



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada



# **Request for Information Appendix A Summary Statement of Work**

**Web Content Management System  
for  
Environment and Climate Change Canada**

**Version 0.3**

**Last update: November 25, 2020**

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***This Summary Statement Of Work (SSOW) is a concise version of the anticipated Statement of Work (SoW).***

***A detailed version of the SOW will be provided during the solicitation stage of this procurement process.***

## **1 Purpose**

To secure and provide the development, training, hosting, , ongoing support, and maintenance of a new Web Content Management Solution (WCMS) which meets the needs of Environment and Climate Change Canada (ECCC).

### **1.1 Objective**

The immediate objective of this process is to replace ECCC's aging Web Content Management system (WCMS) with a modern, user-friendly system that supports and continues to serve the Department's intranet needs. The existing platform currently supports ECCC's intranet needs, ECCC's Government of Canada Workplace Charitable Campaign (GCWCC) intranet site, and the Impact Assessment Agency of Canada – IAAC (formerly the Canadian Environmental Assessment Agency) intranet site (Atrium). ECCC also requires that the Solution be expandable to support the needs of future ECCC CMS projects.

### **1.2 Background**

Environment and Climate Change Canada (ECCC)'s current intranet web content management system was designed 15 years ago to meet the needs of the Department and has recently reached the limits of its technological effectiveness. The technology used to develop and maintain the current intranet is no longer supported and is not compatible with the ongoing server operating system upgrades resulting from Treasury Board of Canada IT Policy.

IAAC also falls under the responsibility of the Minister of the Environment. Consequently the IAAC intranet site (Atrium) is hosted on ECCC intranet web platform. Additionally, the ECCC champions for the Government of Canada Workplace Charitable Campaign (GCWCC) have their site also hosted on ECCC intranet servers.

The ECCC intranet site is by far the largest of the 3 intranet sites and currently hosts 3,420 web pages. In 2017, there were 1,045,499 visits to the site with an average of 2,864 daily users. That number of visits had grown from 919,603 in 2015 to 995,186 in 2016. The content is posted by 47 web editors, 19 publishers and 7 administrators. Communications manages publishing centrally. GCWCC and Atrium are smaller sites in terms of pages, users and daily traffic.

Within ECCC, the intranet site is the Deputy Minister's primary internal communications tool. Although no specific plans exist to replace ECCC's public facing internet WCMS at this time, this may become an objective during the life of this contract.

## **2 Project Summary**

**Defined terms: Words and expressions used in this Summary Statement of Work (SSOW) have the meanings defined in Glossary of Terms and Acronyms attached as Appendix A to the SSOW.**

This document provides a concise version of a Statement of Work (SOW) associated with the planning, design, configuration, testing, integration, training, migration, deployment, management, operation, maintenance and support of the WCMS Solution (Solution).



The project to be addressed by the procurement process involves the activities necessary for the successful development, implementation and maintenance of a WCMS Managed Services platform based on the GC supported, open source **Drupal WxT distribution**. The platform **will provide the capabilities to deploy and operate multi-stage content management systems using Drupal WxT** that deliver **authoring, editing, and publishing** capabilities for ECCC & its partners web content management needs in both official languages through a vendor managed solution.

For the purposes of the WCMS services, all WCMS services must be provided using a cloud service that has been sanctioned by Canada<sup>1</sup> to provide services at the Unclassified, Low integrity, Low availability (ULL) level. Specifically, Canada will not accept deployment of any proposed WCMS solution that requires the approvals of a cloud platform service that is not currently sanctioned by Canada.

## 2.1 Immediate WCMS Goals

ECCC requires a WCMS system to allow for internal communication with employees via a central, multi-stage web content publishing system. The web content publishing system will serve as a means for intranet visitors to access content created by WCMS Editors and Publishers, provide functionality for WCMS Administrators to define the site structure and workflows as well as providing the means to administer and maintain the information architecture.

