# **CONTRIBUTION AGREEMENT**

BETWEEN: HER MAJESTY THE QUEEN IN RIGHT OF CANADA

as represented by the Minister of Canadian Heritage (hereinafter called "the Minister" and including any person duly authorized to represent her/him).

AND: [LEGAL NAME OF THE ORGANIZATION], (indicate the legal status of the

Recipient, e.g., a partnership, a corporation, a non-profit organisation) duly incorporated under the laws of the province of [PROVINCE], having its head office at [CITY], represented by [TITLE OF THE AUTHORIZED OFFICER] (e.g., the President or Director

general), hereinafter referred to as the "Recipient".

**WHEREAS** the Minister is responsible for the Partnerships Fund of Canadian Culture Online, hereinafter called the "Program";

WHEREAS the Recipient has submitted to the Minister a proposal for the funding of a Project called "[NAME OF PROJECT]", which qualifies for support under the Program; and

WHEREAS the Minister wishes to provide financial assistance to support the Project.

THEREFORE, in consideration of their respective obligations set out below, the parties agree to the following

#### 1. PURPOSE OF CONTRIBUTION

The Minister agrees to enter into this Contribution Agreement hereinafter referred to as "the Agreement", in order to grant financial assistance to the Recipient solely for the purpose of implementing the Project described in Annex "A" of this Agreement entitled: "[NAME OF PROJECT]"

# 2. MAXIMUM AMOUNT OF CONTRIBUTION BY THE MINISTER

Subject to the appropriation of funds by the Parliament of Canada, to the continuance of current and forecasted Program budget levels and to the provisions of this Agreement, the Minister agrees to contribute a maximum amount, which will be the lesser of the following two amounts: \$ [CCO RECOMMENDED AMOUNT], or [PERCENTAGE] of eligible costs of the project, to implement the activities described in Annex "A" of this Agreement. Furthermore, the contribution will not exceed in any circumstances 75% of the total eligible cost of the project (including cash and in-kind costs).

# 3. TERM

- 3.1 The present agreement will take effect on the date when all parties will have signed and will cease, subject to its termination on a prior date, one year (365 days) after the expiration of the activity period as indicated at clause 3.2.
- 3.2 Subject to termination, the Agreement covers the activities described in Annex "A" of this Agreement for the period commencing on [YYYY/MM/DD] and ending on [YYYY/MM/DD]. Only goods and services rendered within the prescribed time period shall be considered as eligible expenses.
- 3.3 All obligations of the Recipient herein shall, expressly or by their nature, survive termination or expiry of this Agreement, until and unless they are fulfilled or, by their nature, expire.

# 4. OBLIGATION TO INFORM THE PUBLIC

The Recipient hereby agrees that a public announcement with respect to this Agreement may be made by the Minister in the form of a press release, press conference or otherwise, and that all reasonable and necessary assistance in the organization of the public announcement, as the Minister sees fit, shall be provided.

# 5. ACKNOWLEDGMENT

The Recipient shall acknowledge the contribution received from the Minister in any promotional activity related to the Agreement in a manner satisfactory to the Minister. **The Canadian Heritage Signature & the Canada Wordmark** and guidelines to follow for their use are found at the following address: <a href="http://www.canadianheritage.gc.ca/logos/">http://www.canadianheritage.gc.ca/logos/</a>

Any information released or announcement made by the Recipient to the public must include one of the following sentences: "We recognize the financial support provided by the Department of Canadian Heritage via the Canadian Culture Online Program/ Nous reconnaissons le soutien financier du ministère du Patrimoine canadien par l'entremise du Programme de culture canadienne en ligne" or "This project was made possible – in part or entirely – through the Canadian Culture Online Program of the Department of Canadian Heritage/Ce projet a pu être réalisé, en partie, grâce au Programme de culture canadienne en ligne du ministère du Patrimoine canadien".

#### 6. NOTICE

Any notice, information or document required under this Agreement shall be deemed given if it is delivered, sent by facsimile, email or mail. Any notice delivered, sent by facsimile or email shall be deemed to have been received one working day after it is sent; any notice that is mailed shall be deemed to have been received eight (8) working days after being mailed.

All notices must be sent to the following addresses:

To the Recipient	To the Minister:
Name of Organization	Canadian Culture Online
Address	Department of Canadian Heritage
City (Province)	25 Eddy Street, 3 <sup>rd</sup> Floor, 25-3-V
Postal Code	Gatineau, QC
	K1A OM5
Attention:	Attention:
Name	Jean Carrier
Title	Manager, Content Programs
Tel: (xxx) xxx-xxxx	Tel: (819) 934-3731
Fax: (xxx) xxx-xxxx	Fax: (819) 994-8360
Email:	Email: jean carrier@pch.gc ca

# 7. DESCRIPTION OF THE AGREEMENT

This Agreement, including the following Annexes that form an integral part of this Agreement and subsequent amendments to them, constitutes the entire agreement between the parties and supersedes all previous documents, negotiations, understandings and undertakings related to its subject matter. The Recipient acknowledges having read the Agreement and agrees with the contents. In the event of conflict or inconsistency between Annex 'A' and Annex 'C', Annex 'A' will prevail.

Annex A
Annex B
Annex C
Annex D
Annex D
Annex E
Annex D
Annex E
Annex E
Annex B
Annex C
Annex D
Annex D
Annex B
Annex D
Annex D
Annex E
Annex B
Annex

IN WITNESS WHEREOF, the parties hereto have signed this Agreement through duly authorized representatives.

Recipient	The Minister		
Name (Print)	Name (Print)		
Position	Position		
Signature	Signature		
Date	Date		
Witness	Witness		
Name (Print)	Name (Print)		

# Signature **ANNEX "A"**

# PROJECT/PROGRAMMING DESCRIPTION, SPECIFIC CONDITIONS AND BUDGET

#### **Project Description**

[INSERT THE PROJECT DESCRIPTION FROM THE PROJECT DESCRIPTION SECTION OF THE RAF, AND THE LIST OF PARTNERS FROM THE PROJECT ELIGIBILITY SECTION OF THE RAF.]

#### Description of activities proposed by the Recipient

[DESCRIBE THE PROPOSED ACTIVITIES ACCORDING TO THE CATEGORIES LISTED BELOW.]

# **Research and Preparation of Materials:**

[CONTENT]

Digitization and Web Development:

[CONTENT]

**Learning Material:** 

[CONTENT]

**Promotion:** 

[CONTENT]

**Evaluation/Testing and Audit:** 

[CONTENT]

# **Deliverables**

[LIST THE DELIVERABLES MENTIONED IN THE APPLICATION.]

Specific conditions related to the Partnerships Fund

# 1. OBLIGATIONS OF THE RECIPIENT

As part of this Agreement, the Recipient shall

- 1.1 execute the Project as outlined in Annex "A";
- 1.2 invest the total amount of the Contribution in the Project;
  - the Recipient shall not pay out the contribution in the form of dividends, bonuses or other budgetary compensation to shareholders, proprietors or senior management of the organization.
- 1.3 allocate any financial resources specified in **Annex "B"**, **article 1.2** to the digitization of the Collection and the creation of Digital Content, context and online learning materials and associated navigation systems, in both official languages of Canada, except in cases where the Minister has specifically approved funding for a project in only one of the official languages;
- 1.4 consistent with **Annex "D": Reporting Requirements**, provide performance information, including Web usage statistics, on any online collection funded through this Agreement:
  - 1.4.1 information provided in **Annex "D"** shall be reported to the Department in a timely fashion in accordance with the reporting schedule outlined in Annex "B";
  - 1.4.2 the Program reserves the right, for a period of five years after the end of this Agreement, to periodically request follow-up data related to the website usage statistics of the online collection included in **Annex "D"**;
- 1.5 comply with all relevant sections of Canadian Culture Online's "Technical Standards and Guidelines for CCO-Funded Initiatives" attached as **Annex "E"** of this Agreement;
- 1.6 take all action to ensure that any material created as part of this Agreement and published in any way (including electronically) conforms to the laws of Canada and its provinces and territories;
- 1.7 for a period of five years after the end of this Agreement, provide access to the content and charge no fees (including membership dues and subscription fees) or surcharges from any member of the Canadian public



- for access over the Internet or any subsequent technology to any content created as part of this Agreement; and
- 1.8 for a period of five years after the end of this Agreement, take all-necessary action to ensure the continuous functionality of and public access to all materials created as part of this Agreement over the Internet. Furthermore, the Recipient will promptly inform the Minister on becoming aware of any event, malfunction, planned maintenance or other issues which could interrupt said functionality or public access for any period longer than 48 hours in duration;
- 1.9 for a period of five years after the end of this Agreement, ensure proper maintenance and management of the digitized collection developed through this Project (including ensuring that all links and navigational elements remain functional, that regular backups are performed, that comparable quality is maintained from one language to another, etc.);
- 1.10 register the website on which the collection is housed with at least three well-known search engines (e.g., google.ca, yahoo.ca, alltheweb.ca);
- 1.11 agree to having the online content funded through this Agreement included in the links collection of Culture.ca (<a href="www.culture.ca">www.culture.ca</a>), and to include the Culture.ca visual identifier as a link pointing toward Culture.ca on the home page of the Recipient's own Program-funded website (specific instructions will be provided before March 31, 2007);
- 1.12 give access to the Minister to visit the premises or site where the activities funded under this Agreement are being carried out;
- 1.13 collaborate with the Minister, as required, to conduct studies and surveys in regards to the digital content funded through the Program, including any collection created as a result of this Agreement;
- 1.14 provide at least two weeks prior to the launch of the online collection, three (3) images taken from the digitized collection for which the rights have been cleared (captured at a minimum of 300dpi, and stored in the specified format), along with the corresponding metadata and documentation in both English and French, so that the Minister may use them to promote the Canadian Culture Online initiative and/or the collection developed through this Project;
- 1.15 inform the Minister of any planned launch or public communication related to the collection digitized as a result of this agreement;
- 1.16 maintain in good standing all of its financial obligations to its employees, contractors and creditors;
- 1.17 open a new account in the name of the project in a financial institution, which will be used exclusively for the project. The withdrawals from the account of the project will require the simultaneous signatures of two authorized representatives of the Recipient. The account number and the names of the two signatories will be provided to the Program.
  - 1.17.1 All the payments made by the minister in accordance with this Agreement will be made payable to the recipient's name and will be deposited in the project account.
  - 1.17.2 The Recipient shall follow the Generally Accepted Accounting Principles (GAAP).

