekkers; Paul Murphy; Peter Pappamikail, John Borrass, DC-Gov
<b>Date Issued</b>	2001-09-17
<b>Identifier</b>	
<b>Replaces</b>	Not applicable
<b>IsReplacedBy</b>	Not applicable
<b>Status of document</b>	This is a DCMI Working draft
<b>Description</b>	This proposal is for an application profile that clarifies the use of Dublin Core in a public administration context. It was prepared by the Managing Information for e-Government (MIReG) group in conjunction with the DC-Gov Working Group.

## Contents

1. Introduction
2. Namespaces and Format of entries
- 3 DC-Extensions and additions
4. DC-Government Application Profile

## 1. Introduction

This document proposes a possible application profile to clarify the use of the Dublin Core Metadata Element set by public administrations and in public sector-related applications and projects. The proposal is submitted by the Dublin Core Government Working Group to the Dublin Core Usage Board. The content of this document is intended to reflect the consensus reached within DCGov for a minimal extension set.

## Metadata in the public sector

Dublin Core is already being used by practically all public administrations that want to use metadata to improve access to their information.

However, though seen as the ideal starting point, Dublin Core is not sufficient for our varied and specialised needs. It doesn't cater for data security, or the requirements of data protection or freedom of information legislation, nor the need for information audit trails, or the complex legislative processes.

It is therefore necessary to advance on two inter-connected fronts:

- the development of an extension to DC to create an element set comprehensive enough to cope with the job in hand;
- the development of an appropriate metadata framework , including application profiles,

encoding schemes and indications of best practice, that administrations can subsequently use to support the proposed extended metadata set.

The DC-Gov working group has therefore joined forces with the MIREG Advisory Board to advance the extension; MIREG is part of the European Union IDA Programme (Interchange of Data between Administrations) for 2001, charged with producing an EC metadata framework. The MIREG Advisory Board consists of

- \* John Borrás - UK Office of the e-Envoy
- \* Peter Pappamikail, European Parliament, ParlML project
- \* Palle Aagaard, Danish State Information Service
- \* Makx Dekkers, Luxembourg, Managing Director, DCMI
- \* Paul Murphy, European Commission, IDA Programme
- \* Maewyn Cumming, UK Office of the e-Envoy.

MIREG also works with CEN (European Standards Organisation) to help its Metadata for MultiMedia Information - Dublin Core (MMI-DC) Workshop. The Dublin Core Government working group will likewise continue to work over the next year with other interested parties to clarify and quantify the various issues and develop further proposals as necessary.

The extension to DC is the subject of the present submission; The metadata framework is exclusively the concern and remit of MIREG and will develop in consequence of the first.

## 2. Namespaces and Format of entries

**The DC-Government Application Profile consists of several namespaces:**

- Dublin Core Metadata Element Set, Version 1.1 [[DCMES version 1.1](#)]
- Dublin Core Qualifiers [[DCMES Qualifiers \(2000-07-11\)](#)]
- DC-Gov Metadata Element Set (DC-GOVMES)
- DC-Gov Metadata Element Set Qualifiers (DC-GOVMES Qualifiers)

### **Format of entries:**

Name	The unique token assigned to the qualifier
Label	The human-readable label assigned to the qualifier.
Choice of Namespace	DCMES version 1.1, or DCMES Qualifiers (2000-07-11)
DC Refinement(s)	DC Element Refinements: These qualifiers make the meaning of an element narrower or more specific. A refined element shares the meaning of the unqualified element, but with a more restricted scope.
DC-Gov Refinement(s)	These are domain-specific refinements for DC-Gov.

DC Encoding Scheme(s)	These qualifiers identify schemes that aid in the interpretation of an element value. These schemes include controlled vocabularies and formal notations or parsing rules. A value expressed using an encoding scheme will thus be a token selected from a controlled vocabulary (e.g., a term from a classification system or set of subject headings) or a string formatted in accordance with a formal notation (e.g., "2000-01-01" as the standard expression of a date). If an encoding scheme is not understood by a client or agent, the value may still be useful to a human reader.
DC-Gov Encoding Scheme(s)	These are domain-specific encoding schemes for DC-Gov.
Form of Obligation	In the DC-Gov data model the obligation can be: Mandatory, Mandatory if applicable, Recommended or Optional. "Mandatory" ensures that some of the elements are always supported and "Mandatory if applicable" means that this element must be supported if the information is available. An element with a Mandatory obligation must have a value. The "Recommended" and "Optional" elements should be filled with a value if the information is appropriate to the given resource but if not, they can be left blank.
DC Definition	Dublin Core definition of this metadata field
DC Comment	Dublin Core comments on this metadata field
DC-Gov Definition	DC-Gov definition of this metadata field, if different from the DC definition
DC-Gov Comment	DC-Gov comments on this metadata field
Best practice	Recommendations of best use of this element for DC-Gov
Open questions	Problems, notes, open questions regarding this field

