Minister of Canadian Heritage



Ministre du Patrimoine canadien

Ottawa, Canada K1A 0M5

MAR 2 9 2018

The Honourable Kevin Sorenson, P.C., M.P. Chair
Standing Committee on Public Accounts
House of Commons
Ottawa, Ontario
K1A 0A6

Dear Mr. Sorenson:

Pursuant to Section 109 of the Standing Orders of the House of Commons, I am pleased to provide the Government of Canada's response to the Fortieth Report of the Standing Committee on Public Accounts, entitled Special Examination Report – Canadian Museum of Nature, of the Spring 2017 Reports of the Auditor General of Canada, tabled in the House of Commons on December 12, 2017.

I appreciate and value the important work undertaken by the Committee in conducting a review of the special examination of the Auditor General of Canada, which examined whether the systems and practices selected for examination at the Canadian Museum of Nature provide the Crown corporation with reasonable assurance that its assets are safeguarded and controlled, its resources are managed economically and efficiently, and its operations are carried out effectively.

.../2



The Government is pleased to report back to the Committee on its six recommendations. To this end, the measures annexed to this letter detail the specific activities that the Canadian Museum of Nature has undertaken or will undertake in response to the findings identified by the Committee. Furthermore, the Museum has committed to providing any additional information requested within the time frame identified.

I would like to take the opportunity to thank you and the members of the Standing Committee for your important work.

Please accept my best wishes.

Sincerely,

The Honourable Mélanie Joly, P.C, M.P.

GOVERNMENT RESPONSE

Public Accounts Committee Recommendations and Canadian Museum of Nature Responses

Recommendation 1: On Board of Trustees Governance

That, by 31 May 2018 (a first report), and again between 1 January and 31 May 2019 (a second report), the Canadian Museum of Nature report to the House of Commons Standing Committee on Public Accounts the names of Board of Trustees members, their terms, and the date each member's term expires.

Response from the Canadian Museum of Nature

The Museum is pleased to provide, in advance of the May 31 2018 deadline, a list of current members of the Board of Trustees. The Museum will provide an updated list to the Standing Committee between January 1 and May 31, 2019. (Please see attached list of current members of the Board of Trustees)

Recommendation 2: On information technology

That, by 31 May 2018, the Canadian Museum of Nature present the House of Commons Standing Committee on Public Accounts with a report on the award of the Information Technology Strategic Plan request for proposal and the results of tests carried out in 2017–2018 on information technology operations, particularly as regards its Business Continuity Plan and its IT Disaster Recovery Plan.

Response from the Canadian Museum of Nature

In response to the request to provide, by May 31, 2018, a report on the award and the results of the tests on its IT operations, the Museum is pleased to inform the Standing Committee that the request for proposal was completed early 2017 and resulted in a change in outsourced IT services to Nova Networks. The Museum completed the test of the Business Continuity Plan (BCP) and the IT BCP Disaster Recovery Plan (DRP) on October 23rd. In conclusion, the test results demonstrate that the Museum's BCP and DRP work. The resulting contract with Nova also call for annual tests of the IT BCP/DRP, ensuring that the Museum's IT systems are well protected today, and into the future.

Recommendation 3: On funding for collections management

That, by 31 May 2018, the Canadian Museum of Nature present the House of Commons Standing Committee on Public Accounts with a multi-year plan to attract additional funding from every level of government, the general public, private corporations and academic sources, in order to digitize its entire collection and make it accessible to all Canadians.

Response from the Canadian Museum of Nature

As requested by the Standing Committee, the Museum is pleased to provide its revised Digitization Priority Plan. It should be noted that digitizing an entire collection is an aspiration of many natural history museums around the world; however it is not an immediate priority for fundraising, given the enormity of the cost relative to other more pressing needs. The Museum has identified its collection digitization priority order, based on scientific need and public interest. Digitizing the data (without image) is the first step. Over the next five years, the Museum will seek cash or in kind support from multiple sources. This is a reasonable and responsible objective from a fundraising perspective and a human capacity perspective. To date we have raised \$1 million to digitize the Arctic collection. (Please see attached Revised Digitization

| | Priority Plan) | | | |
|--|---|--|--|--|
| Recommendation 4: On Conservation Priorities | | | | |
| That, by 31 May 2018, the Canadian Museum of Nature needs to present the House of Commons Standing Committee on Public Accounts with its prioritization plan for addressing conservation collection. | | | | |
| Response from the Canadian Museum of Nature | In response to the request to provide, by May 31, 2018, the Museum's prioritization plan for addressing conservation collection, the Museum is pleased to provide the Standing Committee with its Collection Conservation Plan which, consistent with its conservation policy, will guide the Museum's focus in each annual Corporate Plan, depending on funding and human capacity. (Please see attached Collection Conservation Plan) | | | |