# 2. INTELLECTUAL PROPERTY LICENCE

- 2.1 Definitions that apply to this section:
  - "Collection" means the entirety of the content to be digitized as part of this Agreement.
  - "Digitized Content" refer to content that will be digitized as part of this Agreement, including but not limited to, text, images, artefacts, audio and video, etc.
  - **"Protected Content"** means content protected under copyright that has been digitized as part of this Agreement.
  - **"Copyright Owner"** means the copyright holder or any other person duly authorized by the copyright holder to grant the applicable licence.
  - "Technical Protection Measures" means the reasonable technical measures designed to prevent the unauthorized reproduction of Digitized Content by a person accessing the Recipient's Site, a Federal Site or a Sub-licensee Site containing this Digitized Content. These may include reproducing Digitized Content at lower resolution levels or a sampling rate that is considerably lower than what is generally acceptable for the commercial development of similar content in accordance with existing standards, or encoding Digitized Content with technology (software or hardware) that is usually available in Canada for reasonable terms, including the price, allowing Digitized Content to be viewed or heard and without being reproduced by every user without the technical knowledge or skills required to circumvent these technologies.

**"Federal Agency"** means the Department of Canadian Heritage and any other federal department, federal government agency or federal institution.

**"Federal Site"** means an Internet site that is created, published, updated and placed online by a Federal Agency or by any subcontractor on behalf of the Federal Agency.

#### 2.2 Terms of the contribution

The contribution is conditional on the Recipient's compliance with all relevant Canadian legislation, including the Copyright Act, and with any Licence obtained by the Recipient that is described in the present Agreement, from any relevant Copyright Owner.

#### 2.3 Terms for licences

- 2.3.1 Technical Protection Measures. The Licences described in Articles 2.4.3, 2.4.4 and 2.4.5 are subject to the use, by the Recipient, of Technical Protection Measures designed to prevent unauthorized reproduction by any persons accessing the Digitized Content produced as part of this Agreement on the Recipient's Site, any Federal Site and any Sublicensee Site.
- 2.3.2 Exempt Reproductions. Not subject to Article 2.3.1:
  - provisional, transitional or accessory reproduction of the Digitized Content that
    is an integral and essential part of a technical process whose only objective is to
    send this Digitized Content between the Recipient, the government, and
    licensees in a network, by an intermediary.
  - ii) the reproduction of Digitized Content on the internal memory of the user's computer equipment that is erased when this equipment is deactivated, and
  - iii) posting Digitized Content on any of the user's peripheral visual equipment or the acoustic performance of digitized content on any of the user's peripheral audio equipment.
- 2.3.3 Copyright Notice. The Recipient's Site, any Federal Site and any Sub-licensee Site shall include a notice informing users that the Digitized Content is protected by copyright.
- 2.3.4 Information for copyright clearance. The Recipient's Site, any Federal Site or any Sublicensee Site shall include a notice informing users that they must have copyright clearance to reproduce or make any use of the Protected Content, other than a use covered by the Licence or allowed under an exception to copyright.
- 2.4 Licences
  - Digitization Licence. The Recipient is required to obtain non-exclusive licences from the relevant copyright owner or an authorized representative of the copyright owner, authorizing the reproduction of any Protected Content necessary for the Recipient or by any Subcontractor of the Recipient to produce copies of any such Protected Content in digital form
  - 2.4.2 Conservation Licence. The Recipient is required to obtain non-exclusive licences from the relevant copyright owner, authorizing the reproduction and, where necessary, any other action relating to Digitized Content necessary for the preservation and conservation of this Digitized Content.
  - 2.4.3 Online Publication Licence (Recipient). The Recipient is required to obtain non-exclusive licences from the relevant Copyright Owner authorizing any reproduction, communication to the public by telecommunications and other act relating to any Digital Content, whether carried out by the Recipient or any Sub-Contractor thereof, required to post any Digitized Content on the Recipient's Site, including for the creation, editing, updating and online publishing of the Recipient's Site.
  - 2.4.4 Online Publication Licence (Federal Agency). The Recipient is required to obtain irrevocable non-exclusive licences from the relevant Copyright Owner for any Federal Agency, authorizing without charge the reproduction, online public communication and any other action relating to Digitized Content, by any Federal Agency or its Subcontractors, necessary to include Digitized Content on any Federal Site, including the creation, publication, update and placement online of any Federal Site.
  - 2.4.5 Online pre-authorized licences for educational resources. The recipient's website should clearly indicate in a prominent location the authorized use of the collection for

educational purposes by including the following paragraphs which can be adapted to reflect the site content.

- Teachers can use, modify, reproduce and distribute without having to request additional permission for non-commercial purposes the educational resources found on the site including teaching strategies, ideas for the classroom, activities and games.
- ii) Educational institutions, teachers and students can reproduce, communicate by telecommunication, perform, publish, exhibit, crop, reverse, translate, archive and use for non-commercial educational purposes, any content, which can be found on the website.
- 2.4.6 Hyperlinks (Federal Agencies). The Recipient is required to grant Federal Agencies or their Subcontractors an irrevocable non-exclusive licence authorizing the inclusion without charge on any Federal Site of one or more hyperlinks:
  - i) to the Recipient's Site, or directly to any subdirectory or file on the Recipient's Site containing Digitized Content;
  - ii) to any Digitized Content on the Recipient's Site;
  - iii) directly to any Digitized Content on any federal site.
- 2.4.7 Sub-licences. The Recipient shall be required to obtain an irrevocable non-exclusive licence from the relevant Copyright Owner for the Department of Canadian Heritage, authorizing the Department to grant without charge one or more licences authorizing.
  - i) use of Digitized Content. Any reproduction, online public communication and any other action relating to Digitized Content by any Sub-licensee or Subcontractors of the Department that is necessary for the inclusion of this Digitized Content on the site of any Sub-licensee, provided all Digitized Content is included on the site of a sub-licensee only to report, announce and promote this Digitized Content or any Collection including Digitized Content on the Recipient's Site or any Federal Site, and
  - ii) hyperlinks (Sub-licensee) authorizing the inclusion on any Sub-licensee Site of one or more hyperlinks:
    - (a) to the Recipient's Site or directly to any subdirectory or file on the Recipient's Site containing Digitized Content;
    - (b) to any Federal Site or directly to any subdirectory or file of such a Federal Site containing Digitized Content;
    - (c) to any Digitized Content on the Recipient's Site or any Federal Site;
    - (d) to any Collection on the Recipient's Site or any Federal Site.
- 2.4.8 Trademarks. The Recipient shall be required to grant or, where necessary, obtain a non-exclusive licence from the relevant Copyright Holder for any Federal Agency and any Sub-licensee, authorizing without charge the reproduction of any trademark, symbol, logo or slogan associated with any Digitized Content and collections, in association with any Digitized Content or any Hyperlink referred to in clause 2.4.6(ii) and reproduced on either the relevant Federal Site or the Sub-licensee Site, and in any field on the Federal Site or Sub-licensee Site other than the field where the Digitized Content is reproduced, in order to refer to this field with a hyperlink or otherwise.
- 2.4.9 Conflicts between licence and exception to copyright. The licence agreements reached in accordance with this section stipulate that in the event of conflict or incompatibility between a restriction or limit set out in such a licence agreement and an exception set out in the Copyright Act, the exception in the Copyright Act takes precedence to the full extent of this incompatibility or conflict.
- 2.4.10 Separate copyright for Digitized Content. For greater certainty, if separate copyrights from those protecting Protected Content exist or are recognized with respect to the Digitized Content that the Protected Content is taken from, the Licences set out in this section also pertain to copyrights protecting this Digitized Content
- 2.4.11 Contract restrictions. For greater certainty, if the production of Digitized Content is subject to some authorization or restriction by any person other than the Copyright Holder, this authorization or restriction must not in any way affect the exercise of any right granted under the terms of any License described in this section.

#### 2.5 Duration

- 2.5.1 Effective Date. The Licences take effect, at the latest, on the day when all Protected Content is digitally reproduced.
- 2.5.2 Conservation Licence. The Licence described in Articles 2.4.2 and 2.4.3 remains in effect for the entire duration of the copyright on the Digitized Content.
- 2.5.3 Other Licenses. The Licenses (except for the licence described in Article 2.4.2 and 2.4.3) expire five (5) years after the end of the fiscal year during which the project was completed. Licenses are then automatically renewed for additional, consecutive five-year (5) periods. If fees are paid, they should be in keeping with the standard rates in effect on the date of renewal. In the absence of standard rates, the fee is negotiated in good faith between the parties to the License in question.

### 2.6 Territory

- 2.6.1 Digitization and Conservation Licence. The Licenses described in Articles 2.4.1 and 2.4.2 are for Canada.
- 2.6.2 Other Licenses. The Licenses (except for those described in Articles 2.4.1 and 2.4.2) are for the entire world.

#### 2.7 Technology neutrality

Notwithstanding any reference herein to any technology (such as references to the Internet, and Internet site or a hyperlink), any act authorized by the Licences shall apply to acts carried out in accordance therewith using technologies that exist or are in use as of the date hereof or of any technology which may succeed or replace them in future.

2.8 Transfer

The rights granted to the Department under this section may be transferred to any Federal Agency.

# 3. REPRESENTATIONS BY THE RECIPIENT LINKED TO COPYRIGHTS

# The Recipient hereby represents and warrants to the Minister that:

- 3.1 it owns, to the best of its knowledge, or will acquire, the intellectual property rights in the Collection or has obtained all necessary consents from the intellectual property rights holders to digitize the Collection, to reproduce the Digitized Collection on the Internet or any subsequent technology and to allow the Minister, other federal departments, Crown agencies and any other federal institutions to use, reproduce and display the Digitized Collection, as specified in Article 2 above
- 3.2 it will ensure that its Partners own, to the best of its knowledge, or will acquire, the intellectual property rights in the Collection or have obtained all necessary consents from the intellectual property rights holders to digitize the Collection, to reproduce the Digitized Collection on the Internet or any subsequent technology and to allow the Minister, other federal departments, Crown agencies and any other federal institutions to use, reproduce and display the Digitized Collection, as specified in Article 2 above.