### 3 DC-Extensions and additions

A summary of the extensions, additions and other changes proposed to the Dublin Core Elements Set

#### A. Additional Element

##### 1. Audience

A class of entity for whom the resource is intended or useful

#### B. Additional refinements to existing DC elements

##### 1. Date

acquired	Date on which the resource was received into the organisation
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## 2. Relation

isBasedOn	The described resource is a translation, derivation or interpretation of another resource
isBasisFor	The described resource is translated, derived or interpreted by another resource

## 3. Rights

access marking	Item or notation regulating access to the resource.
previousAccessMarking	Item or notation of immediately preceding marking, if any, at time of change.
accessMarkingChangeDate	Date that the access marking allocated previously to the current accessMarking was changed.
accessRights	Constraints or obligation governing the release of the resource.
copyright	Identifier or statement indicating the legal ownership and rights regarding use of the resource

## 4. Subject

category	A broad or top level subject categorisation or classification of subject areas.
keyword	Term describing the specific subject of the resource.

## 5. Type

aggregationLevel	A resource type may be an aggregation of instances of another resource type:
dossierType	Classification of the dossier or collection of items
itemType	Classification of the item, file or document

## 4. DC-Government Application Profile

### Audience

Name	<b>audience</b>
Label	Audience
Choice of Namespace:	?
DC-Gov Refinement(s)	-
Form of Obligation	Optional
DC-Gov Definition	A class of entity for whom the resource is intended or useful.
DC-Gov Comment	This element describes the people for whom the resource is aimed, e.g. the educational level, profession etc. It does not indicate rights of access.
Best practice	This element should be left blank unless a specific audience is intended; i.e. there is little to be gained in terms of retrieval by putting 'general public' or 'everyone'.

Open questions	An encoding scheme is needed and will be developed as part of the MIREG project
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### Contributor

Name	<b>contributor</b>
Label	Contributor
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Mandatory if applicable
DC Definition	An entity responsible for making contributions to the content of the resource.
DC Comment	Examples of a Contributor include a person, an organisation, or a service. Typically, the name of a Contributor should be used to indicate the entity.
DC-Gov Definition	-
DC-Gov Comment	Examples of a Contributor include a person or organisation. Typically, the name of a Contributor should be used to indicate the entity.
Best practice	-
Open questions	-

### Coverage

Name	<b>coverage ! spatial</b>
Label	Coverage ! Spatial
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	DCMI Point, ISO 3166, DCMI Box, TGN
DC-Gov Encoding Scheme(s)	ISO 191115 Other schemes as appropriate
Form of Obligation	Recommended or Mandatory if applicable
DC Definition	Spatial characteristics of the intellectual content of the resource.
DC Comment	Coverage will typically include spatial location. Recommended best practice is to select a value from a controlled vocabulary.
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	Use Coverage with qualifier Spatial or Temporal.

Open questions	Is there a suitable encoding scheme that meets the level of detail and variety of regions that government information resources cover? Should there be a separate Jurisdiction refinement? Is this really a sub-refinement of Coverage.spatial? Can we have Jurisdiction as a refinement of Creator and Coverage?
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Name	<b>coverage   temporal</b>
Label	Coverage   Temporal
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	DCMI Period, W3C-DTF
DC-Gov Encoding Scheme(s)	DCMI Period, W3C-DTF
Form of Obligation	Recommended or Mandatory if applicable
DC Definition	Temporal characteristics of the intellectual content of the resource.
DC Comment	Coverage will typically include temporal period.
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	Level of obligation

## Creator

Name	<b>creator</b>
Label	Creator
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Mandatory
DC Definition	An entity primarily responsible for making the content of the resource.
DC Comment	Examples of a Creator include a person, an organisation, or a service. Typically, the name of a Creator should be used to indicate the entity.
DC-Gov Definition	-

DC-Gov Comment	Examples of a Creator include a person or organisation. Typically, the name of a Creator should be used to indicate the entity. This Agent often has legal responsibilities and obligations, and personal names may be needed for audit trails.
Best practice	Indicate the Creator as specifically as possible, e.g. include not only the organisation but also the section, department or team and individual as applicable.
Open questions	Do we need qualifiers for the Jurisdiction and Function of the Creator?