Recommendation 5: On project management

That, by 31 May 2018, the Canadian Museum of Nature present the House of Commons Standing Committee on Public Accounts with a detailed plan outlining what changes have been made or will be made to the project management process for public offer activities and its procedures for travelling exhibitions and Web content.

Response from the Canadian Museum of Nature

In advance of the May 31, 2018 deadline, the Museum is pleased to provide information regarding its plan regarding a) its public offer activities, b) its procedures for travelling exhibitions, and c) its Web content.

- a) The project management approach for public offer was refreshed in 2016 and has been in use since that time. The form of documentation of project scoping and business case approval was the issue raised by the special examination and is now in place and being applied. Since the fall of 2016, we have used a standard template as a guide for project scoping and business case development. (Please see attached Public Offer Plan)
- b) For travelling exhibits, following the special examination period a central digital folder was made accessible to two levels of supervisors so that schedules, contracts, logistical plans and refresh cycles are available in the event of long term absence of the travelling exhibits coordinator. This long term absence created a gap in materials available to the special examination team. (Please see attached Travelling Exhibits Procedures)
- c) The procedures for receiving and prioritizing and posting web content remain in place and could be amended if the museum changes its content management system. Digital content management is a fluid and changing process given that tools and platforms change constantly and so our approach to web content management will remain fluid, as per industry practice. (Please see attached Web Content Management Plan)

Recommendation 6: On the approval of new projects

That, by 31 May 2018, the Canadian Museum of Nature present the House of Commons Standing Committee on Public Accounts with a detailed plan outlining the new approach for documenting and approving project initiations.

Response from the Canadian Museum of Nature

In advance of the May 31, 2018 deadline, the Museum is pleased to inform the Standing Committee that it has been using an amended form to document project initiation approval at the executive level. This new form was created to meet the needs of the OAG in future audits and will replace the forms previously used for this purpose. (Please see attached Project Initiation Form)

Response to Recommendation 1 List of Current Board of Trustees of the Canadian Museum of Nature

Chairperson (Part-time)

Appointed for a period not exceeding four years; eligible for two consecutive terms.

Judith Anne LaRocque

Hawkesbury, Ontario

(14-Dec-2017 to 13-Dec-2020)

Vice-Chairperson (Part-time)

Appointed for a period not exceeding four years; eligible for two consecutive terms.

Nicholas Offord

Toronto, Ontario

(30-Sep-2010 to 10-Dec-2018)

Members (Part-time)

Appointed for a period not exceeding four years; eligible for three consecutive terms.

Ronald Calderoni

Boucherville, Quebec

(05-Apr-2012 to 20-Feb-2022)

Douglas Feasby

Carp, Ontario

(06-Mar-2014 to 05-Mar-2018)

Nadine Girault

Montréal, Quebec

(01-Mar-2018 to 28-Feb 2022)

Susan Jane Knott

Vancouver, British Columbia

(10-Apr-2014 to 09-Apr-2020)

Reg Manhas

Texas, USA

(01-Mar-2012 to 29-Feb-2016)

Alice McCarron

Halifax, Nova Scotia

(21-Dec-2010 to 20-Dec-2013)

Erin Rankin Nash

London, Ontario

(24-Feb-2008 to 29-Feb-2016)

Byron Neiles

Calgary, Alberta

(20-Oct-2011 to 19-Oct-2015)

If a trustee is not appointed to take office on the expiration of the term of an incumbent trustee, the incumbent trustee continues in office until a successor is appointed.

To note: On February 21, 2018, the Governor in Council approved the following appointments made by the Minister of Canadian Heritage:

- Linda Nowlan (Vancouver, British Columbia) will replace Reg Manhas effective June 25,
 2018, for a term of three years
- Judith Pereira (Toronto, Ontario) will replace Erin Rankin Nash effective June 25, 2018, for a term of three years
- Christian Robin (Winnipeg, Manitoba) will replace Byron Neiles effective June 25, 2018 for a term of three years

Response to Recommendation 3 Canadian Museum of Nature Digitization of the National Collections Plan

Background

The collection of objects at the Canadian Museum of Nature (CMN) are mostly scientific specimens, the objects of study from a place and time, and therefore considered scientific data that is subject to further study and analysis for all time. Recording the information about those objects connects it to the studies that exist, provide context for further study and allow it to be found within the inventory of the other collection objects.