# 4. RECIPIENT & PARTNERS'CONTRIBUTION AND BUDGET

# 4.1 Revenues

Sources of funding	Cash Amount	In-Kind Amount
PCH	[CCO RECOMMENDED]	
[RECIPIENT]	[CASH]	[IN-KIND]
[PARTNER/CONSULTANT]	[CASH]	[IN-KIND]
[PARTNER/CONSULTANT]	[CASH]	[IN-KIND]
[PARTNER/CONSULTANT]	[CASH]	[IN-KIND]
[OTHER]		
Total Revenues	[TOTAL REVENUES]	

# **4.2 Eligible Expenditures**

[INSERT THE FINAL EXPENDITURE BUDGET IN EXCEL WITHOUT THE PERCENTAGES]

Eligible Expenditures by category	<b>Total Cost</b>	In Kind	Cash	Amount Approved as per this Agreement
Research and Preparation of Materials	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
Digitization and Web Development	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
Learning Material	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
Promotion	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
Evaluation/Testing and Audit	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
Technical Infrastructure and Software/Skills Upgrading	[AMOUNT]	[AMOUNT]	[AMOUNT]	[AMOUNT]
	<b>Total Costs</b>		[TOTAL CO	STS

# Notes

- Only eligible expenditures are subject to reimbursement under this Agreement.
- Only transfers within eligible expenditure categories are allowed under this Agreement. Please refer to Annex "B", clause 5, for conditions.
- Eligible in-kind expenditures must be considered for the government-stacking limit. However, in-kind expenditures will not be reimbursed by the Minister.

# ANNEX "B"

#### FINANCIAL CONDITIONS

#### 1. MAXIMUM AMOUNT OF CONTRIBUTION

- 1.1 Subject to the appropriation of funds by the Parliament of Canada, to the continuance of current and forecasted Program budget levels and to the provisions of this Agreement, the Minister agrees to contribute up to a maximum of the lesser of [\$AMOUNT] or [PERCENTAGE]% toward the eligible expenditures incurred by the Recipient for the activities described in Annex "A."
- 1.2 Disbursements of the Contribution will not exceed the following amount(s) for the applicable fiscal year(s), as per payment breakdown and the eligible expenditures will be incurred by the recipient within the fiscal year for which they are allocated:

#### Federal Government Fiscal Year 2006-07 \$ [AMOUNT]

- 1.3 The federal government's fiscal year starts on April 1<sup>st</sup> and ends on March 31<sup>st</sup> of the following calendar year. For each individual fiscal year, only the goods and services received by the Recipient between April 1<sup>st</sup> and March 31<sup>st</sup> of the following calendar year are eligible for the funding allocated for the applicable fiscal year.
- 1.4 In the event that the Recipient forecasts to incur fewer expenses than anticipated during the current government's fiscal year and according to the clause 1.2 above, the Recipient shall inform the Minister in writing, as soon as possible, but no later than 60 days prior to the end of the federal government's fiscal year. The Minister will consider any request to adjust the following fiscal year s contribution allocation accordingly but the Minister will have no obligation to do so.

#### 2. REDUCTION/TERMINATION OF THE AGREEMENT

- 2.1 Funding under this Agreement may be reduced or terminated at the Minister's discretion in response to the government's annual budget, a parliamentary, governmental or departmental spending decision, or a restructuring or re-ordering of the federal mandate and responsibilities that impact on the Program under which this Agreement is made.
- 2.2 In the event of a proposed reduction or termination of the funding of the Program under clause 2.1 above, the Minister may, upon giving the Recipient written notice of ninety (90) days, reduce the funding or terminate this Agreement. Subject to the terms and conditions of this Agreement, in the event that funding is terminated under the Program, the obligations of both parties shall cease at the end of the notice period.

### 3. SURPLUS

The Recipient agrees that all revenues and expenditures mentioned in Annex "A" (Budget) are anticipated and also agrees to inform the Minister of any change without delay and, in all cases before the final payment is due, of any increase or decrease in their revenues and/or expenditures for this Project/Programming. In this case, the Recipient recognizes that the financial support given in terms of this Agreement and the expected activities/results may be adjusted or renegotiated at the Minister's discretion.

# 4. DESCRIPTION OF ELIGIBLE EXPENDITURES

The Recipient agrees that the Minister's contribution will be applied to only those eligible expenditures described in Annex "A" of this Agreement.

# 5. TRANSFER OF FUNDS BETWEEN EXPENDITURE CATEGORIES

- 5.1 If more than one expenditure category is specifically funded in Annex "A" of this Agreement, the Recipient may transfer funds amongst approved expenditure categories, under the following circumstances:
  - 5.1.1 after receiving written authorization from the Minister, if at least one expenditure category involved in the transfer(s) represents an increase or a decrease exceeding 15% of the funds for that category. Such an authorization would have the same value and the same effect as a formal amendment to this Agreement.
  - 5.1.2 without authorization from the Minister, provided that no expenditure category involved in the transfer(s) would be subject to an increase or a decrease exceeding 15% of the funds for that category.

The Recipient may transfer funds from one item to another within the same expenditure category without the Minister's authorization.

# 6. PAYMENTS

The Minister shall pay to the Recipient the contribution described in clause 1.2 as follows

- **The Minister may** make advance payments based on the Cash Flow Statement submitted by the Recipient. Payments will be made on or about the first day of the period covered by the advance (please refer to first column below entitled "Advance payment for the period of").
  - **6.1.1** The Recipient must submit the reports as indicated in the schedule below. Advance payments that require reports are conditional upon receipt and acceptance of the reports by the Minister. All advance payments are conditional upon compliance with previous advance payment terms and conditions.

# PAYMENT SCHEDULE

Advance payment	Payments conditions						
for the period of	Conditions or type of reports (Cash Flow, Interim Report)		Period covered by the report	Report to be submitted by			
The first payment may cover a three-month period.							
Apr. 1 – June 30, 2006	Signature of the Agreement Cash Flow Statement	April	1, 2006 – Mar. 31, 2007	At the signing of Agreement			
July 1 – July 31, 2006	No report required						
Aug. 1 – Aug. 31, 2006	No report required						
Sept. 1 – Sept.30, 2006	Cash Flow Statement		1 – Aug. 31, 2006 (actuals) and 1, 2006 – March 31, 2007 cast)	Sept. 15, 2006			
Oct. 1 – Oct. 31, 2006	No report required						
Nov. 1 – Nov. 30, 2006	Interim Report	April	1 – Sept. 30, 2006	Nov. 1, 2006			
Dec. 1 – Dec. 31, 2006	Cash Flow Statement		1 – Nov. 30, 2006 (actuals) and 1, 2006 – March 31, 2007 east)	Dec. 15, 2006			
Jan. 1 – Jan. 31, 2007	No report required						
Feb. 1 – Feb. 28, 2007	Interim Report	Oct.	1 – Dec. 31, 2007	Feb. 1, 2007			
Mar. 1 – Mar. 31, 2007	Cash Flow Statement		1, 2006 – Feb. 28, 2007 (actuals) March 1 – March 31, 2007 cast)	March 15, 2007			
If the Recipient forecast to incur fewer expenditures than anticipated in the budget (Annex "A") for the current fiscal year, the Recipient must inform the Minister as soon as possible, but no later than 60 days prior to the end of the current fiscal year.							
A final payment representing the holdback shall be made on receipt and acceptance of the following reports, certified by a person duly authorized by the Recipient							
Holdback	Final Report	April	1, 2006 to March 31, 2007	May 31, 2007			
	Audited Financial Report	April	1, 2006 to March 31, 2007	May 31, 2007			

#### 7. FINANCIAL REPORT

#### 7.1 Cash Flow Statement:

For the purposes of this Agreement, a Cash Flow Statement, certified by a person duly authorized by the Recipient, shall include as separate items the budget as well as all the Recipient's revenues and expenditures for the given period with regard to activities funded through this Agreement. This report shall include the sources of revenues and expenditure items as set out in Annex "A". Any other sources of revenue or expenditure items added to the activities after the Agreement is signed shall also be included, and the Recipient should inform the Program. The report shall be prepared in accordance with the template provided by the Program.

# 7.2 Final Audited Financial Report:

For the purposes of this Agreement, the Final Audited Financial Report, certified by a person duly authorized by the Recipient, shall clearly include all the Recipient's revenues and expenditures with regard to the project funded through this Agreement for the given period. This report shall include the sources of revenues and expenditures as set out in Annex "A". Any other sources of revenues or expenditures added to the project after the Agreement is signed shall also be included. Accounts shall be audited by professional accountants who are independent of the organization and are active members in good standing of one of the following professional associations: CA, CMA, CGA.

#### 8. ADVANCE PAYMENTS

Where the terms of the Agreement permit advance payments to be made, such advance payments shall be considered debts owed to the Minister until such time as the Recipient has accounted for the said advance payments in accordance with the terms of the Agreement and to the Minister's satisfaction.

# 9. TAX CREDIT

The Minister does not reimburse the tax paid by the Recipient for goods and services for which the Recipient is entitled to tax credit or reimbursement.

# 10. OVERPAYMENT

- 10.1 Where, for any reason, the Recipient is not entitled to the contribution or the Minister determines that the amount of the contribution disbursed exceeds the amount to which the Recipient is entitled, any such amount is a debt tue to Her Majesty and is recoverable as such.
- When the Recipient's final financial report on revenues and expenditures is completed and an overpayment is identified, the Recipient shall forward a reimbursement cheque to the Department for the amount of the overpayment, payable to the Receiver General for Canada. The due date for the reimbursement shall be the date of the submission of the final financial report and the final activity/ result report to the Minister.
- 10.3 When the Minister or its agents performs a financial analysis or an audit of the financial statements of the Recipient and an overpayment is identified, the overpayment shall be repaid to the Minister no later than 30 days after the date of the notice by the Minister.
- 10.4 Where any amount due to the Minister has not been repaid, an amount equal to the amount due may be retained by way of deduction from or set-off against any sum of money that may be due or payable to the Recipient.