## Date

Name	<b>date</b>
Label	Date
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	Created, Valid, Available, Issued, Modified
DC-Gov Refinement(s)	Acquired, Created, Valid, Available, Issued, Modified,
DC Encoding Scheme(s)	W3CDTF, DCMI Period
DC-Gov Encoding Scheme(s)	W3CDTF, DCMI Period
Form of Obligation	Mandatory if applicable
DC Definition	A date associated with an event in the life cycle of the resource.
DC Comment	Typically, date will be associated with the creation or availability of the resource. Recommended best practice for encoding the date value is defined in a profile of ISO 8601 [W3CDTF] and follows the YYYY-MM-DD format.
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	A refinement should always be used.
Open questions	Do we accept the Date element without refinement? How to deal with inadequacies of the possible encoding schemes? There are limitations in conveying: 1) BCE dates; 2) non-Gregorian calendar dates; 3) ambiguity, approximation (e.g., about, near, flourished, assumed); 4) partially known dates (e.g., 19?? ); 5) date is unknown/unavailable; 6) open-ended intervals (e.g., 1999-); 7) complex, multi-instance/period intervals. Are there conventions (e.g. bracket, slash, etc.) or other encoding schemes we want to specify to allow for these limitations?

## Date

Name	<b>date   acquired</b>
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Label	Date   Acquired
Choice of Namespace:	?
DC Refinement(s)	-
DC-Gov Encoding Scheme(s)	W3CDTF
DC Definition	Date on which the resource was received into the organisation.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	The nature of a resource can change when it is submitted by one authority to another, ( e.g. in legislative procedures) without necessarily any change being made to the content of that resource. EXAMPLE: The date that a legislative text is tabled for consideration (=date of acquisition by the House) is not the same as the date the resource is adopted (by the submitting or receiving authority).
Best practice	-
Open questions	-

### Date

Name	<b>date   created</b>
Label	Date   Created
Choice of Namespace	DCMES Qualifiers (2000-07-11)
DC Encoding Scheme(s)	W3CDTF
DC-Gov Encoding Scheme(s)	W3CDTF
DC Definition	Date of creation of the resource.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

### Date

Name	<b>date   valid</b>
Label	Date   Valid
Choice of Namespace	DCMES Qualifiers (2000-07-11)
DC Encoding Scheme(s)	W3CDTF, DCMI Period
DC-Gov Encoding Scheme(s)	W3CDTF, DCMI Period
DC Definition	Date (often a range) of validity of the resource.
DC Comment	-



DC-Gov Definition	-
DC-Gov Comment	-
Best practice	?
Open questions	-

**Date**

Name	<b>date   available</b>
Label	Date   Available
Choice of Namespace	DCMES Qualifiers (2000-07-11)
DC Encoding Scheme(s)	W3CDTF, DCMI Period
DC-Gov Encoding Scheme(s)	W3CDTF, DCMI Period
DC Definition	Date (often a range) that the resource will be or did become available.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

**Date**

Name	<b>date   issued</b>
Label	Date   Issued
Choice of Namespace	DCMES Qualifiers (2000-07-11)
DC Encoding Scheme(s)	W3CDTF
DC-Gov Encoding Scheme(s)	W3CDTF
DC Definition	Date of formal issuance (e.g. publication) of the resource.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	A unique date, rather than a range, on which a resource was published or otherwise made available. Includes date resource was put onto a web site. The Time of issue may also be needed e.g. where the item was subject to a press embargo.
Best practice	
Open questions	

**Date**

Name	<b>date   modified</b>
Label	Date   Modified

Choice of Namespace	DCMES Qualifiers (2000-07-11)
DC Encoding Scheme(s)	W3CDTF
DC-Gov Encoding Scheme(s)	W3CDTF
DC Definition	Date on which the resource was changed.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

## Description

Name	<b>description</b>
Label	Description
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	Table of contents ; Abstract
DC-Gov Refinement(s)	Table of contents ; Abstract
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Recommended
DC Definition	An account of the content of the resource.
DC Comment	Description may include but is not limited to: an abstract, table of contents, reference to a graphical representation of content or a free-text account of the content.
DC-Gov Definition	-
DC-Gov Comment	The description could cover approach to subject (e.g. critique, explanation, beginners guide), reason for production of resource, (e.g. to inform, invite discussion, record events), groups and organisations referred to, events covered, list of key fields (database) or chapters, any other useful information
Best practice	-
Open questions	-

## Format

Name	<b>format</b>
Label	Format
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	Extent; Medium
DC-Gov Refinement(s)	Extent; Medium