Other objects in the collection include books and documentation about the collection and related scientific disciplines, works of art (paintings and sculptures), and a wide variety of scientific imagery (illustrations, photographs on paper, diapositives, glass negatives).

Having information about each collection object in the most current format makes the objects most accessible. Efforts to move from analog to digital format is a major preoccupation of the CMN and all natural history institutions in Canada, and will be for some time to come. This is not unexpected, because the initial 150 years of recording was analog and in Canada we amassed collections of tens of millions of objects. The CMN has conducted a survey of leading institutions (n=17) for the past four-years and based on the 26-million specimen lots of just Canadian material (there are 44-million specimen lots in total), 30% of the data is available in digital format. The CMN has 41% of its 1.39 million specimen lots of Canadian content in digital format.

In 2010, the Council of Canadian Academies convened an Expert Panel on Biodiversity Science, an in-depth study on the status of taxonomic expertise, biodiversity information and access to it. They concluded that Canada's capacity is slipping based on international benchmarks and requires attention in all of these connected areas. The CMN has taken steps in each of these areas, according to available resources, some traditional, some opportunistic and others actively sought through a planned program of fundraising.

All of the collection inventory at the CMN should be represented in digital format and freely available. However, not all objects should be represented in the same fashion, based on their importance, scientifically or otherwise.

The following are the priorities from highest to lowest:

- Primary types: unique to the naming and description of a species, thousands of records, all data and images
- Secondary types: duplicate collections of the unique specimen, tens of thousands of records, all data and images
- Research priorities: the products of our working staff and associates, tens of thousands of records, all data, selected images according the previous two categories

- Outreach priorities: the digitization of selected items that are used for our program of outreach activities
- **Special projects:** this is opportunistic funding that is directed at a specific project, such as the Arctic
- Canadian specimens: hundreds of thousands of records, all data, some with images (botanicals)
- International specimens: hundreds of thousands of records, all data, select images
- Other specimens: hundreds of thousands of records, this is the backlog and can be in all categories, enter as much data as possible according to the above descriptions, minimal data entry is a metadata description for larger thematic groupings (for an geographic area, for a specific collecting event, for a specific year or other event)

Current Status of Action

- Regular acquisitions and data entry: ~10,000 specimens/year
- Directed backlog sorting and data entry: ~15,000 specimens/year
- **Scientific training program:** ~5,000 specimens/year
- Arctic specimen program: ~50,000 specimens/year

Mark Graham, Vice President, Research and Collections, 15 December 2017.

Response to Recommendation 4 Canadian Museum of Nature Collection Conservation Plan

Background

Managing the risk associated with the natural history collections at the CMN is an ongoing process. The CMN has a full-time, permanent Conservator and a staff of Collection Curators, Managers and Technicians, who all work on conserving the collections. The key challenge in this work is establishing priorities, because the diversity and volume of work is significant. The priorities are based on the risk of losing value from the collection.

In the past the CMN employed an expert who was a world leader in risk assessment for natural history collections; since his retirement he continues to provide risk assessments for museums around the world. In 2006 the CMN had a complete risk assessment for its collections that helped focus conservation work. A more focussed assessment is being considered to inform future work.

In the meantime, the collection and conservation staff members have compiled a list of work that needs to be done in each of the collections, prioritized it and are addressing it.

CMN Approach

The CMN Conservator is in the process of developing a Conservation Plan based on this Framework. This is being done in consultation with our Collections experts, other museum stakeholders, and outside authorities. The plan will provide a list of priorities ranked by risk category, and indicate our capacity to address the list. It will also outline our process for accessing risk. These risks range from the scanning of historical documents to limit the physical handling of them (low priority), to the maintenance of exhibit specimens (medium priority), to dealing with issues around labelling (e. g. for cryogenic storage of plant materials – high priority) and the best material to use for microscope slide mounts (high priority).

One of the more systematic conservation challenges, because it exists in each of the collections, are backlogged specimens. Because there is little or no records for these specimens, they are not accessible and often unmonitored. This is being addressed as one of our highest priorities.