# 11. AUDIT

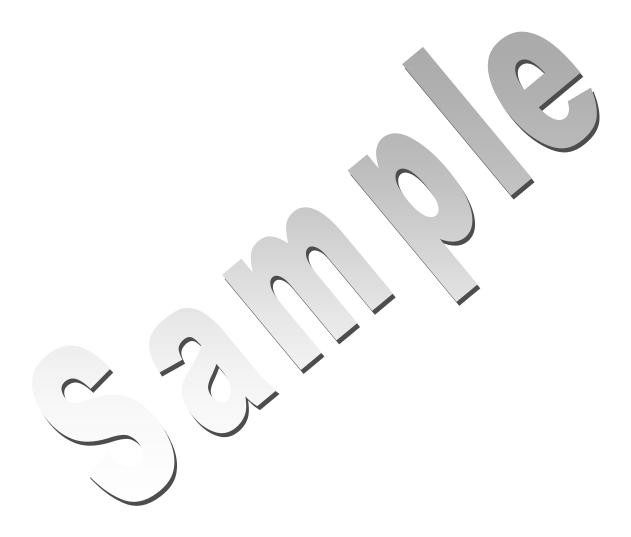
- 11.1 The Minister reserves the right to audit or cause to have audited the accounts and records of the Recipient for a period of up to five years after the end of this Agreement to ensure compliance with the terms and obligations of the Agreement. The scope, coverage and timing of such an audit shall be determined by the Minister and, if conducted, may be carried out by employees of the Department or its agent(s). The Recipient shall make available to auditors, in a timely manner, any records, documents and information that the auditors may require.
- 11.2 The Recipient agrees to adhere to generally accepted accounting practices and principles and shall keep and make available to the Minister's representatives for examination and audit its books, accounts and registers of all revenues and expenditures in relation to the Project/Programming financed under this Agreement.

# 12. INTEREST CHARGES

Any overpayment remaining owing and unpaid shall carry interest calculated and compounded monthly at the average bank rate, within the meaning of such expression as contained in the *Interest and Administrative Charges Regulations*, SOR/96-188, plus three per cent (3%), from the due date to the settlement date.

# 13. LATE CLAIMS

The Minister will not be held to pay bills or other expenditures after the end date of the agreement as indicated at clause 3.1 (see first page of the agreement).



# ANNEX "C"

# **GENERAL TERMS AND CONDITIONS**

#### 1. REPRESENTATION BY THE RECIPIENT

The Recipient confirms and warrants:

- 1.1 that it has the capacity and authority to enter into this Agreement to carry out the Project/Programming and that it knows of no reason, fact or event, current, imminent or probable, that would diminish this capacity and authority;
- that it holds sufficient intellectual property rights for the conduct of the Project/Programming or the exploitation of any intellectual property resulting thereof;
- 1.3 that it, for the duration of this Agreement, has no interest, pecuniary or otherwise, in any business matter that would put it in an actual or apparent conflict of interest;
- 1.4 that the description of the Project/Programming in Annex "A" accurately reflects what it intends to do, that the information contained therein is accurate, and that all relevant information has been disclosed;
- 1.5 that it will declare any amount owing to the federal government under legislation, contract or contribution agreements during the term of this Agreement and that it recognizes that amounts due to the Recipient may be withheld to offset amounts owing to the Government; and
- 1.6 that no current or former public office holder or public servant who is not in compliance with the Values and Ethics Code for the Public Service or the Conflict of Interest and Post-employment Code for Public Office Holders shall derive a direct benefit from this Agreement.

#### 2. OBLIGATIONS OF THE RECIPIENT

- 2.1 The Recipient must identify the Project/Programming clientele and take all necessary measures to communicate and provide Project/Programming related services to this clientele in English and in French as the case may require.
- 2.2 During the term of this Agreement, the Recipient shall:
  - 2.2.1 take all necessary actions to maintain itself in good standing, to preserve its legal capacity and to inform the Minister without delay of any failure to do so;
  - 2.2.2 upon the written request of the Minister and without delay, provide any information as the Minister may require concerning this Agreement;
  - disclose to the Minister, without delay, any fact or event that would or might compromise the Project/Programming's chances of success or the Recipient's ability to carry out any of the terms and conditions of this Agreement, either immediately or in the long term, including but not limited to, pending or potential lawsuits and audits;
  - 2.2.4 ensure access by the Minister, her/his authorized representatives and by the Auditor General of Canada to its premises at all reasonable times and upon not less than two weeks notice for audit and evaluation purposes; and
  - 2.2.5 ensure contracts over \$ 25,000 that are necessary for the conduct of the Project/Programming will be submitted to a competitive process and apply the best combination of quality criteria at the best overall cost over the useful life of the Project/Programming and shall ensure that those contracts contain terms and conditions accurately reflecting those applying to this Agreement.

### 3. CERTIFICATION-CONTINGENCY FEES

Definitions that apply to this subsection:

"contingency fee" means any payment or other compensation that is contingent upon or is calculated upon the basis of a degree of success in soliciting or obtaining a government agreement or negotiating the whole or any part of its terms;

"employee" means a person with whom the Recipient has an employer/employee relationship; and

"person" includes an individual or group of individuals, a corporation, a partnership, an organization or an association and, without restricting the generality of the foregoing, includes any individual who is required to file a return with the registrar pursuant to section 5 of the *Lobbyists Registration Act*, R.S. 1985, c. 44 (4th Suppl.), as the same may be amended from time to time.

- 3.1 The Recipient certifies that it has not directly or indirectly paid or agreed to pay and agrees that it will not directly or indirectly pay a contingency fee for the solicitation, negotiation or obtainment of this Agreement to any person other than an employee acting in the normal course of the employee's duties.
- 3.2 All accounts and records pertaining to the payment of fees or other compensation for the solicitation, obtainment or negotiation of the Agreement shall be subject to the audit provisions of the Agreement (Annex "B", clause 11).
- 3.3 If the Recipient certifies falsely under this section or is in default of the obligations contained therein, the Minister may either terminate this Agreement for default or recover from the Recipient by way of reduction of the contribution or otherwise the full amount of the contingency fee.

#### 4. APPLICABLE LEGISLATION

- 4.1 The Recipient must ensure that the Project/Programming is carried out in compliance with all applicable statutes, regulations, orders, standards and guidelines.
- 4.2 Acts: The Recipient agrees to comply with the spirit and intent of the *Employment Equity Act*, S.C. 1995, c. 44, the *Canadian Multiculturalism Act*, R.S., 1985, c. 24 (4th Supp.).
- 4.3 This Agreement shall be governed by and interpreted in accordance with the applicable laws of the Province of residence of the Recipient or main place of business.
- 4.4 Any person lobbying on behalf of the Recipient shall be registered pursuant to the *Lobbyists Registration Act*, R.S., 1985, c. 44 (4th Supp.).

#### 5. CONFIDENTIALITY

- 5.1 The Recipient shall ensure that any information of a confidential nature relating to the affairs of the Minister to which the Recipient or its officers, servants or agents become privy shall be treated as confidential and shall not disclose such information to third parties, unless such a disclosure is made pursuant to the *Access to Information Act*, R.S., 1985, c. A-1 and to the *Privacy Act*, R.S., 1985, c. P-21.
- 5.2 The Recipient shall ensure that any personal information which may be brought to the attention of the Recipient and its employees or agents will be dealt with according to the provisions of the *Privacy Act*, R.S.1985, c. P-21.
- **6. ASSETS DISPOSAL** (applicable only if the Agreement allows reimbursement of capital expenditures)

For any asset purchase (furniture, equipment, automotive equipment, building, etc) that has a cost of over \$1000, the Recipient shall:

- 6.1 Preserve and maintain the assets acquired with contribution funds and use them for the purposes of the funded activities during the term of this Agreement unless;
  - 6.1.1 written exemption from this requirement is obtained from the Minister;
  - 6.1.2 the Minister authorizes the disposition of the asset;
  - 6.1.3 replacement of assets subject to wear is necessary; or
  - 6.1.4 assets that have become outdated require replacement.
- 6.2 The Recipient agrees that, at the end of the Project/Programming or upon termination of this Agreement, if earlier, and if directed to do so by the Minister, any capital assets that have been preserved by the Recipient shall be:
  - 6.2.1 sold at fair market value and the funds realized from such a sale applied to the eligible cost expenditures of the Project/Programming to offset the Minister's contribution to the eligible cost expenditures of the Project/Programming;
  - 6.2.2 turned over to another organization or person designated or approved by the Minister; or
  - 6.2.3 disposed of in such other manner as may be determined by the Minister.

#### LIABILITY 7.

- The Minister and her/his employees and agents shall not be held liable for any injury, including death to any person, or for any loss or damage to property of the Recipient or for any obligation of the Recipient or anyone else, incurred or suffered by the Recipient or its employees, agents or voluntary workers in carrying out the Project/Programming, including where the Recipient has entered into loans, capital leases or other long term obligations in relation to this Agreement.
- 7.2 Where the Recipient is an unincorporated organization, it is agreed by the representatives of the Recipient signing this Agreement on behalf of the Recipient, that they shall be personally, jointly and severally liable for all obligations, covenants, promises, liabilities and expenses assumed by the Recipient under this Agreement.

#### 8. INDEMNIFICATION

The Recipient shall indemnify and save harmless the Minister and her/his employees and agents from and against all claims, losses, damages, costs, expenses, actions and other proceedings made, sustained, brought, prosecuted, threatened to be brought or prosecuted in any manner based upon, occasioned by or attributable to any injury to or death of a person or damage to or loss of property arising from any wilful of negligent act, omission or delay on the part of the Recipient or its employees, agents or voluntary workers in carrying out the Project/Programming, except that the Minister shall not claim indemnification under this section to the extent that the injury, loss or damage has been caused by the Minister or her/his employees or agents.

#### **INSURANCE**

The Recipient shall, through an appropriate policy of insurance, cover any liability resulting from anythin done or omitted by the Recipient or its employees, agents or voluntary workers in carrying out the Project/Programming.