Following contract award, existing legacy CMS tenants will be migrated to the target WCMS platform as soon as possible:

- a. ECCC Intranet (Intranet.ec.gc.ca)
- b. Atrium (Atrium.ceaa-acee.gc.ca)
- c. GCWCC (Gcwcc-ccmtgc.ec.gc.ca)

Further details regarding the WCMS business requirements are presented in the SSOW Appendix B – Minimal Viable Product Requirements.

## 2.2 Long-term Goals

ECCC envisions that the Solution will be expandable to support the needs of similar or related content management related systems in the future. Examples may include:

- web content management systems for specific programs, organizations or agencies related to the business activities of ECCC,
- web content management systems that are available to the general public,
- other web based business applications requiring content management system capabilities of a Drupal platform as a component of a larger IM/IT System.

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<sup>1</sup> Canada is equivalent to the Government of Canada

### 3 Solution Requirements

#### 3.1 Introduction

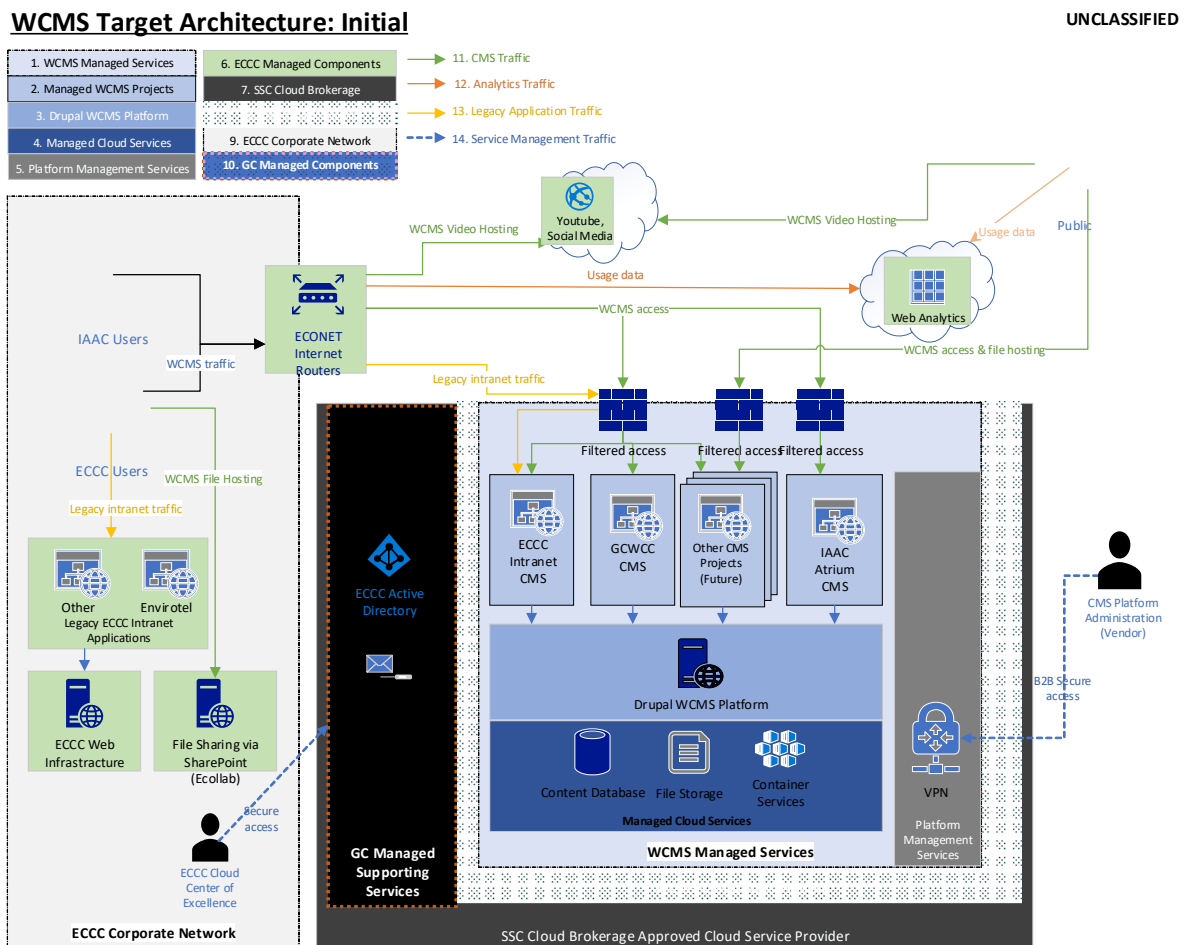
The target WCMS environment represents an integration of ECCC Custom built components and the vendor Solution. The following sections open with a context diagram of the Solution, followed by a definition of the functional requirements that will drive its target architecture.