DC Encoding Scheme(s)	IMT
DC-Gov Encoding Scheme(s)	IMT Other schemes as appropriate
Form of Obligation	Recommended
DC Definition	The physical or digital manifestation of the resource.
DC Comment	Typically, Format may include the media-type or dimensions of the resource. Format may be used to determine the software, hardware or other equipment needed to display or operate the resource. Examples of dimensions include size and duration. Recommended best practice is to select a value from a controlled vocabulary (for example, the list of Internet Media Types [MIME] defining computer media formats).
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

### Identifier

Name	<b>identifier</b>
Label	Identifier
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI, ISBN, ISSN Other schemes as appropriate
Form of Obligation	Mandatory
DC Definition	An unambiguous reference to the resource within a given context.
DC Comment	Recommended best practice is to identify the resource by means of a string or number conforming to a formal identification system. Example formal identification systems include the Uniform Resource Identifier (URI) (including the Uniform Resource Locator (URL)), the Digital Object Identifier (DOI) and the International Standard Book Number (ISBN).
DC-Gov Definition	-
DC-Gov Comment	Other possible identifiers are the ISO 8879 FPI (Formal Public Identifier) -
Best practice	Use best practice statement as above.

Open questions	<p>Should ISBN, ISSN be used as encoding schemes?</p> <p>How to deal with internal identifiers – we could build on EC work developing a hierarchical scheme for identifiers, adding identifiers for country/organisation/item to create a unique identifier.</p> <p>How to indicate sub-sections of documents and serials, e.g. specific chapters or clauses of Acts?</p>
----------------	---

## Language

Name	<b>language</b>
Label	Language
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	
DC-Gov Refinement(s)	
DC Encoding Scheme(s)	ISO 639-2/B, RFC3066
DC-Gov Encoding Scheme(s)	ISO 639-2/T, ISO 639-2/B
Form of Obligation	Mandatory if applicable
DC Definition	A language of the intellectual content of the resource.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	Use codes rather than text. Use ISO 639-2/T for preference.
Open questions	-

## Publisher

Name	<b>publisher</b>
Label	Publisher
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Recommended
DC Definition	An entity responsible for making the resource available.
DC Comment	Examples of a Publisher include a person, an organisation, or a service. Typically, the name of a Publisher should be used to indicate the entity.

DC-Gov Definition	The publisher is the entity to whom one should go to obtain copies of a resource, be they printed versions of an on-line resource or printed copies of an off-line resource. The publisher is also the entity one should approach for permission to reuse or republish the resource.
DC-Gov Comment	-
Best practice	A publisher has certain legal responsibilities regarding the information, so should always be named.
Open questions	-

## Relation

NOTE – qualifiers appear here in pairs, to save space

Name	<b>relation</b>
Label	Relation
Choice of Namespace	DCMES version 1.1
DC Refinements	Is Version Of, Has Version, Is Replaced By, Replaces, Is Required By, Requires, Is Part Of, Has Part, Is Referenced By, References, Is Format Of, Has Format
DC-Gov Refinements	Is Version Of, Has Version, Is Basis for, Is Based On, Is Replaced By, Replaces, Is Required By, Requires, Is Part Of, Has Part, Is Referenced By, References, Is Format Of, Has Format,
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
Form of Obligation	Optional
DC Definition	A reference to a related resource.
DC Comment	Recommended best practice is to reference the resource by means of a string or number conforming to a formal identification system.
DC-Gov Definition	-
DC-Gov Comment	If using qualifiers, use the most specific one that is applicable. Relation can be used to allow cascading retrieval of interrelated objects, especially if used in conjunction with the Type.aggregationLevel element.
Best practice	-
Open questions	-

## Relation

Name	<b>relation   isVersionOf / hasVersion</b>
Label	Relation   Is Version Of / Has Version
Choice of Namespace	DCMES Qualifiers

DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource is a version, edition, or adaptation of the referenced resource. Changes in version implies substantive changes in content rather than differences in format.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

Name	<b>relation ! isBasedOn / isBasisFor</b>
Label	Relation ! Is Based On / Is Basis For
Choice of Namespace:	?
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	
DC Comment	
DC-Gov Definition	The described resource is a translation, derivation or interpretation of another resource.
DC-Gov Comment	Whereas isVersionOf indicates a ‘linear’ evolution of a content from one stage to another, isBasedOn indicates a ‘transversal’ relationship with another resource, either of a similar or same nature in another language or of a completely separate resource that nonetheless has inspired or been used in the creation or evolution of the resource. EXAMPLES. A legal act that ‘isBasedOn’ a draft legislative proposal and a European Union directive. A press release that IsBasedOn the published research paper.
Best practice	Some confusion has been known between isBasedOn and Source. isBasedOn/isBasisFor allows two-way resource linking, and should be used for preference.
Open questions	Need some good examples here, and perhaps a better definition.