CMN Actions

Earlier in 2017 the museum documented its backlog of specimens within each of its diverse collections. There are efforts being applied to identifying, conserving and documenting this list of backlog. There is additional applied to documenting our Arctic collections, and some of that work will address backlog in the botanical collections.

CMN Investments

The museum relies on experts to make sure its specimens are collected, researched and correctly documented. It is known that those experts are in shorter and shorter supply and that museums are an essential training ground for them (see the CCA report from 2010¹).

The CMN has mounted a Scientific Training Program that ensures new experts are being trained at all levels, from undergraduate to post-doctorate, that young experts and other scientists have access to the collection and that our young staff members receive continual training.

Dr. Mark Graham, VP Research & Collections, December 21, 2017

¹ http://www.scienceadvice.ca/en/assessments/completed/biodiversity.aspx

Response to Recommendation 5 Canadian Museum of Nature Public Offer - Project Scope Document

This document defines the scope of the project/program/activity/web initiative etc. and acts as the guideline for how the project will be run.

| Document creation Date: | |
|--|---|
| Project Working title: | |
| Description: Should include the gap this will fill or the program/activity/web initiative/exhibit | oblem it will solve and a brief description of the |
| appropriate – revenue targets, attendance, | chibit will be seen to be successful (including if audience segment, size, link to ls to the program/activity/web initiative/exhibit) |
| Project Deliverables: | List the items that this project will deliver. |
| Not in the Project Scope: | List items that are out of scope for this project |
| Questions to be resolved by team: later date. | List any outstanding items to be addressed at a |
| Specific or Unusual Project Requirements : requirements. | List any unique technical or environmental |
| Key dates: (Start & end dates, any other key dates to e successful) | nsure the program/activity/web initiative/exhibit is |
| Budget: \$ Project budget as approved | |
| Project team: Not all program/activity/web initiative/exh | ibits require all of these groups to be represented. |
| Internal Sponsor: Project manager/Project Lead: Research & Collections: | |

<u>EE</u>:

| Web: |
|-----------|
| Exhibits: |
| Programs: |

Communications:

Advancement:

Corporate Services (IT/HR/Facilities):

Project Review Team: This would be established at 3PC (Public Programming Planning Committee) or SME (Sustainable Museum Enterprise)

Response to Recommendation 5 Canadian Museum of Nature Travelling exhibits procedures

Roles and responsibilities General

The Canadian Museum of Nature will:

- provide all-risk insurance coverage for the Exhibition while it is in transit and while it is located at the Borrower's facility;
- make all arrangements for the transportation of the Exhibition;
- schedule shipping with adequate time for unpacking, installation, dismantling and repacking the Exhibition, (a minimum of one week in advance of the opening date at the Borrower's venue);
- provide one technician for set-up and takedown of the Exhibition and Mastodon;
- provide collateral materials in both official languages to facilitate promotion of the Exhibition;
- supply online exit surveys (self-administered style).

The Borrower will:

- pay a Circulation Fee of \$ ______ (plus applicable taxes, plus fuel surcharge) including prorated transportation fee, insurance and expenses for one technician for exhibition set-up and takedown.
- give CMN prior approval for any official reference to or use of logos for CMN, the Montreal Science Centre, the Royal Tyrrell Museum of Paleontology, and the Yukon Beringia Interpretive Centre.

For Environmental Requirements and Security on Borrower's Site

- take all reasonable precautions to protect the Exhibition;
- assume full responsibility for any loss or damage, including damage and/or loss attributable to theft, vandalism, or mishandling; to deterioration caused by extremes of heat, light, humidity, insects or fungus;
- keep Exhibition areas at a temperature of 21-24°C, and the relative humidity maintained at 50-55%;
- take all fire precautions according to local fire department regulations;
- provide continuous surveillance of the Exhibition during public hours and keep locked and in a secured location at all other times.

Procedures general

For Transportation and Handling

- receive the Exhibition when delivered and have it repacked and ready to ship so that
 adequate time is allowed for shipment to the following venue (maximum one week after
 official closing);
- use sufficient number (2-4) of persons to load and unload the Exhibition to ensure the safety of the objects and personnel;

- store the empty crates and packing materials in a clean, secure, climate controlled area
 where they will be protected from extremes in temperature and humidity, acts of
 vandalism, and/or other circumstances that could result in damage to the crates and
 packing materials. Crates must not be stored outside. Borrowers will be held responsible
 and accountable for any damage to and/or loss of the exhibition crates and packing
 materials caused by the Borrower;
- pay for all costs associated with installation.