This section sets out the Solution Services required by the ECCC.

#### 3.2 Target Environment

Figure 3-1 provides an initial architecture diagram for the target WCMS solution. The WCMS Solution is comprised of ECCC Managed Components (shaded in green), and Vendor-supplied components (shaded in blue). The interactions between the components, and between the users and the Solution, are functionally briefly described in SOW Appendix B. The below diagram solely intends to provide an overview of the scope of the WCMS solution requirement.

Figure 3-1 – WCMS Vendor Solution – Target Architecture Initial State Diagram





### 3.2.1 Description of the target environment

1. **WCMS Managed Services:** Set of the services to be provided by the vendor.
2. **Managed WCMS Projects:** Represents instances of the Drupal WxT platform deployed to support individual projects or initiatives
3. **Drupal WCMS Platform:** Represents the platform services deployed to enable and deliver the Managed WCMS Project instances
4. **Managed Cloud Services:** Represents managed Cloud Services used by the vendor to deliver the Drupal WCMS Platform with the required functionality. Vision for target delivery includes components required to deliver a content database, unstructured file storage, mail services and containerized deployment of WCMS instances.
5. **Platform Management Services:** Represents services setup by the vendor to enable access for administration and ongoing support of the platform.
6. **ECCC Managed Components:** Represents components that deliver a portion of overall WCMS capabilities but are delivered, administered and/or accessed by ECCC personnel.
7. **SSC Cloud Brokerage Approved Cloud Service Providers:** Represent cloud service providers that have been approved by the SSC Cloud Brokerage Services and may include delivery of foundational cloud administration and billing services through the cloud brokerage services if enrolled via departmental channels.
8. **WCMS Cloud Subscription:** Represents the WCMS cloud subscription for which the vendor would be responsible for the administration and ongoing operation there-in.
9. **ECCC Corporate Network:** Represents the components of the overall WCMS architecture provided via on Premises IM/IT systems owned and operated by ECCC & its partners.
10. **GC Managed Supporting Services:** Represents GC managed cloud service components that would be leveraged by the WCMS architecture. These services include but are not limited to email relay services and active directory integration.
11. **CMS Traffic:** This flow represents network traffic as a result of interacting with the WCMS. This includes accessing content provided directly through the WCMS Managed Services platform as well as traffic supported by external data sources such as local web-based file storage, social media, YouTube, etc. Transit level encryption will be provided by HTTPS
12. **Analytics Traffic:** This flow represents web analytic traffic executed in the users browser. The WCMS managed services platform will be expected to integrate with the departmental web analytics engine WebTrends, which is under review for replacement. Google Analytics is expected to replace it and the new WCMS must have the ability to integrate with it.
13. **Legacy Application Traffic:** This flow represents traffic as a result of users accessing a subset of legacy applications hosted on premises that are closely tied to the legacy ECCC Intranet CMS. These applications provide a supporting function to the legacy CMS and in some cases have hard-coded dependencies on web assets such as, but not limited to, HTML, CSS, and JS files hosted on the legacy CMS platform. While these high-risk applications await migration to new platforms, the ECCC Intranet CMS project will need to maintain these domain based URL dependencies.
14. **Service Management Traffic:** This flow represents traffic originating from service support staff to access service management systems. This includes service management via cloud platform administrative interfaces as well as service management access directly to the platform components.