Name	<b>relation ! isFormatOf / hasFormat</b>
------	--

Label	Relation   Is Format Of / Has Format
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource is the same intellectual content of the referenced resource, but presented in another format.
DC Comment	-
DC-Gov Definition	The described resource is the same intellectual content of the referenced resource, but presented in different physical or digital format.
DC-Gov Comment	-
Best practice	-
Open questions	-

Name	<b>relation   isReplacedBy / replaces</b>
Label	Relation   Is Replaced By / Replaces
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource is supplanted, displaced, or superseded by the referenced resource.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

Name	<b>relation   isPartOf / hasPart</b>
Label	Relation   Is Part Of / Has Part
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource is a physical or logical part of the referenced resource.
DC Comment	-
DC-Gov Definition	-

DC-Gov Comment	Can be used in conjunction with Type Aggregation level to give a clear description of dossiers and collections.
Best practice	-
Open questions	-

Name	<b>relation   isRequiredBy / requires</b>
Label	Relation   Is Required By / Requires
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource requires the referenced resource to support its function, delivery, or coherence of content.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

Name	<b>relation   isReferencedBy / references</b>
Label	Relation   Is Referenced By / References
Choice of Namespace	DCMES Qualifiers
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
DC Definition	The described resource is referenced, cited, or otherwise pointed to by the referenced resource.
DC Comment	-
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	-
Open questions	-

## Rights

Name	<b>rights</b>
Label	Rights
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	Access Marking, Previous Access Marking, Previous Access Marking Change Date, Access Rights, Copyright



DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Mandatory if applicable
DC Definition	Information about rights held in and over the resource.
DC Comment	Typically, a Rights element will contain a rights management statement for the resource, or reference a service providing such information. Rights information often encompasses Intellectual Property Rights (IPR), Copyright, and various Property Rights.
DC-Gov Definition	-
DC-Gov Comment	The rights element is used to indicate security markings, as well as legal and other obligations and restrictions on access to the resource.
Best practice	-
Open questions	-

## Rights

Name	<b>rights   accessMarking</b>
Label	Rights   Access Marking
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
DC Definition	-
DC Comment	-
DC-Gov Definition	Item or notation regulating access to the resource.
DC-Gov Comment	The security or access classification of the resource EXAMPLES: Secret, Confidential-within-administration, Public
Best practice	-
Open questions	-

Name	<b>rights   previousAccessMarking</b>
Label	Rights   Previous Access Marking
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
DC Definition	-

DC Comment	-
DC-Gov Definition	Item or notation of immediately preceding marking, if any, at time of change.
DC-Gov Comment	Repeated use of this refinement and the Previous Access Marking Change Date provide an access status history of the resource.
Best practice	-
Open questions	-

## Rights

Name	<b>rights   previousAccessMarkingChangeDate</b>
Label	Rights   Previous Access Marking Change Date
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	W3CDTF
DC Definition	-
DC Comment	-
DC-Gov Definition	Date that the access marking allocated previously to the current AccessMarking was changed .
DC-Gov Comment	Date of the change indicated in the preceding refinement.
Best practice	-
Open questions	-

## Rights

Name	<b>rights   accessRights</b>
Label	Rights   Access Rights
Choice of Namespace:	?
DC-Gov Encoding Scheme(s)	-
DC Definition	-
DC Comment	-
DC-Gov Definition	Constraints or obligation governing the release of the resource.
DC-Gov Comment	Indicates the legal or other basis which governs public access to the resource. EXAMPLE: Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents ( <a href="http://europa.eu.int/eur-lex/en/lif/dat/2001/en_301R1049.html">http://europa.eu.int/eur-lex/en/lif/dat/2001/en_301R1049.html</a> )
Best practice	-
Open questions	Do we need an encoding scheme?

Name	<b>rights   copyright</b>
Label	Rights   Copyright
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
DC Definition	-
DC Comment	-
DC-Gov Definition	Identifier or statement indicating the legal ownership and rights regarding use of the resource.
DC-Gov Comment	-
Best practice	Link to a standard description of rights such as the Crown copyright notice at <a href="http://www.hmso.gov.uk/docs/copynote.htm">www.hmso.gov.uk/docs/copynote.htm</a>
Open questions	Does this clash with the DC-Lib proposal to have a Date Copyright refinement? Would it be better to put the Copyright statement <i>and</i> date together in this refinement?