#### DEFAULT AND REMEDIES

- 10.1 The following constitute events of default:
  - 10.1.1 the Recipient becomes bankrupt or insolvent or is placed in receivership or takes the benefit of any statute relating to bankrupt and insolvent debtors;
  - 10.1.2 an order is made or a resolution is passed for the winding-up of the Recipient or the Recipient is dissolved;
  - 10.1.3 in the Minister's opinion, there is a change in risk that would jeopardize the success of the Project/Programming;
  - 10.1.4 the Recipient either directly or through its representatives, makes or has made a false or
  - misleading statement to the Minister in the Minister's opinion, a condition or a commitment provided for in the Agreement has not been respected; and
  - 10.1.6 the Recipient is no longer eligible under the "Eligibility Criteria" of the Program.
- Where there is a default or where, in the Minister's opinion, there is likely to be a default under this Agreement, the Minister may reduce the contribution level, suspend any payment, make 10.2 arrangements under particular terms and conditions so that the Project/Programming will be completed or continued by another Recipient, rescind this Agreement and immediately terminate any financial obligation arising out of it and require repayment of amounts already paid.
- 10.3 The fact that the Minister refrains from exercising a remedy or any right herein shall not be considered to be a waiver of such remedy or right and, furthermore, partial or limited exercise of a remedy or right conferred on her/him shall not prevent her/him in any way from later exercising any other remedy or right under this Agreement or other applicable law.

# 11. EVALUATION

- The Minister and the Recipient agree on the importance of assessing what has been accomplished in terms of the defined objectives and expected results outlined in this Agreement.
- 11.2 The evaluation of the Agreement is a joint concern of the Minister and the Recipient. To this end, the Recipient agrees:
  - that it shall provide activity reports in a way that shows progress in relation to the defined objectives and expected results of the Project/Programming and participate in any evaluation of the Project/Programming as required and as mutually agreed upon; and
  - that the Minister reserves the right to make an evaluation for a period of up to five years after the end of this Agreement to ensure compliance with the terms and conditions of the Agreement.

# 12. PARTNERSHIP

- 12.1 The Parties acknowledge that this Agreement does not constitute an association for the purpose of establishing a partnership or joint venture and does not create an agency relationship between the Minister and the Recipient, and that it in no way implies any agreement or undertaking to conclude any subsequent agreement.
- 12.2 The Recipient shall not represent itself as being a partner, co-contractor, employee or agent of the Minister in carrying out the Project/Programming referred to in this Agreement.

#### 13. ASSIGNMENT

The Recipient shall not assign this Agreement or any part thereof or any payments to be made thereunder without the written permission of the Minister, but nothing shall preclude the Recipient from enlisting the assistance of others in carrying out the obligations under this Agreement.

#### 14. MEMBERS OF PARLIAMENT OR SENATORS

No Member of the House of Commons or the Senate shall be eligible to any share of part of this Agreement or to benefit therefrom.

#### 15. DISPUTE RESOLUTION

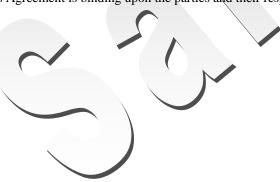
In the event of a dispute arising under the terms of this Agreement, the parties agree to make a good-faith attempt to settle the dispute. In the event that the parties are unable to resolve the dispute through negotiation, they agree to consider mediation. The parties will bear the costs of mediation equally.

# 16. AMENDMENTS

This Agreement may be amended by the mutual written consent of the Parties hereto. To be valid, any amendment to this Agreement shall be in writing and shall be signed by the Parties hereto or by their duly authorized representatives, while this Agreement is in effect.

# 17. SUCCESSORS

This Agreement is binding upon the parties and their respective administrators and successors.



# ANNEX "D"

# REPORTING REQUIREMENTS

#### INTERIM /FINAL REPORTS AND WEBSITE USAGE STATISTICS

### A. INTERIM REPORT – DUE ON [INTERIM REPORT DATE]

For each of the following items, provide an update and outline any gap between your original plan and your implementation results to date:

#### 1. Research and Preparation of Materials

- Quantify and describe the content identified for digitization following your research phase (documents, photographs, audio/video files, and other objects to be digitized).
- Provide an update on your copyright rights clearance activities. What is the current status? How will you
  ensure that all copyright provisions included in your contribution agreement for the project are respected?
  Provide an example of a rights release agreement, if copyright must be obtained from others in the context
  of this project.

# 2. <u>Digitization and Web Development</u>

- Quantify and describe the content digitized to date (documents, photographs, audio/video files, and other objects digitized).
- Explain the measures taken to back-up and preserve the content during the production phase.
- Describe, using quantities or percentages, how much of the metadata information has been created for the collection so far. Does the metadata/indexing conform with the Technical standards and Guidelines for CCO-Funded Initiatives?
- Describe the structure and functions of the website in relation to your initially submitted storyboard.
- Where are you in terms of making your site/collection/stories accessible to Canadians living with a disability?

#### 3. <u>Learning Material</u>

- List the learning materials developed so far and describe the testing/evaluation activities that have taken place (technical evaluation, user feedback, focus group, survey, etc) and describe the results. How will the feedback be implemented? What other testing/evaluation is planned?
- Describe the linkages you have established with the school community regarding your project and learning materials, or your plan to do it.

# 4. Promotion

- Where are you in terms of making your site/collection/stories accessible to French speaking Canadians (translation, original French content, metadata, learning materials, promotional materials, etc)?
- Indicate when the digitized collection (including learning materials) will be all online and functional.
- Describe your marketing activities to date? When do you plan on launching the collection or website?

### 5. Evaluation/Testing and Audit

• List and describe the testing/evaluation activities that have taken place so far (technical evaluation, user feedback, focus group, survey) and describe the results.

# 6. Administration/Management

- Provide an update on the use of resources (human resources, financial and technical/equipment) in relation to what was initially planned in your application and approved budget.
- Describe any significant gaps between the original budget and its implementation to date.
  - Any significant or anticipated budget modification (+/-15% per category) must be approved by the Program.
  - O Any significant change in your total contribution for your project must be reported at least 60 days before the end of the fiscal year.
- Describe any actual or potential issues or problems that could jeopardize the project, if applicable.
- How is the partnership going? Do you anticipate major changes in the partnership agreements content, expertise, financial/in-kind contributions, HR, etc.)?

#### B. FINAL REPORT – DUE ON MAY 31, 2007

#### Report on the following items, and identify any gaps between your original plan and your results to date:

**Please note:** Canadian Culture Online is implementing its new database. For some of the indicators below, a template will be provided – before the end of the fiscal year – to assist you in reporting of data.

## **REPORT**

# 1. Research and Preparation of Materials

• Has all copyright clearance been done has planned? Describe how all-copyright provisions included in your contribution agreement for the project are respected?

#### 2. <u>Digitization and Web Development</u>

- Provide the final number of items digitized (documents, photos, audio/video files, etc.)
- Have the cataloguing and metadata creation gone as planned? Is the metadata in both official languages?
- Explain the measures taken to back-up and preserve the content developed through this project online for the next five years. Do you plan to continue updating your content?

# 3. Learning Material

- Provide the final number of learning materials produced.
- Indicate to which subject matters and grade levels these learning materials apply.
- Provide an update, based on your interim reporting, of the connections you have established with the school community regarding your project and learning materials.

#### 4. Promotion

- Indicate the percentage of content that has been made accessible in French (taking into consideration content, interface, metadata, learning materials, interactive features, promotional materials, etc.).
- Indicate the percentage of content available in languages other than English and French.
- Indicate the percentage of content accessible online that is based on **original** French, English and/or other languages content.
- Describe the results of your communication/promotion activities for the site.

#### 5. Evaluation/Testing and Audit

• Provide an update on any testing/evaluation activities that have taken place since your interim reporting. Describe the results and indicate how the feedback will be implemented.

### 6. Administration/Management

- Provide a final update on the use of resources (human resources, financial expenditures and technical/equipment) in relation to what was initially planned in your application and approved budget.
- Describe any significant gaps between the original budget and actual project expenditures.

# 7. <u>Deliverables</u>

• Describe the results achieved for each deliverable as stated in the beginning of the project (see Annex "A").

# 8. Other Required Documentation (checklist)

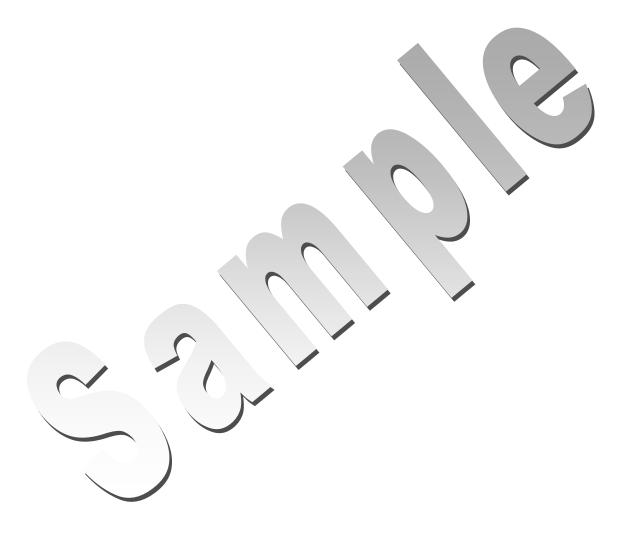
# Please ensure you provide the following:

- ☐ The URL for the project
- ☐ The URL for the notice and/or logo identifying the Department's contribution
- ☐ The URL for the *culture.ca* identifier
- □ A copy of all promotional materials developed in the course of the project (Please note that unless expressly stated otherwise in this contribution agreement, all public communications related to the project, including your promotional materials, should be in both of Canada's official languages.)
- An audited financial report, as per article 7.2 of Annex "B," detailing all your sources of revenues and the items of expenditures you incur for each activity funded through this Agreement, prepared by an external accountant and audited in accordance with generally accepted accounting principles (A template for the preparation of this report will be provided by the responsible Program office in advance of the submission date for the Final Report.)

