IMS 6001-1-2, Metadata for Recordkeeping and Web Content

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Application: This standard expands on the requirements of DAOD 6001-1, *Recordkeeping* and applies to employees of the Department of National Defence (DND employees) and to officers and non-commissioned members of the Canadian Forces (CF members).

Supersession:

IMS 456.21, Metadata Application Profile – Unstructured Information resources

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1. Definitions

information resources (ressources documentaires)

Any documentary material produced in published and unpublished form regardless of communications source, information format, production mode or recording medium. Information resources include textual records (memos, reports, invoices, contracts, etc.), electronic records (e-mails, databases, internet, intranet, data etc.), new communication media (instant messages, wikis, blogs, podcasts, etc.), publications (reports, books, magazines), films, sound recordings, photographs, documentary art, graphics, maps, and artefacts. (*Directive on Recordkeeping*, Treasury Board)

information resources of business value (ressources documentaires à valeur opérationnelle)

Are published and unpublished materials, regardless of medium or form, that are created or acquired because they enable and document decision-making in support of programs, services and ongoing operations, and support departmental reporting, performance and accountability requirements. (*Directive on Recordkeeping*, Treasury Board)

metadata (métadonnées)

The definition and description of the structure and meaning of information resources, and the context and systems in which they exist. (*Standard on Metadata*, Treasury Board)

value domains (domaines de valeurs)

A set of permissible values for metadata elements. Value domains include, but are not limited to, controlled vocabularies, taxonomies, ontologies, thesauri, reference data, authority lists, naming conventions, and value string instructions. (*Standard on Metadata*, Treasury Board)

2. Overview

Context

- **2.1.** In 2010 the Treasury Board Secretariat's *Standard on Metadata* was issued, providing direction to departments on the collection, management and use of metadata.
- **2.2.** Metadata is structured information that describes, explains, locates, or otherwise makes it easier to retrieve, use, or manage information resources (IRs). Metadata is often called data about data or information about information. Examples of metadata elements could include:
 - the title of an IR;
 - the language an IR was written in;
 - who created the IR; or
 - a description of the IR's contents.
- **2.3.** Value domains are a category of information that may be associated with a metadata element. They represent the list of permissible values that can be assigned to a metadata element and serve to standardize metadata content. An example of a value

domain could be a list of valid security markings, or a list of the acceptable languages in which an IR can be written.

- **2.4.** Collecting and managing metadata information is an important activity that supports recordkeeping, resource discovery (for both legal and business purposes), search engine effectiveness and Web content management.
- **2.5.** This IMS is part of the *DND* and *CF IM* and *IT Policy Framework* and should be read in conjunction with other relevant ADM(IM) policies, instructions, directives, standards and guidance.

Objectives

2.6. The objective of this standard is to establish the baseline metadata requirements for IRs and Web content within DND and the CF.

3. Requirements

Scope

- **3.1.** In alignment with the *Standard on Metadata*, the requirements of this standard apply only to the following areas of IR management:
 - Recordkeeping: Recordkeeping metadata supports recordkeeping as a
 management function through which information resources of business value are
 created, acquired, captured, and managed in departmental repositories over
 time, and used as a strategic asset to support effective decision making and
 facilitate ongoing operations and the delivery of programs and services.
 - **Web resource discovery**: Web resource discovery metadata supports the navigation, searching, display and sharing of Web IRs.
 - Web content management systems: Web content management system (WCMS) metadata supports business and technical processes for authoring, managing and publishing Web content in WCMSs.

Metadata Requirements for Systems Managing IRs

- **3.2.** Systems managing IRs within the above areas must incorporate DND and CF metadata and associated value domains into their design and implementation. Further, these metadata must be documented and maintained to enable the interpretation and exchange of IRs within and across systems.
- **3.3.** The registry of these metadata elements and value domains can be found in appendices A and B of this IMS.

Information Technology Systems and Software

3.4. Any software or system acquired by DND and the CF that creates, manages or uses metadata must either meet or be capable of meeting the requirements of the *Standard on Metadata*, as well as any further requirements specified in this IMS.

Official Languages Application to Internet Metadata

3.5. In accordance with the *Directive on Official Languages for Communications and Services*, any metadata information related to an IR must be expressed in the official language(s) of the IR.