### Source

Name	<b>source</b>
Label	Source
Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	URI
DC-Gov Encoding Scheme(s)	URI Other schemes as appropriate
Form of Obligation	O
DC Definition	A reference to a resource from which the present resource is derived.
DC Comment	The present resource may be derived from the Source resource in whole or in part. Recommended best practice is to reference the resource by means of a string or number conforming to a formal identification system.
DC-Gov Definition	-
DC-Gov Comment	Use Relation for preference
Best practice	Reference by means of an identifier
Open questions	

### Subject

Name	<b>subject</b>
Label	Subject

Choice of Namespace	DCMES version 1.1
DC Refinement(s)	-
DC-Gov Refinements	Category, Keyword
DC Encoding Schemes	LCSH ; MeSH ; DDC ; LCC ; UDC
DC-Gov Encoding Schemes	
Form of Obligation	Mandatory if applicable
DC Definition	The topic of the content of the resource.
DC Comment	Typically, a Subject will be expressed as keywords, key phrases or classification codes that describe a topic of the resource. Recommended best practice is to select a value from a controlled vocabulary or formal classification scheme.
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	Use Subject if no encoding scheme is used. An encoding scheme should always be used for either of the refinements.
Open questions	-

## Subject

Name	<b>subject   category</b>
Label	Subject   Category
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	UK Government Category List Other schemes as appropriate
DC Definition	-
DC Comment	-
DC-Gov Definition	A broad or top level subject categorisation or classification of subject areas.
DC-Gov Comment	Differs from Subject Keyword in that it requires a broad heading not a specific subject descriptor. This will be used for browsing systems (Yahoo-type categories) and other circumstances where only a broad heading is needed. It should be possible to use Keyword and Category in conjunction, e.g. to search all items in a given category with given keywords.
Best practice	Value to be taken from either framework-specific or organisation specific taxonomy.
Open questions	Coincides with the proposed DC-Lib Subject Classification refinement. Prefer 'Category' as 'Classification' implies an alphanumeric code.

## Subject

Name	<b>subject   keyword</b>
Label	Subject   Keyword
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	LCSH ; MeSH ; DDC ; LCC ; UDC Other schemes as appropriate
DC Definition	-
DC Comment	-
DC-Gov Definition	Term describing the specific subject of the resource
DC-Gov Comment	Entry would contain the subject to be found at the lowest level of granularity available in a controlled vocabulary or thesaurus and descriptive of the subject matter of the resource.
Best practice	Term from a thesaurus or similar controlled vocabulary.
Open questions	Coincides with the proposed DC-Lib Subject Keyword. Requires a specific subject descriptor rather than broad heading. Will be used to aid the mapping of multiple thesauri.

## Title

Name	<b>title</b>
Label	Title
Choice of Namespace:	DCMES version 1.1
DC Refinement(s)	Alternative
DC-Gov Refinement(s)	Alternative
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Mandatory
DC Definition	A name given to the resource.
DC Comment	Typically, a title will be a name by which the resource is formally known.
DC-Gov Definition	-
DC-Gov Comment	For alternative title add any form of the title used as a substitute or alternative to the formal title of the resource, including abbreviations.
Best practice	Drop initial articles if present
Open questions	-

## Type

Name	<b>type</b>
Label	Resource Type
Choice of Namespace	DCMES version 1.1

DC Refinement(s)	-
DC-Gov Refinement(s)	-
DC Encoding Scheme(s)	DCMI Type
DC-Gov Encoding Scheme(s)	DCMI Type Other schemes as appropriate
Form of Obligation	Recommended
DC Definition	The nature or genre of the content of the resource.
DC Comment	Type includes terms describing general categories, functions, genres, or aggregation levels for content. Recommended best practice is to select a value from a controlled vocabulary. To describe the physical or digital manifestation of the resource, use the Format element.
DC-Gov Definition	-
DC-Gov Comment	-
Best practice	Use a controlled list and identify the source with encoding scheme.
Open questions	Do we accept the Type element in a unqualified (unencoded) form?

Name	<b>type   aggregationLevel</b>
Label	Type   Aggregation Level
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	Collection; Dossier; Item
Form of Obligation	Recommended
DC Definition	-
DC Comment	-
DC-Gov Definition	A resource type may be an aggregation of instances of another resource type.
DC-Gov Comment	This element allows searches to be restricted to records at a particular level of aggregation. It also controls the management actions which may be taken on the record(s). It should be worked in conjunction with Relation!HasPart. This refinement describes where in the collection hierarchy, if anywhere, a resource sits; the relation indicates what, if any other resources also belong in that hierarchy. Note that it is possible for a 'Folder' or 'collection' level description to exist for a resource which is empty, i.e. it contains no parts. In this instance the hasPart relation would not indicate the level. Nor is it possible to limit a search by Level by using hasPart.