# <u>WEBSITE USAGE STATISTICS – REQUIRED ON MAY 31, 2007 AND MAY 31, OF EACH YEAR FOR</u> FOUR (4) SUBSEQUENT YEARS

Please provide monthly traffic statistics, obtained through web traffic analysis software such as *WebTrends Log Analyzer*, for each current and past project funded through the Partnerships Fund. The following statistics are required for both the English and French interfaces: number of visits, number of files accessed (e.g. videos, audios), number of unique visitors, number of repeat visitors, and average visit length.

**Please note:** In order to help assess the success of the Partnerships Fund and the Canadian Culture Online initiative, the Recipient is required to provide annual traffic updates consistent with the above criteria for a period of four years



# ANNEX "E"

# TECHNICAL STANDARDS AND GUIDELINES FOR CCO-FUNDED INITIATIVES

# TABLE OF CONTENTS

- Introduction to CCO Standards
  - o Background
  - o Principles and Goals of Technical Standards Guidelines
- Summary of Technical Requirements
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# INTRODUCTION TO CCO STANDARDS

# **Background**

This document outlines the technical requirements that Canadian Culture Online (CCO) funded projects must meet. The requirements are based on widely-accepted standards developed by such organizations as the World Wide Web Consortium (W3C) and the International Standards Organization (ISO). All CCO-funded projects must implement the standards identified as requirements.

The standards and guidelines presented in this document should be interpreted as a base line from which institutions can develop additional requirements.

In addition, CCO recommends, but does not require, that recipients apply additional standards in some cases.

### **Principles and Goals of Technical Standards Guidelines**

CCO technical standards are based on the following principles:

**Accessibility:** Content created, digitized and developed through CCO-funded projects must be made available to all Canadians regardless of geographic or technical boundaries, or disabilities.

Visibility: Standards help to maximize the visibility of CCO-funded projects by facilitating discovery on Internet search engines as well as by other cultural gateway sites.

**Preservation:** CCO encourages preservation of the digital material it helps create. Long-term preservation strategies maximize the investments made today and maintain a record of the evolution of our online culture.

**Interoperability:** Well-defined standards help to ensure that content can be shared and operate in conjunction with other content.



# SUMMARY OF TECHNICAL REQUIREMENTS

Details on all of the requirements below, as well as best practices for complying with the requirements, are found in the main body of this document.

Fund recipients are required to:

- conform to accessibility guidelines as defined by the W3C's Web Accessibility Initiative (WAI) Guidelines 1.0.
- develop and document file- and directory-naming rules and guidance for their respective CCO-funded projects
- display text-based content as HTML or XHTML. The latest version recommended by W3C (currently HTML 4.01) or the latest version of XHTML (currently 1.0) must be used
- make text-based content prepared in other formats such as Adobe's PDF available in an alternate format, such as HTML, which is accessible to individuals with disabilities
- use one of the following formats when using multimedia applications:
  - o JPEG (photos) or GIF (computer graphics) for graphics on the Web
  - TIFF or PNG for storage of digitized images (images can be provided in a second format beyond those mentioned above for the purpose of allowing downloading of images)
  - o video, animation and sound file formats that can be played on freely-available plug-ins or players such as QuickTime, RealPlayer, Media Player or ShockWave
  - o prepare alternate low-bandwidth versions when video and sound files are prepared for delivery in a highbandwidth environment
  - o provide alternate, text-based summaries of video, audio and animation files that allow any user to obtain the essence of individual files
  - use a database that supports open standards such as SQL and XML
  - o document their database designs and structures
  - o use client-side scripting languages that comply with the ECMAScript standard such as JavaScript version 1.5 or JScript version 5.5
- provide metadata describing their digitized objects. Six metadata elements are required when describing these objects:
  - o title
  - o creator
  - o subject
  - o date created
  - o language (where applicable)
  - o identifier
  - o establish a disaster-recovery plan as well as data backup procedures

# Accessibility

CCO requires its fund recipients to create Web sites that can be viewed by all Canadians, regardless of physical disabilities.

CCO funded recipients **are required to** create sites that either conform to accessibility guidelines as defined by the W3C's <u>Web Accessibility Initiative (WAI) Guidelines 1.0</u> or make available alternate versions that comply with these guidelines.

Several resources can be of help to site developers to meet these conformance requirements. For example, WAI provides a checklist: "Checklist for Web Content Accessibility Guidelines 1.0" at <a href="http://www.w3.org/TR/WCAG10/full-checklist.html">http://www.w3.org/TR/WCAG10/full-checklist.html</a>

It is **recommended** that fund recipients adhere to the practices described in the <u>Accessibility Tip Sheet</u> developed by the Canadian Heritage Information Network for the Canadian museum community.

# File Naming and Directory Structures

A well-considered set of file-naming practices offers multiple benefits both in the immediate and the long term. A file-naming convention helps to manage digitization workflow while a well-planned directory structure will improve the management of digital assets. It will enable portability of objects, better discovery by search engines and increase visibility to users.

CCO **requires** that fund-recipients develop and document file- and directory-naming rules and conventions for CCO-funded projects.

It is **recommended** that file names and directory structures be descriptive and intuitive for both site developers and users.

Consistent file-naming and directory structure conventions can also provide users with some "intelligence" about where an object comes from. Some digital objects may be reused in places outside of the host institution and

intelligent file naming can assist users in knowing where the object originated. It can also help ensure that objects are not overwritten where they are used for aggregating purposes (for example, collections of thumbnail images).

It is **recommended** that CCO-funded projects ensure that objects can be identified with a persistent URL for the purposes of citation, cross-linking and integrated access. Objects retrieved from a database should not have dynamically-assigned identifiers (for example, session keys) embedded within the URL as this defeats persistence.

# **Types of Content and Format Standards**

The vast majority of CCO-funded projects will result in content that will be viewed by users on browsers over the Web. Since the Web browser is the intermediary between users and Web sites, it is important that all content and all files in which the content resides are built on standards supported by the various browsers available to users. As the Web has grown in complexity and evolved to provide developers with more powerful tools, an increasingly larger number of file formats has emerged. Some formats are non-proprietary and recognized as open standards in their categories, while other formats are proprietary and subject to commercial licensing or use agreements.

Proprietary formats require the use of proprietary software to create, distribute, manage and/or view or experience the content available in this type of format.

To encourage the development of content accessible to the greatest number of people, CCO **requires** the use of non-proprietary formats by fund recipients in the preparation of projects, or the implementation of a strategy to allow users to experience the content at no charge in cases where proprietary formats are used, i.e. using freely-available plug-ins or media players. Types of content formats addressed in the guidelines are:

- text
- still images
- moving images/video
- sound
- animation
- databases

### **Text**

Text-based content for the Web is stored either in a database or in files on a Web server, and delivered to a browser.

CCO **requires** that text-based content developed for delivery to a browser be displayed as HyperText Markup Language (HTML) or Extensible HyperText Markup Language (XHTML). The latest version recommended by W3C (currently HTML 4.01) or the latest version of XHTML (currently 1.0) must be used. HTML and XML documents must be validated against a published DTD and/or using services such as those freely supplied by the W3C and other organizations. Sources from the W3C:

- HTML 4.01
- XHTML 1.0.

Text-based content can also be developed in a proprietary format for viewing or printing with the use of freely-available plug in software over the Internet. An example of this type of format is Adobe's PDF format, which requires the use of the Adobe PDF viewer. Content prepared in such formats **must** also be made available in an alternate format, such as HTML, that is accessible to individuals with disabilities.

While all text-based content must be displayed as HTML or XHTML as described above, such content can also be delivered in a second format such as RTF, ASCII or delimited text files. Content produced in such formats is acceptable if the files are intended for download, storage or manipulation by users outside of the browser environment and if they are not meant to be a substitute to creating content in HTML or XHTML.

To promote the long-term viability of text-based content, CCO **recommends** that fund recipients create and manage content in a structured format suitable for delivery as HTML files. In most cases storing text-based content as HTML, XHTML, XML or ASCII text will be the most appropriate option. This will reduce the dependency on any content creation or management software and on the server environment on which it is stored. This, in turn, will extend the lifespan of the content.

Text-based content can also be developed and managed in a database or content management system. CCO recommends that fund recipients choose a system that will allow the content to be exported in a standardized format such as a delimited text format. This will ensure that the content managed in such environments is not completely dependent on a single application or platform and, at a minimum, that it can be migrated to new environments with greater ease.

**Please note:** The requirements listed above do not apply to text found within still images, moving images or animation files.

# Still Images

The development of the Mosaic browser and server in 1994 made it possible to incorporate still images, or graphics, into Web pages. This feature has arguably contributed more than any other to the growth in the Web's early

popularity. Today, graphics are ubiquitous on the Web but are nonetheless subject to standards, as they can exist in a variety of formats:

CCO requires that fund recipients use images in GIF or PNG formats in the case of line-drawn graphics or in JPEG format in the case of photographs when displaying them on their Web sites.

In the case of projects involving the digitization or creation of photographs or visual art, or the original creation of digital images leading to the creation of collections of images, images must be initially created and stored using the TIFF or PNG formats, which are uncompressed formats. These formats are suitable for the initial capture of the images, whether this is the result of a scanning process or of a digital creation process. More importantly, it is most suitable for preserving and archiving content for future use.

TIFF or PNG formatted images must be stored in an environment such that fund recipients can access them at a future date. These files must therefore be stored on a server (subject to regular backups) or on CDs.

Depending on the project, fund recipients may provide images in a second format beyond those mentioned above for the purpose of allowing downloading of images.

CCO may grant exemptions to the above requirements in certain situations where the use of proprietary solutions is needed to meet project objectives. This could be the case, for example, where geographic maps are being digitized. In such cases, specialized solutions could be chosen to provide users with greater flexibility in viewing the digitized objects. Fund recipients must provide a justification for the use of such technologies in the context of their project objectives. Fund recipients must allow the content to be viewed or experienced at no charge, e.g. through the use of a freely-available plug-in or media player.

# Moving Images / Video

As issues surrounding bandwidth, access to multimedia computers and tools to create digitized video have been resolved, more and more Web site producers are integrating video into their projects. Online video files require the use of specialized players in order for users to view them.