For Exhibition Promotion

- provide the CMN with an overview of its exhibition marketing plan six weeks prior to the opening;
- advise the CMN of any exhibition or program sponsors prior to final sponsorship negotiations (excluding in-kind and media sponsors);
- use exclusively the communications templates provided by CMN or work with CMN to develop alternative options. Space has been allocated for the Borrower's logo and their partners;
- provide CMN with all promotional materials prior to production for final approval (pdf files for print material);
- provide the CMN with copies of press clippings and public announcements, installation photographs of the exhibition, and attendance figures, within two months of the exhibition's closing date.

For Partner Profile and Recognition

- apply partner recognition guidelines as outlined in Appendix A of this contract;
- install the entrance and credit panel supplied with the exhibition;
- a separate panel will be provided for installation of Venue partners' names and logos as local supporters;
- offer a sneak preview of the Ice Age Mammals travelling exhibition for the employees and partners of CMN, the Montreal Science Centre, the Royal Tyrrell Museum of Paleontology, and the Yukon Beringia Interpretive Centre;
- invite a representative from the Canadian Museum of Nature to speak at the official public opening, at no fee to the Borrower;
- include CMN spokesperson in opening scenario;
- provide CMN with scenario three weeks prior to opening;
- provide invitations to the opening event for the executives and board of CMN, the Montreal Science Centre, The Royal Tyrrell Museum of Paleontology, and the Yukon Beringia Interpretive Centre;
- provide approx. 30 invitations to CMN to the opening event (to be mailed by CMN);
- provide the CMN with 50 free passes to the exhibition for each of the Montreal Science Centre, the Royal Tyrrell Museum of Paleontology, and the Yukon Beringia Interpretive Centre (where entrance fees are charged).

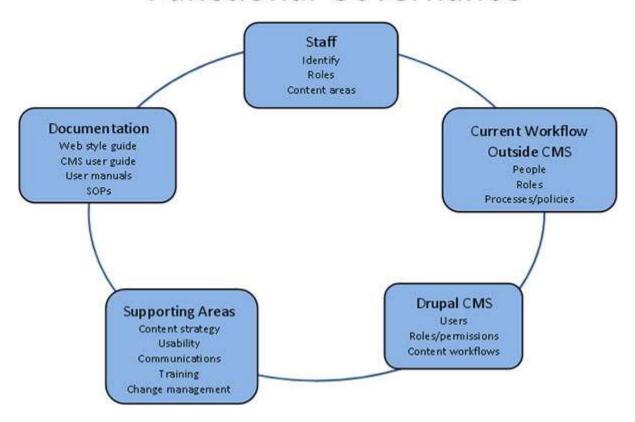
For Exhibition Evaluation

make available exit surveys to visiting public, supplied by the CMN, and forward the

completed surveys to CMN.

Response to Recommendation 5 Canadian Museum of Nature Web Content Management

Functional Governance



Web content management at CMN is tied to our need to host content on the nature.ca website that meets the information, learning, planning and searching needs of our diverse audiences.

Web content management is guided by the brand framework and guidelines.

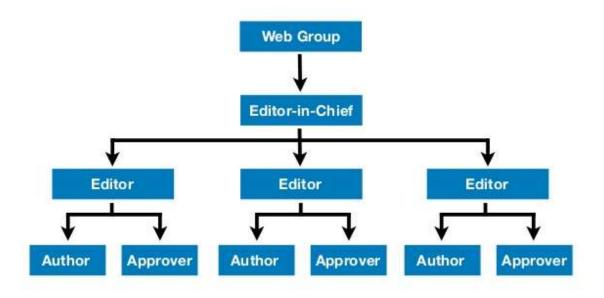
Web content management is guided by the strategic plan.

Content priorities and decisions are distributed to the six divisions led by the Executive Team driven by the business plan objectives for each division.

Content creation is distributed.

Content posting is mostly centralized, with some exceptions based on training and experience and time.

Content governance model



Content governance for each division is managed by the senior manager and the delegated authority for content creation, approval and posting or distribution to the web team for posting.

Web look and feel is driven by the web team guided by the branding framework and visual identity guidelines.