	The entry indicates the level of aggregation.
Best practice	-
Open questions	-

Name	<b>type   dossierType</b>
Label	Type   Dossier Type
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Recommended
DC Definition	-
DC Comment	A number of items gathered together into one container or folder.
DC-Gov Definition	Classification of the dossier or collection.
DC-Gov Comment	An example encoding scheme (as used by UK) is Policy; Case; Parliamentary Question; Minister's Case.
Best practice	-
Open questions	-

Name	<b>type   itemType</b>
Label	Type   Item Type
Choice of Namespace:	?
DC Encoding Scheme(s)	-
DC-Gov Encoding Scheme(s)	-
Form of Obligation	Recommended
DC Definition	-
DC Comment	-
DC-Gov Definition	Classification of the item, file or document.
DC-Gov Comment	An encoding scheme for government item types will be developed by the MIREG project.
Best practice	-
Open questions	-



# JISCmail

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**Date:** Fri, 9 Aug 2002 21:44:04 +0100  
**Reply-To:** Andy Powell <a.powell@UKOLN.AC.UK>  
**Sender:** General DCMI discussion list <DC-GENERAL@JISCMail.AC.UK>  
**From:** Andy Powell <a.powell@UKOLN.AC.UK>  
**Subject:** Re: Usage of conformsTo  
**Comments:** To: Chris Croome <chris@webarchitects.co.uk>  
**In-Reply-To:** <20020809174835.GH21578@webarchitects.co.uk>  
**Content-Type:** TEXT/PLAIN; charset=US-ASCII

On Fri, 9 Aug 2002, Chris Croome wrote:

```

> I have been thinking about the usage of conformsTo I guess that this how
> it would be used for RDF:
>
> <dcterms:conformsTo>
>   <rdf:Description rdf:about="http://www.w3.org/TR/xhtml1/">
>     <dc:title>XHTML 1.0 The Extensible HyperText Markup Language</dc:title>
>   </rdf:Description>
> </dcterms:conformsTo>
>
> And this for XHTML:
>
> <meta
>   name="DC.Relation.conformsTo"
>   scheme="URI"
>   content="http://www.w3.org/TR/xhtml1/" />
  
```

Sounds reasonable... and this for XML

```

<dcterms:conformsTo xsi:type="dcterms:URI">
  http://www.w3.org/TR/xhtml1/
</dcterms:conformsTo>
  
```

> What I'm not so sure about it what URI to use?



>

> When producing metadata for a XHTML document should the URI be the  
> specification, as above, or the namespace or the DTD?

Namespace feels wrong to me - since for some/many 'specifications' there will be multiple namespaces. Furthermore, not all 'specifications' will be XML or SGML based... e.g. Web Content Accessibility Guidelines 1.0... so linking to the DTD or XML schema won't be possible.

Therefore, in general I'd use the 'preferred' URI for the human-readable form of the specification that is being conformed to. E.g. in the case of WAI, I'd use one of

<http://www.w3.org/WAI/WCAG1A-Conformance>

<http://www.w3.org/WAI/WCAG1AA-Conformance>

<http://www.w3.org/WAI/WCAG1AAA-Conformance>

(based on the guidance at <http://www.w3.org/WAI/WCAG1-Conformance>). For your XHTML example, I'd use

<http://www.w3.org/TR/xhtml1/>

as you have.

In some cases, there won't be an appropriate URI, in which case I'd use the 'title' of the specification. E.g a resource that conforms to GCE A level (an educational level in the UK) one might simply have to use

GCE A Level

In general, I see the values of DC elements (and element refinements) as being human-readable. A URI for a spec is a useful identifier... clearly a URI is machine-readable, but in general, I'm not convinced that DC consuming applications will want (or expect) to be able to retrieve what is at the URI and do anything useful with it (other than display it to the end user, or allow the end user to 'click' on the link). That said, given any two descriptions, it would be nice to be able to tell if the resources both conform to the same spec or not - therefore, having some consistency in how we 'name' specifications is very valuable. Using the URI for the human-readable spec feels like the 'best' approach to me.

> The 'Nature of HTML' section of this page: <http://www.rddl.org/natures/>  
> discussed this.

>

> Thoughts?