4. Responsibilities

Responsibility Table

1.1. The following table identifies the responsibilities associated with this IMS:

The	is or are responsible for				
DIMPS	 developing, documenting and managing DND and CF metadata elements and value domains in conformance to applicable Government of Canada (GC) standards; and 				
	 maintaining a registry of standardized metadata and value domains for DND and the CF. 				
IM practitioners	 providing support to DND employees and CF members on the application of metadata to IRs. 				
DND employees and CF members	 applying metadata to information resources of business value, published Web content IRs and IRs within WCMSs as described in appendices A and B of this IMS. 				

5. Conformance to GC and Other Metadata Standards

- **5.1.** The metadata described in the appendicies of this IMS conform to:
 - a. the Government of Canada (GC) Standard on Metadata;
 - **b.** the GC *Recordkeeping Metadata Element* Set, a set of 52 metadata elements, created by and for GC institutions;
 - **c.** the GC *Recordkeeping Metadata Application Profile*, which defines constraints on the usage of those 52 elements; and
 - d. the GC Recordkeeping Metadata Implementation Guideline.
- **5.2.** The following elements conform to international standards:
 - **a.** Date ISO 8601 (<u>Data elements and interchange formats Information</u> interchange -- Representation of dates and times);
 - **b.** Date and time (<u>World Wide Web Consortium Date and Time Formats (World Wide Web Consortium)</u>: and
 - **c.** Language <u>ISO 639.2 (Codes for the Representation of Names of Languages Part 2: Alpha-3 Code)</u>.

6. References

Acts, Regulations, Central Agency Policies and Policy DAOD

- <u>Directive on Official Languages for Communications and Services</u>, Treasury Board
- <u>Directive on Recordkeeping</u>, Treasury Board
- Standard on Metadata, Treasury Board
- Web Standards for the Government of Canada, Treasury Board
- DAOD 6001-1, Recordkeeping

Other References

- GC Records Management Application Profile, Library and Archives Canada
- GC Records Management Metadata Standard, Library and Archives Canada
- ISO 639.2 Codes for the Representation of Names of Languages, International Organization for Standardization
- ISO 8601: Data elements and interchange formats -- Information interchange --Representation of dates and times
- DND and CF IM and IT Policy Framework
- <u>Codes for the Representation of Names of Languages Part 2: Alpha-3 Code</u>, United States of America Library of Congress
- <u>Date and Time Formats</u>, World Wide Web Consortium
- <u>Dublin Core Metadata Elements Set, Version 1.1</u>, Dublin Core Metadata Initiative

Appendix A: DND and CF Recordkeeping Metadata Element Set

A.1. This set focuses on the DND and the CF application of the *GC Metadata Element Set* to electronic and non-electronic information resources that are described and managed in a electronic recordkeeping system. This scope does not include published information or datasets that are maintained for computational purposes (e.g. as they would within a database).

Core Metadata Elements Table

The following information is useful for the interpretation of the RK Core Metadata table:

- **M** = Mandatory
- M, A = Mandatory, if applicable
- O-HR = Optional, highly recommended
- **O-HR**, **A** = Optional, highly recommended, if applicable
- **O** = Optional
- * = the element is mandatory at item level or mandatory at file level. Must be mandatory for at least one level; may be mandatory at both levels.
- ** = the element is optional—highly recommended at item level or optional—highly recommended at file level. Must be optional—highly recommended for at least one level; may be optional—highly recommended at both levels.

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
1	Access Restrictions	Permissions assigned to an information resource that govern or restrict the ability of users to locate or take actions on the resource.	М	М	-	1	-	V
2	Addressee [Email]	The name(s) of the recipient(s) to whom an information resource has been sent.	M, A		V	-	-	-

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
3	Agent Identifier	A unique value that identifies the individual who performs an action on an information resource.	М	M	√	-	-	-
4	Agent Name	The name of an individual who performs an action on an information resource.	М	M	1	-	-	-
5	Agent Corporate Name Trustee Corporate Name (DND)	The name of the organization of the individual who performs an action on an information resource.	M	M	√	-	-	-
6	Agent Section Name • Trustee's Organization	The name of the work group, unit of work, business unit, etc. of the individual who performs an action on an information resource.	M	М	√	-	-	-
7	Agent Position Title	The name of the position held by the individual who performs an action on an information resource.	0	0	√	-	-	-
8	Agent Role ¹ • Author • Trustee	A category that identifies the function or responsibility of an individual who performs an action on an information resource.	M	M	٧	٧	-	√

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¹ **Author** - The entity primarily responsible for making the intellectual content of an information resource. **Trustee** – The entity responsible for the stewardship of an information resource. The trustee is responsible for the integrity of an information resource and for assigning sensitivity levels, access control lists and classifying the information resources. The trustee is not necessarily the author, and is not necessarily involved in authorizing disposition actions. The trustee should not be confused with the element office of primary interest (OPI). The element OPI is used as the final arbiter for disposition only and is not responsible for the stewardship of information resources through the other phases of the information management lifecycle.