### 3.2.2 Initial vs Future State Transition

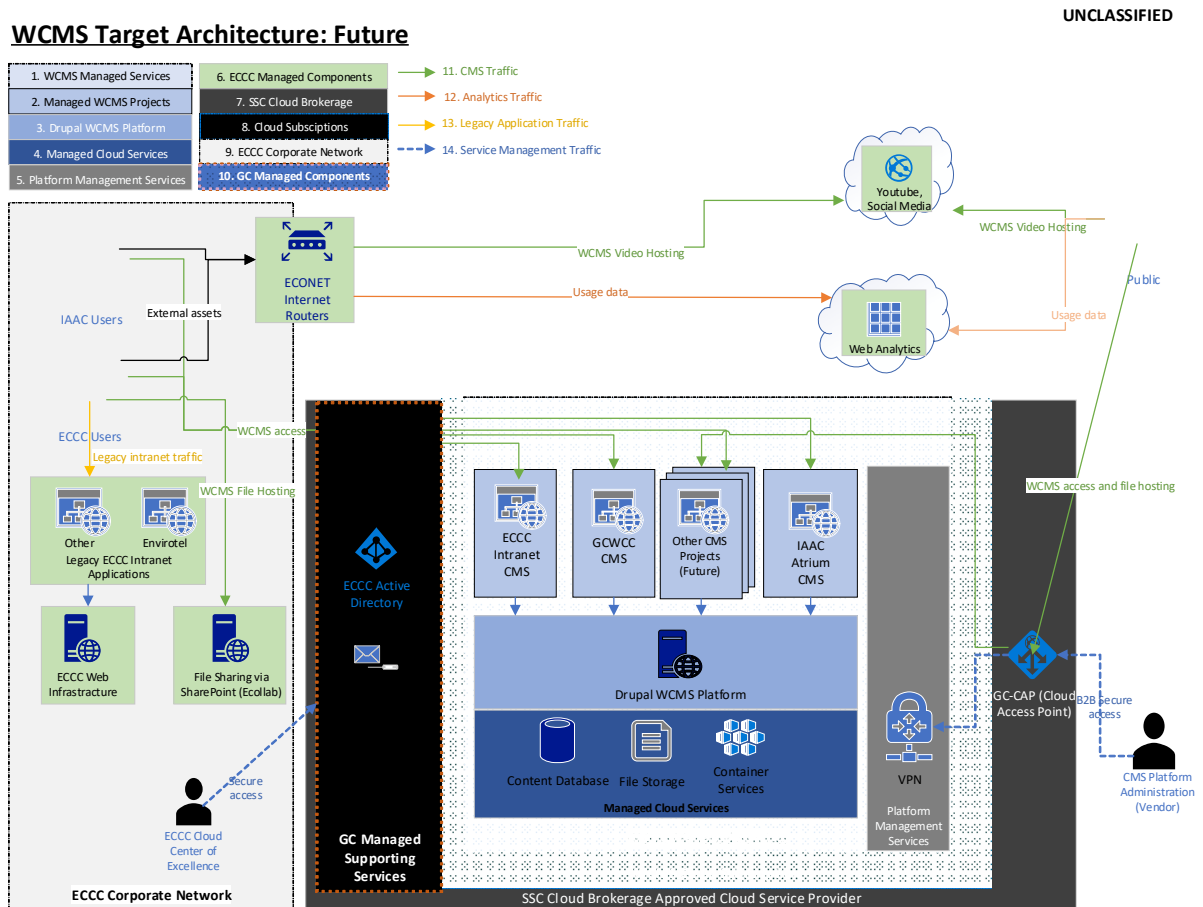
SSC’s Secure Cloud Enablement & Defense (SCED) initiative is developing the framework for how departments will enable integrated cloud access with corporate networks. The delivery and proliferation of SCED services will allow for the implementation of Cloud 2 Ground and Ground 2 Cloud type connectivity as well as accelerate integration of Active Directory domains with Cloud hosted systems.