>  
> Chris  
>  
> --  
> Chris Croome <chris@webarchitects.co.uk>  
> web design <http://www.webarchitects.co.uk/>  
> web content management <http://mkdoc.com/>  
> everything else <http://chris.croome.net/>  
>

Andy

--

Distributed Systems, UKOLN, University of Bath, Bath, BA2 7AY, UK

<http://www.ukoln.ac.uk/ukoln/staff/a.powell> +44 1225 383933

Resource Discovery Network <http://www.rdn.ac.uk/>

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[WWW.JISCMail.AC.UK](http://WWW.JISCMail.AC.UK)





# JISCmail

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## Archives of DC- USAGE@JISCMail.AC.UK

*A mailing list for the Dublin Core Metadata  
Initiative's Usage Board*

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## Dublin Core Metadata Initiative

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Title: DCMI Usage Board Meetings - a chronology  
 Creator: [DCMI Usage Board](#)  
 Creator: Thomas Baker ([thomas.baker@bi.fhg.de](mailto:thomas.baker@bi.fhg.de))  
 Identifier: <http://dublincore.org/usage/meetings/>  
 Latest version: <http://dublincore.org/usage/meetings/>  
 Date modified: 2002-06-18  
 Description: This document, periodically updated, provides annotated links to the agendas and meeting notes of DCMI Usage Board meetings. The decisions resulting from these meetings are documented at <http://dublincore.org/usage/decisions/>.

2002 May 12-13, Bath, UK

Agenda: <http://dublincore.org/usage/meetings/2002/05/agenda.html>  
 Meeting packet: <http://dublincore.org/usage/meetings/2002/05/meeting-packet.pdf>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2002-01>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2002-02>

The Usage Board met for two days in Bath (UK) to approve new-term proposals, discuss Usage Board documentation, and clarify issues related to process.

2001 October 22, Tokyo, Japan

Agenda: <http://dublincore.org/usage/meetings/2001/10/agenda.shtml>  
 Meeting notes: <http://dublincore.org/usage/meetings/2001/10/meeting-notes.shtml>  
 Meeting packet: <http://dublincore.org/usage/meetings/2001/10/2001-10-19.dc-usage.pdf>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2001-05>

The Usage Board met at DC2001 in Tokyo to discuss issues of process (ie, a Web-based fast-track procedure for registering encoding schemes) and review an extensive proposal from the DC-Government Working Group.

2001 May 21, Dublin, Ohio, USA

Agenda: <http://dublincore.org/usage/meetings/2001/05/index.shtml>  
 Meeting notes: <http://dublincore.org/usage/meetings/2001/05/meetingnotes.shtml>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2001-04>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2001-03>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2001-02>  
 seeAlso: <http://dublincore.org/usage/decisions/#Decision-2001-01>

At a DCMI meeting in Madeira, February 2001, the Advisory Committee approved the re-constitution of the old Usage Committee as a smaller Usage Board, the goal of which would be to meet twice per year face-to-face and review proposals for metadata term semantics in a timely, principled, and well-documented manner. The first meeting of the new Usage Board was held in May 2001 at OCLC in Dublin, Ohio. The

Board discussed mission and process, an application profile, changed one definition, and approved three new metadata terms.

#### 2000 January through July, DCMI mailing lists

A Usage Committee of twenty-four interested members of the DCMI Advisory Committee held a discussion over the Web and approved a set of first set of DCMI Qualifiers [3,6] and a controlled vocabulary of values for the Type element [5,7]. The discussion, from late 1999 through follow-up in July 2000, is archived on the (now-defunct) Mailbase service [1]. The voting results for individual qualifiers, with review comments, are archived at DCMI [2]. The set of qualifiers was issued as a DCMI Recommendation on 11 July [3], as described in a press release at that time [4].

- [1] <http://www.mailbase.ac.uk/lists/dc-usage/>
- [2] <http://dublincore.org/usage/meetings/2000/04/>
- [3] <http://dublincore.org/documents/2000/07/11/dcmes-qualifiers/>
- [4] <http://dublincore.org/news/communications/pr-20000711.shtml>
- [5] <http://dublincore.org/documents/2000/07/11/dcmi-type-vocabulary/>
- [6] <http://dublincore.org/usage/decisions/#Decision-2000-01>
- [7] <http://dublincore.org/usage/decisions/#Decision-2000-02>

#### Pre-2000

seeAlso: <http://dublincore.org/usage/decisions/#Decision-1998-01>  
seeAlso: <http://dublincore.org/usage/decisions/#Decision-1999-01>

Before the DCMI Usage Board (and its immediate precursor, the Usage Committee) were constituted as such, the Dublin Core Metadata Element Set versions 1.0 and 1.1 were approved by the Dublin Core Advisory Committee through discussion and balloting over the Web.



Metadata associated with this resource: <http://dublincore.org/usage/meetings/index.shtml.rdf>

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