- Eg. CMN is about real, relevant, inspiring, surprising and emotional experiences.
- Eg. CMN is collaborative, creative, courageous, curious and colloquial.
- Eg. CMN is a national museum of international first rank known for excellence in arctic knowledge and species discovery. CMN is a courageous leader in nature inspiration, growing earned revenues to fund a sustainable and relevant future.

Sample Content Creation Workflow: Tasks



ePublish Media, Inc.

Content creation is done by the web team for EE and for each division by someone assigned to the task. Content creation training is distributed and dependent on experience and need.

- Eg. CEO office creates content for high level "about us" pages
- Eg. Director of Advancement creates content for high level advancement pages. Membership officer creates content for member, donor, patron pages.
- Eg. Marketing creates content for marketing brochure pages.
- Eg. Web team creates content for EE based on key messages provided within the division.
- Eg. Research and collections creates content for the research pages of the web site, posted by the web team.
- Eg. Finance creates the material for public disclosure, posted by the web team.

Response to Recommendation 6 Canadian Museum of Nature Project Initiation Approval Form

| SECTION A 1. General Information / Renseignements généraux | | | | | | |
|--|---------------------------------------|------------------|--------------|-----------------------------|----------------|-----------------------|
| Project Name: | | ABC | | | | |
| Project Sponsor(s): | Titre du projet : Project Sponsor(s): | | | | | |
| Promoteurs : | | ABC-IT | | | | |
| 2. Project Team / Équip | oe de proje | et | | | | |
| | Nar | me / Nom | Dept. | Phone / Tél | E-mail / Courr | iel |
| Vendor: Fournisseur : | | XYZ | XYZ - IT | 123-456-789 | xyz@sample.co | <u>om</u> |
| Stakeholders: Parties prenantes: | AB | C-Finance | ABC - Fin | 123-456-789 | abc-fin@samp | le.com |
| Project Lead: Chef de projet : | Joh | n Doe - IT | XYZ - IT | 123-456-789 | xyz-it@sample | .com |
| 3. Dates | | | | | | |
| Start date / Début du projet: | | January 1st 2018 | | I End date / Fin du projet: | | December 31st 2019 |
| 4. Project Scope / Éten | due du pro | ojet: | | | | |
| Project Description (Hi | gh level ov | verview) / Descr | iption du pr | ojet (survol des gra | ndes lignes): | |
| A brief description of the project / le projet en bref | | | | | | |
| Project Budget & Budg | et Code / | Budget du proje | t et code du | budget: | | |
| Responsibility Centre / | code budg | gétaire | | | | |
| Deliverables / Livrable | s: | | | | | |
| Description of deliverables / les livrables en bref | | | | | | |
| In-Scope / Portée: | | | | | | |
| | | | | | | |
| Metrics for success / Mesures de succès: | | | | | | |
| | | | | | | |
| 5. Communication Strategy / Stratégie de communication: | | | | | | |
| | | | | | | |

| SECTION B 6. Approvals / Approbations : | | | | | | |
|---|---|-------------|--|--------------|--|--|
| | Responsible / Responsable | | Signature | Date | | |
| Other | | | | | | |
| Other | | | | | | |
| Other | | | | | | |
| 15 k | | | | | | |
| 25 k | | | | | | |
| 50 k | | | | | | |
| 100 k | | | | | | |
| 500 k SS* | | | | | | |
| Full | | | | | | |
| | SECTION C 7. Contract & Procurement service approval / Approbation services des contrats et approvisionnement : | | | | | |
| | ation Method / Méthode d Implété par les services de | | to be completed by Contracts and Procurement . ats) | Services / à | | |
| | Competitve Method léthode compétitive | Description | | | | |
| | Request for Quotation (RFQ) Demande de prix (DDP) | | | | | |
| | Requests for Proposals (RFP) Demande de propositions (DP) | | | | | |
| | Invitation to Tender (ITT) Appel d'offres (AO) | | | | | |
| | Standing offer Offre permanente | | | | | |

| Non-competitive Method méthode non compétitive | | Justification | |
|--|--|-------------------------|-------|
| | Sole source (SS)* Source unique (Drop-down list; Liste déroulante) | | |
| | Single Source (SS)* Source unique (Drop-down list; Liste déroulante) | | |
| | Exception | Specify / Spécifiez: | |
| | Other /Autre | | |
| Head - Contracts and Procurement | | | |
| Signature: | | | Date: |