Video and moving images files **must** be prepared in a format that can be played by a freely available player such as Apple's Quick Time Player, Microsoft's Media Player, Macromedia Flash Player and Real's RealOne Player. Files can be saved in formats such as Quick Time, Real Media, RAM, AVI, Windows Media. SMIL and MPEG file formats.

To promote accessibility of the content, fund recipients are required to provide alternate, text-based summaries of video files that allow any user to understand the essence of individual clips. Video files can be developed for delivery as streamed video or as files to download prior to viewing.

If video files are prepared for delivery in a high-bandwidth environment, an alternate low-bandwidth version **must** also be prepared and provided to users.

Some streaming systems allow producers to prepare a single video file that can be played at various streaming speeds that correspond to multiple Internet access speeds. In cases where such systems are used (examples include Real's SureStream and MS Windows Intelligent Stream), a single version of a video file is sufficient.

Where codecs are used to produce digital video files in order to compress the content, fund recipients **must** ensure that they are included in a platform (such as the Apple, Real or Microsoft platforms) or freely-available for installation by users. A link to codecs must be provided for users who need to download and install them.

# Sound / Audio

As with video, sound and audio files have gained in popularity on the Internet in recent years. Sound files require the use of players for users to hear the content they include.

Sound files **must** be prepared in a format that can be read by at least one of the freely-available players and can include RM, WAV, AU, MIDI, FLV and MP3 file formats.

To promote accessibility of the content, fund recipients **are required to** provide alternate, text-based summaries of audio files that allow any user to understand the essence of individual clips. Sound files can be developed for delivery as streamed audio or as files to download prior to hearing.

If sound and audio files are prepared for delivery in a high-bandwidth environment, an alternate low-bandwidth version **must** also be prepared and provided to users.

Some streaming systems allow producers to prepare a single audio file than can be played at various streaming speeds that correspond to multiple Internet access speeds. In cases where such systems are used (examples include Real's SureStream and MS Windows Intelligent Stream), a single version of an audio file is sufficient.

Where codecs are used to produce the audio files to compress the content, fund recipients must ensure that they are implicit to a platform (such as the Apple, Real or Microsoft platforms) or freely-available for installation by users. A link to codecs must be provided for users who need to download and install them

#### Animation

Collaborative work in standards bodies, such as the W3C, as well as industry organizations regarding animation is such that the development of animation currently involves the use of both open standards as well as proprietary components.

When creating animation, fund recipients are **required** to develop the animated content in a format that can be played with the use of plug-in software freely-available to users.

A link to the software, for those users who need to download and install the software, must be provided.

To promote accessibility of the content, fund recipients are **required** to provide alternate, text-based summaries of animation files that allow any user to understand the essence of individual animation files.

It is recommended that animation be created on a platform based as much as possible on open standards such as the W3C's Scalable Vector Graphics 1.1 specification, SMIL or MPEG 4 standard.

#### **Databases**

Many Web sites, particularly complex or large-scale sites, make use of databases to store content. Users therefore never interact directly with the database but rather do so through the browser, which will show the results of a database query or allow the user to accomplish certain functions via a form.

The database standards and requirements below are aimed at ensuring interoperability and preservation of data.

Fund recipients **are required to** use a database that supports open standards such as SQL and XML. The database solution **must** allow fund recipients to import and export the data into a range of commonly-used formats that are independent of any particular platform rather than dependent on a proprietary one.

Fund recipients **are required to** document their database designs and structures. Documentation about the design, the rationale behind it and decisions for normalizations, etc., will serve several purposes. These include facilitating possible migrations, data recovery and preservation; not to mention allowing others to better understand the database itself in cases of future maintenance and software updates.

Fund recipients building databases to store metadata are **encouraged** to follow the Open Archives Initiative Protocol for Metadata Harvesting. This will allow access to data by harvesters such as those of cultural information gateways and metadata repositories.

Source: www.openarchives.org/

# **Markup and Scripting Languages**

# **Markup Languages**

The universal language on which Web sites are built and understood by computers accessing the World Wide Web is HyperText Markup Language (HTML). As the W2C puts it, HTML is the "lingua franca" for publishing hypertext on the Web,

The fundamental purpose of HTML is to structure text and other objects integrated into Web pages such as graphics and video. While many developers use HTML to define presentational characteristics of their pages, style sheets have now emerged as the preferred method of describing the layout of a Web page. The following are requirements and recommendations regarding the use of HTML and style sheets.

As mentioned in the "Text" section above, fund recipients **are required to** develop content for delivery to a browser in HTML or XHTML formats as recommended by the W3C.

Fund recipients are **encouraged** to choose tools and technologies that produce HTML and Web pages that will be properly displayed on multiple browsers. CCO encourages fund recipients to incorporate the principles of Web site interoperability across browsers and platforms into their site designs.

CCO strongly **encourages** fund recipients to develop Web pages that separate the overall structure from presentation features, using HTML to determine structure of the pages and Cascading Style Sheets (CSS) to determine the visual presentation of content elements. Experience has shown that separating the structure of a document from its presentational aspects reduces the cost of serving a wide range of platforms, media, etc., and facilitates document revisions.

Fund recipients should use Cascading Style Sheets, level 1 when developing content in HTML to determine the presentation and layout characteristics of their Web pages.

Fund recipients should validate both HTML and CSS with the assistance of validators before publishing content to their public Web sites. The W3C provides access to an <u>online CSS validator</u> and to an <u>online HTML validator</u>.

# Client-side Scripting

Scripts are often incorporated into Web pages for a variety of purposes, including increasing the interactive quality of a page and extending the capabilities of the markup language. Client-side scripts depend on users' browsers to interpret them to accomplish their designated tasks. For example, a script could be created to alternate between two graphics when the user's cursor passes over a particular graphic with his/her mouse. This effect depends on the user's browser interpreting the script to switch between the two graphics when the mouse is "over" a specific graphic.

The most broadly used of the scripting languages are JavaScript, originally developed by Netscape, and JScript, developed by Microsoft. Shortly after the appearance of Internet scripting languages, the Switzerland-based standards organization, the European Computer Manufacturers Association (ECMA) proposed a standard for scripting languages known as ECMAScript. Both Netscape and Microsoft have developed new versions of their scripting languages that comply with this standard.

CCO **requires** that fund recipients developing Web projects that include client-side scripts ensure that scripts are compliant with <u>ECMAScript</u>, <u>version 3</u>, also known as ECMA-262.

CCO **recommends** that fund recipients develop client-side scripts using either JavaScript version 1.5 or JScript version 5.5, which most closely comply with ECMAScript.

Fund recipients **are required to** test pages on which client-side scripts are found using the last three versions of each major browser. This will ensure the largest number of users can view the pages correctly.

Fund recipients should take into account the possibility that users will disable client-side scripts on their browsers. Key features of a site should function when scripting is disabled on a browser.

#### **METADATA**

# **CCO Metadata Requirements**

One of CCO's objectives is to facilitate the discovery and increase the visibility of Canadian cultural content on the Internet. That is why, for projects funded by CCO, metadata is required. Metadata, or "data about data", is defined as structured descriptions of objects in real or online environments. Metadata, like a library catalogue, connects users to the information they want to find and use. In the online world, applying metadata can, among other things, help manage content, improve site navigation and manage rights associated with content.

We require the application of six metadata elements for all CCO-funded projects. Other metadata elements can be added to projects but that decision is at the discretion of individual organizations.

The application of a mandatory set of six metadata elements will help to ensure that sites funded by CCO can be found by Canadians and others interested in Canadian culture. Cultural gateway sites such as Culture.ca will be able to take advantage of the metadata to help users find exactly what they are looking for and thus, bring Canadian cultural content to broader audiences

Appendix "A" of this document provides an overview of metadata and what it can help you accomplish.

# Application of the CCO Metadata Element Se

# Common Metadata Element Set: Mandatory Elements

Fund recipients are required to apply the following six mandatory elements to describe their online resources:

- Title
- Creator
- Subject
- Date Created
- Language (where applicable)
- Identifier

### Common Metadata Element Set: Recommended Elements

CCO also recommends (but does not require) that fund recipients apply an additional nine elements based on their relevance to each recipient's project. **These optional elements are**:

- Description
- Publisher
- Contributor
- Type
- Format
- Source
- Relation
- Coverage
- Rights

Please read the accompanying document entitled CCO Metadata Application Guidelines for detailed information, guidance and best practices for each element listed above.

These nine recommended elements, together with the six mandatory elements noted above, comprise a core element set based on the internationally-recognized Dublin Core Metadata Initiative element set, adopted in 2003 as an International Standards Organization (ISO) standard.

CCO also recommends that fund recipients consider additional element sets if their project falls under one of the following four types of cultural resources:

- learning resources;
- audio-visual resources;
- collective resources; and
- resources supporting rights management.

The application of these sets by CCO fund recipients is optional. The list of elements for each of the four sets can be found in the CCO Metadata Application Guidelines. It also provides detailed information, guidance and best practices on each element.

Fund recipients may also apply additional metadata elements not listed in any of the elements sets provided by CCO. It is strongly recommended that additional elements be selected from existing international metadata standards. This will provide projects with greater long-term flexibility and a solid foundation for interoperability.

If you are using a metadata element set developed specifically for your organization, CCO requires that the six mandatory elements of the CCO comment element set be present in your metadata profile and that you demonstrate this adherence.

# **Identifying the Appropriate Objects to Tag**

As important as identifying the purpose and actual elements to use is the question of what online content should be described within a Web site. Is the insertion of metadata tags on the main page of a site sufficient? Or, should tags be inserted on the first page of each main section? Should individual items, such as images, be tagged?

Since each Web site is unique, each will need to be evaluated individually to determine the correct level of depth. To determine this, CCO recommends that the following principles be applied to CCO-funded projects:

The resources tagged should be resources for which there is sufficient context and meaning and are also worth listing in a search engine. A navigation button such as "Top of Page" would likely not be worth tagging but a digitized photo that is part of a collection would be worth tagging and thus made available as an individual object.

If you are digitizing a collection, each item in it should be tagged individually.

Apply metadata to resources in which users will likely be interested.

Keep in mind that the more resources that are tagged, the greater the visibility your work will have.