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
9	Agent Security Clearance ²	The level of security clearance held by an individual.	O—HR	O—HR	√	-	-	-
10	Aggregation	The level of arrangement of the information resource within a hierarchy.	М	М	V	-	-	-
11	ATIP Open Date	The date on which a restriction identified under Access to Information or Privacy (ATIP) legislation no longer applies, and an information resource is declared open.	0	0	-	-	V	-
12	ATIP Restrictions	Any limits assigned to an information resource under Access to Information and Privacy legislation.	0	0	-	-	V	-
13	ATIP Status	An indication of Access to Information or Privacy related restrictions on an information resource.	0	0	-	-	V	-
14	Audience	The intended reader of the information resource.	0		-	-	-	1
15	Classification Code	A unique code derived from a classification scheme that is applied to an information resource.	M*	M*	V	-	V	1

² The "Agent Security Clearance" element applies to individuals and not to information resources. Although it is not applied to information resources, this element is important to the security and integrity of the information resource. The security clearance level of an individual can be used to determine the individual's right to access or perform an action on an information resource.

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
16	Compound Resource Link	A unique value assigned to an information resource that is used to identify a linkage between it and a constituent part.	O—HR, A		√	-	-	-
17	Container Type	The name of the type of storage receptacle of an information resource.		M, A	-	√	√	-
18	Container From Date	The date of the earliest information resource stored in a container.		M, A	V	-	√	-
19	Container To Date	The date of the most recent information resource in a container upon closure of the container.		M, A	٧	-	√	-
20	Description	An account of the content of an information resource.	0	0	-	-	-	√
21	Disposition Action	The action that will be taken on a resource upon the expiry of its retention period.	M*	M*	٧	√	V	-
22	Disposition Authority	Legal instrument issued by Library and Archives Canada that authorizes the transfer, destruction, or alienation outside the control of the GC, of an information resource.	M*	M*	٧	√	√	-
23	Encryption Description	Information or pointers to information about how an information resource is systematically scrambled.	0		-	-	-	√
24	Encryption Status	An indicator that an information resource is systematically scrambled so that it cannot be read	0		-	1	-	√

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
		without knowing the coding key.						
25	Essential Status	An indicator that an information resource is considered to be vital to continuing or re-establishing critical institutional functions.	M*	M*	-	V	√	-
26	Event Date and Time	The date and time of an action taken on an information resource.	М	М	√	-	-	-
27	Event Description	The details of a specific action taken on an information resource.	0	0	-	-	٧	√
28	Event Identifier	A unique value that identifies a specific recordkeeping or business process event.	O—HR	O—HR	√	-	-	-
29	Event Type	Identifies the type of action taken on an information resource during its life cycle.	М	M	√	-	-	-
30	Extent	The size or duration of the content of an information resource.	0		-	-	-	√
31	External Resource Identifier	A unique value or code assigned to an information resource in another system.	0		-	-	V	√
32	External Resource Identifier Type	The type of unique value assigned to an information resource in an external environment or system.	0		-	-	٧	√
33	Format	The specific structure or arrangement of data code stored as a computer file whose purpose is to dictate how a computer displays, prints, processes and saves it.	M		√	-	-	-

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
34	Integrity ³	Information that indicates that the contents and format of an information resource (and the value captured in relation to this metadata element) has not been altered.	M*	*_3	√	-	٧	1
35	Jurisdiction	The scope of authority or control applied by an information resource, for example, a geo-political area such as a country.	0	0	-	-	٨	1
36	Language	The language of the intellectual content of an information resource.	М		-	1	-	√
37	Location	A description or indication of where an information resource resides.	0	М	V	V	√	-
38	Medium	The material or physical carrier of an information resource.	0		-	-	√	1
39	Office of Primary Interest	The organizational entity that authorizes the disposition of resources belonging to a particular function or activity on behalf of the GC.	O—HR**	O—HR**	V	-	1	-
40	Releasable To	The entity to which an information resource can be disseminated outside the originating institution.	O—HR, A	O—HR, A	-	-	-	1
41	Resource Date	A date that best represents the information resource.	M		V	1	1	1

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³ Integrity can most logically be applied at either the item-level or the system-level. It must be applied at the item level or the system-level or both. Be aware that how this element is applied at the item-level is dissimilar from how the concept of integrity is to be applied and implemented at the system-level.

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
42	Resource Identifier	A unique value or code that is applied to an information resource in a particular system or context.	М	M	√	-	-	-
43	Resource Locked	An indicator that an information resource cannot be further changed.	O—HR		-	√	٧	1
44	Retention Period	The period of time an information resource should be retained before authorized disposition.	M*	M*	V	√	٧	-
45	Retention Trigger	A description of a condition that should be met to initiate the retention period countdown.	M*	M*	V	√	٧	-
46	Retention Trigger Date	The date that initiates the retention period countdown.	M*	M*	V	•	٧	-
47	Sensitivity	The highest security classification or designation assigned to an information resource.	М	M	-	√	-	√
48	Subject	The topic of the content of an information resource.	0		-	V	-	1
49	Supplemental Markings	Requirements for the special handling of information resources that are sensitive and do not necessarily pertain to national security or privacy.	M, A	M, A	-	-	-	√
	Title [item-level]	A name given to an information resource.	М		√	-	٧	1
50	Title [file-level]	A name given to an information resource.		M	V	-	٧	-

Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
51	Туре	The nature or genre of the content of an information resource.	0		-	√	-	\
52	Usage Conditions	Limitations or restrictions on how an information resource can be used.	0	0	-	-	√	V

Additional DND and CF specific physical recordkeeping requirements

A.2. These metadata apply to the storage of physical records at semi-dormant and dormant record storage facilities.

DND and CF Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
А	Accession ID	A unique value or code that is applied to an accession.		M	-	-	√	-
В	Accession Locator	A description or indication of where an accession resides.		M	-	-	√	-
С	Bar Code	A code representing characters by sets of parallel bars of varying thickness and separation which are read optically by transverse scanning.		M	V	-	-	-
D	Box - Identifier	A unique value or code that is applied to a box.		M	-	-	√	-
E	Box - Description	An account of the content of a box.		М	-	-	٧	-

DND and CF Element Reference Number	Element Name	Definition	Item-Level Obligation (Record)	File-Level Obligation	Probable Auto- population by EDRMS	Set as default	Records Manager Input	End-User Input
F	Box – Location Code	A description or indication of where a box resides.		M	-	-	√	-
G	Box – LAC BAN Number	A unique LAC BAN value or code that is applied to an accessioned box.		M	-	-	√	-
Н	Box – LAC MIKAN Number	A unique LAC MIKAN value or code that is applied to an accessioned box.		M	-	-	√	-
I	Box – Finding Aid Number	A unique LAC finding aid value or code that is applied to an accessioned box.		M	-	-	√	•
L	Charge Out Date	A date that a file is loaned to a requestor.		M	√	√	-	-
М	Charge In Date	A date that a requestor returns a file.		M	V	√	-	-
N	Status	The situation at a particular time during a process.		M	٧	-	-	-

Appendix B: DND and CF Metadata for Web Content, and Web Content Management Systems

- **B.1.** The following table provides the mandatory metadata elements for Web content that is published or contained within a WCMS, along with their interpretation and syntax.
- **B.2.** These metadata elements must be applied to the following types of Web resources:
 - **a.** welcome pages and home pages (defined as the major entry point to an institution or those distinct organizational units where there is likely to be a perception that they stand alone);
 - **b.** topics or services in high demand by the community that the institution serves (this can be based on usage statistics but may also include topical or publicized resources with potential public interest);
 - **c.** information required by the audience to understand their entitlements to government assistance or obligations;
 - d. pages that provide an actual on-line service to the public, employees or CF members (such as payment forms or application forms);
 - e. pages required to meet a prescribed legal or service obligation of the institution;
 - f. entry points to specific on-line services and indexes (e.g. an entry point to a legal database);
 - g. major formal publications (e.g. annual reports, corporate strategic plans, or public policy and accountability documents);
 - h. media releases;
 - i. major entry points or indexes and menus to a range of closely related topics, programs or policies;
 - j. information about agency powers affecting the audience, and manuals and other documents used in decision making; and
 - **k.** substantial descriptive or marketing information about institutions, their services, activities and collections.