# **Metadata and Format**

Metadata can be stored and maintained within the resource itself (embedded metadata) or it can be stored and maintained independently of the resource (stand-alone metadata). For example, it is possible to store some metadata about a digitized image within a header that becomes part of the image file during the digitization process. Alternatively, metadata can be stored in a database and linked to the digital resource.

In cases where it is critical that metadata and content coexist, CCO recommends that the metadata be embedded.

In cases where metadata is stored separately, the metadata **must** be accessible to data harvesting software. This will ensure that online resources can be indexed by other search or gateway sites with the use of metadata.

# **Expressing Metadata**

Each piece of metadata **must** be expressed in a standardized way to be read, searched, and exchanged by computer systems.

Metadata can be expressed in HTML (Hypertext Markup Language) or XML (eXtensible Markup Language). Simple metadata, such as unqualified Dublin Core, can easily be expressed in HTML. More complex metadata, such as qualified Dublin Core, can be expressed in HTML, but with limitations. XML has been used more successfully for highly-structured, complex metadata.

# **Rules for Individual Elements**

Each element is subject to its own set of rules that indicate how its content and values should be expressed.

CCO **recommends** that CCO-fund recipients review and apply the rules outlined for the six mandatory elements (and any other elements recipients opt to use as well) in the CCO Metadata Application Guidelines document. It provides detailed information, guidance and best practices for each element.

Where possible, CCO has applied ISO standards to ensure interoperability, that is, to ensure that CCO-funded sites express metadata values in the same way as other sites on the Web.

#### **Staff Training**

CCO-fund recipients should keep in mind that the quality of the metadata they produce will directly affect how successfully their content will be found. The higher the quality of the metadata, the more likely their online resources will be discovered by users. It is therefore important that individuals responsible for metadata creation be properly trained to carry out this task.

CCO recommends that fund recipients ensure that individuals responsible for the creation of metadata be trained to carry out this task.

In addition, organizations should consider the use of subject specialists or professional indexers and cataloguers.

#### **Steps in Developing Metadata**

Organizations should define their metadata requirements early in the project planning cycle. Metadata creation should be integrated into the digital production and development cycle rather than be left to the end of the process. This will allow organizations to establish requirements and plan for appropriate resources and training at the beginning of project development.

#### PROJECT MANAGEMENT PRACTICES

# **Production Equipment and Facilities**

Fund recipients are encouraged to use industry standards and appropriate equipment and techniques for the capture and storage of digital resources. It is important to consider whether a resource should be digitized in-house or whether this work should be out-sourced. Several factors go ern this decision-making process, including cost; viability of movement of originals, skill-set available in house etc.

# **Preservation of Digital Resources**

CCO recognizes the many difficulties inherent in the long-term preservation of digital information. CCO encourages funding recipients who are concerned about the long-term preservation of digital materials to contact CCO directly for assistance and / or to arrange for deposits of collections material with one of Canada's federal cultural institutions as stored copies, to allow for future authentication, backup and archival activities.

# **Backups and Disaster Recovery Planning**

CCO funding recipients are required to establish a disaster recovery plan as well as data backup procedures. These procedures should include a process to regularly backup data and store the backup medium (tapes, data CDs, etc.) in an area other than the site-hosting location.

# APPENDIX A: METADATA PRIMER

# What is Metadata?

Metadata is information about an object or a resource that is organized in a structured fashion. The best analogy for understanding the nature of metadata is a typical library catalogue. In a catalogue, every book is described by a record that includes the author, title, subject, date of publication, etc. All catalogue records are structured in the same way and with the same fields of information. Records give users enough information to figure out which resources, books and journals (from among the hundreds of thousands in the library) will meet their needs, and where the resources are located in the library building. Moreover, the catalogue provides several paths to information by allowing users to search for resources with similar characteristics, such as all books by one author or on one subject. In the digital realm, metadata, like a library catalogue, provides some basic information about digital resources.

Users can search metadata records to find digital resources much like they would search a library catalogue to find a particular book. Without structured metadata, users are left sifting through mounds of irrelevant information to find what they are looking for.

The application of metadata is the strategy chosen by CCO and many digital content experts to produce structured information that makes it easier for users to locate the digital resources they are looking for.

### **An Example of Metadata**

If, for example, a high school student were preparing a presentation on the history of women in hockey in Canada, she would probably include photos of early women's hockey teams as part of a presentation to her class. Her teacher suggests she look at the Library and Archives Canada's Web site as a possible source of photos.

The site includes a section called <u>Images Canada</u>, an online search tool that provides access to thousands of digitized photos from several Canadian cultural institutions. Using the Images Canada search function, the student types in "women, hockey" as her keywords. The search returns nine records, each of which includes a link to a digitized version of a photo.

Each photo is accompanied by detailed information, which allows the student to properly describe the photos she chooses for her presentation. One of the photos is accompanied by the following details:

Title: Women's hockey team, University of Alberta, Edmonton, Alberta.

Image: <u>View full size image</u> Source: Glenbow Archives

Subject: Edmonton, Alberta - Sports | Edmonton, Alberta - Personalities | Edmonton, Alberta - Newspapers | Hockey Description: Back row L-R: H. Moore; M. Russel; R. Wood; J. Hennesey; H. Barclay; W. Matthews, coach. Front row L-R: D. Whiteman, manager; L. Macgregor; T. McQueen, captain. From "Evergreen and Gold" page 83.

Type: Image
Format: Jpeg
Language: English
Unique ID: NA-4030-3
Coverage: Canada - Alberta

Rights: Copyright

This information represents metadata. Each of the nine records includes similar information. Metadata allows the student to find the photo because both "women" and "hockey" are found in the title of the photo. It also provides details such as the year the photo was taken, where the hockey team came from and a description of who is in the photo. It also includes important information on the use of the photo through its description of copyright. This information assures the student that she has permission to use the photo for her school project.

In this example, metadata serves several purposes: 1) it allows the student to find photos for her school project; 2) it provides detailed information about each photo that she can use in her presentation; and 3) it provides the cultural institution, namely the Glenbow Archives, with the means of controlling how the photo is used as described in its copyright policy.

### **Metadata Structure**

As mentioned earlier, metadata expresses information about resources, structured into categories such as title, type and source. These categories of information about an object are called metadata **elements**. In our example above, twelve elements are listed. A grouping of elements identified as an appropriate assortment of characteristics is called an **element set**. In the case of the Images Canada example, the element set consists of: 1) title; 2) image; 3) source; 4) subject; 5) description; 6) date; 7) type; 8) format; 9) language; 10) unique ID; 11) coverage; and 12) rights. There are advantages to organizations agreeing to use the same element set. In the case of Images Canada, the catalogue of photos is actually populated by the individual collections of several institutions. The Images Canada collection exists in large part because the partnering institutions agreed to use the same element set to describe their photos. The seamless sharing of information in this way is what is meant by interoperability and is possible because of the wide acceptance of certain element sets.

The Images Canada metadata element set is based on an international standard: the Dublin Core Metadata Initiative (DCMI) element set. The Imitative is a voluntary group that brings together individuals and organizations interested in creating a basic set of metadata elements applicable in any content on the Internet. The complete DCMI standard includes 15 elements.

Another element set that has emerged in recent years is the one created by the Institute of Electrical and Electronic Engineers (IEEE) for use in the context of e-learning resources. The Learning Object Metadata Standard that this organization's members have developed is composed of 76 elements.

Several other element sets have been developed by international standards organizations to describe various types of digital resources. Each set includes specialized elements that describe particular characteristics of digital resources.

Beyond element sets, other issues include the format in which an element's value is displayed (e.g., do we write a date as "January 1, 2006", "01-01-06" or "1/1/06", etc.) as well as the syntax used to write metadata (is it included in the HTML code of a Web page or is it stored in a database or even in XML files?). Standards in each area provide direction to address such problems.

# **Uses of Metadata**

Metadata has no use on its own and is generally meant to be read and interpreted by a computer. The results of the computer interaction are then made available to the user and take a form that is more easily understood. In other words, it requires a software application, such as a content management system - a metadata-enabled search engine or catalogue software - to make it usable and useful.

There are many examples of organizations using metadata to enhance the functionality and value of their Web sites on the Internet. There are also benefits to metadata that go beyond the individual site, such as providing value to sites that aggregate information. These are the search engines, directories, gateways and specialized portals that connect users to the information they seek.

#### **Searching for Content**

Simply making content available on the Internet does not guarantee that users will find the material in which they are interested. Metadata can provide different ways for users to look for information on a Web site.

There is momentum building in favour of metadata as one of the better tools to help sort through the mass of information published everyday on the Web. In the competitive and fast-paced world of search engines, techniques that harvest metadata and increase the efficiency of searches will undoubtedly surface and provide greater advantage to some of the existing engines.

In the immediate, metadata is perhaps of greatest use in directories, gateways and specialized portals. Sites such as Culture.ca use metadata extensively to assist users in locating Canadian cultural resources. More widespread application of metadata will only increase the gateway's efficiency in giving content greater visibility.

An example of a specialized portal using metadata is the <u>Movie Review Query Engine</u>, which provides links to reviews of films and includes data such as the publication in which the review appears, the language of the review, the film's rating, location on the Web, etc.

Developing metadata today ensures you will be better positioned in tomorrow's Internet.

#### **Collaboration and sharing**

Canada's online cultural resources are held in repositories, databases and web servers across the country. Well structured metadata records make it possible for users to search across multiple collections using online gateways and repositories, establish relationships, and create virtual collections from materials that are distributed across several repositories. The <a href="Images Canada collection of photos">Images Canada collection of photos</a> we used in our earlier example clearly demonstrates the advantages of collaboration.

#### Other Uses by Organizations

Metadata can be applied to great effect within a Web site to meet the needs of an organization. It can, for instance, help support a broad range of functions used by visitors to a site. Some of these functions are as follows:

- Navigation: Metadata can be used to create navigation menus and help users to navigate a site or a collection.
- Support for life cycle of content and copyright: Metadata can be used to document the layers of rights and reproduction information that exast for original resources and their multiple versions.
- Other uses within an organization can include:
  - the management of content versions of documents (for example, where low and high-resolution versions of the same works of art are created);
  - o data stability (documenting technology requirements for some resources); and
  - o protecting investments (metadata can add to the value of resources by increasing their usefulness).