Metadata Element	Interpretation	Syntax
Title	A name given to the Web resource (Web page or document / multimedia	<pre><meta content="{meaningful title}" name="dcterms.title"/></pre>
	format). It appears in search results and helps visitors decide if content is	<title>(meaningful title)</title>
	relevant to them. It also helps search engines to rank a page, i.e. to decide if	
	one page is more relevant than another, similar page.	
	The title should be unique for each page and use enough words to provide a	
	title that is meaningful on its own. The same title should also appear in the	
	HTML title tag. (The SME should provide the title.)	

Metadata Element	Interpretation	Syntax
Creator	An entity primarily responsible for making the Web resource (Web page or document / multimedia format). This is the organization responsible for making the content.	English page: <meta content="Government of Canada, National Defence, {Level 1}, {Director General or Command}, {Directorate or Section}" name="dcterms.creator"/> French page: <meta content="Gouvernement du Canada, Défense nationale, {Level 1}, {Director General or Command}, {Directorate or Section}" name="dcterms.creator"/>
Language	The language of the Web resource (Web page or document / multimedia format). Normally "fra" (French) or "eng" (English) taken from ISO 639.2T, Codes for the Representation of Names of Languages Part 2: Alpha-3 Code (http://www.loc.gov/standards/iso639-2/php/code list.php)	<pre><meta content="{language code}" name="dcterms.language" scheme="ISO639-2/T"/> Ex. English page: <meta content="eng" name="dcterms.language" scheme="ISO639-2/T"/> Ex. French page: <meta content="fra" name="dcterms.language" scheme="ISO639-2/T"/></pre>
Date - Issued	The date the Web resource (Web page or document / multimedia format) was published to the Internet or intranet. Must use the World Wide Web Consortium Date and Time Formats (http://www.w3.org/TR/NOTE-datetime)	<meta content="{date time}" name="dcterms.issued" scheme="W3CDTF"/> Ex. <meta content="2012-02-14T 15:41:09" name="dcterms.issued" scheme="W3CDTF"/>
Date - Modified	The date when significant modifications were made to the Web resource. Assists users in determining currency of content. Must use the World Wide Web Consortium Date and Time Formats (http://www.w3.org/TR/NOTE-datetime)	<pre><meta content="{date time}" name="dcterms.modified" scheme="W3CDTF"/> Ex. <meta <="" content="2012-02-14T 15:41:09" name="dcterms.modified" pre="" scheme="W3CDTF"/></pre>
Status	This is used to indicate that a Web resource (Web page or document / multimedia format) has been archived (i.e. has been left online for a period of time - for example, to show the evolution of policy) but is no longer updated. Absence of this tag indicates that the content is live (NOT archived). Use of this field may be extended in the future to cover other stages in the life cycle of Web content.	<meta content="archived" name="status"/>

Metadata Element	Interpretation	Syntax
Subject	The topic of the Web resource (Web page or document / multimedia format). At least one term must be taken from the GC Core Subject Thesaurus (http://www.thesaurus.gc.ca). The standard template will include "National Defence" / "Défense nationale"; others from the Thesaurus can be added if desired.	<pre><meta content="National Defence, {others from list}" name="dcterms.subject" scheme="gccore"/> Ex. <meta content="National Defence, Military, Technology " name="dcterms.subject" scheme="gccore"/></pre>
Description	An account of the Web resource (Web page or document / multimedia format). This is an abstract or a free-text description of the Web page. Appears in search results along with the resource title to help readers decide if resource is relevant to them. Both "dcterms.description" and "description" tags need to be included. Terms can be take from the GC Core Subject Thesaurus (http://www.thesaurus.gc.ca) and, or the Defence Terminology Bank (http://terminology.mil.ca/term-eng.asp) but should also reflect users' preferred terminology, to improve content search results.	<meta content="{abstract or text free description}" name="dcterms.description"/> <meta content="{abstract or text free description}" name="description"/>
Keywords	Controlled and uncontrolled terms added to the unrefined keywords element if they will make it easier for people to find the resource. Ideally they should be taken from the GC Core Subject Thesaurus (http://www.thesaurus.gc.ca) and the Defence Terminology Bank (http://terminology.mil.ca/term-eng.asp).	<pre><meta content="{keywords}" name="keywords"/> Ex. <meta content="requirement specification language, application, materiel" name="keywords"/></pre>
Review Date	The date a resource is scheduled for a full review by the author to determine if it should be archived, updated or retained as is.	<meta content="2009-10-21" name="review_date" title="W3CDTF"/>
	It assists readers in determining currency of content; it also helps an author to keep content up-to-date.	