While these services are not available at the time of contract award, the future state diagram provides a view of how the platform would evolve to align with initial SCED architecture diagrams presented to the Government of Canada Enterprise Architecture Review Board. Features of the future state diagram not present in the initial state include:

- Implementation of Ground 2 Cloud connectivity via a Trusted Interconnection Point
- Implementation of vendor access and/or public internet access via a virtual Cloud Access Point

While these services are not yet available, the initial state for the WCMS Target Architecture would be to use IP filtering to restrict access to internally facing WCMS platform services.

Figure 3-2 – WCMS Vendor Solution – Target Architecture Future State Diagram





### 3.2.3 Volumetrics

The following table lists some of the estimated volumetrics for the Solution using the ECCC Intranet site as a representative sample. The WCMS Platform must be capable of supporting a similar level of volumetrics in parallel across all hosted Drupal instances.

**Table 3-1: Volumetric estimates for the Solution**

Annual Metric	ECCC Intranet	Expected Annual Growth Rate
Site visits	Over 1M	5-10%
Hosted pages	3,420	5%
Daily Users	2,864	10%
WCMS Editors	47	N/A
WCMS Publishers	15	N/A
WCMS Administrators	3	N/A

Table 3-2: Annual volumetric estimates for the Solution

### 3.2.4 Performance Indicators

The following table lists performance standards that will be set at a later date to establish an acceptable baseline for performance of the Drupal WxT environment. The indicators listed here communicate the level of performance that should be expected in the final Statement Of Work.

Indicator	Description	Expected Range of Performance
<b>Time to First Byte (TTFB)</b>	<p>This is the time that elapses before a response is received by the browser.</p> <p>TTFB is typically stipulated by the delivery speed from the website to the viewer’s ISP, but also by the initial response time of WCMS components operating within the Cloud environment.</p> <p>Since TTFB is affected by the health of WAN networks, this indicator will not be strictly enforced if it can be established that the performance issues lies within the WAN network and not the Cloud environment.</p>	Less than 1 second





<p><b>Time to Interactive (TTI)</b></p>	<p>This is the time that elapses before a page has rendered and is now interactive for the user.</p> <p>TTI is an important metric with JavaScript enabled sites, as a page is not often usable until it has completed loading.</p> <p>Optimal performance will difference between TTI and TTFB should be &lt;1s.</p>	<p>From 1 to 3 seconds</p>
<p><b>Resource Download Time (RDT)</b></p>	<p>RDT tracks the total time required to download web resources hosted by the WCMS platform during the course of page loading.</p> <p>This metric should be minimized on an ongoing basis as it has a direct impact on the more important TTI metric noted above. However, RDT is used as an input to TPRDT (below).</p>	<p>Less than 2 seconds.</p>
<p><b>Third-Party Resource Download Time (TPRDT)</b></p>	<p>TPRDT tracks the total time required to download web resources not hosted directly on the WCMS platform during the course of page loading.</p> <p>Since the download of the Third-Party resources has a direct impact on website performance, this metric is aimed at ensuring external dependencies don't become an anchor on platform performance and that poor performing dependencies are remedied through ongoing performance monitoring of the platform.</p>	<p>Does not exceed 150% of RDT</p>

Table 3-2: Notional web performance indicators for the Solution

## 4 Anticipated Scope

### 4.1 Summary

(1) In summary, the Contractor must deliver, operate and maintain:

- For the WCMS – a Drupal WxT platform that provides the capabilities to:
  - Author and edit web content in a user-friendly fashion
  - Design, Publish and Maintain web content
  - Allow for integration with legacy applications and web analytics system
- A trusted unclassified platform for WCMS web content.

- An extensible environment to facilitate the onboarding of future processes and instances of the WCMS platform.

## 4.2 Expected RFP Requirements

It is expected the RFP will include the following requirements:

The Contractor will be expected to comply with the requirements as set out in the SOW to be issued with the RFP process, subsequent to this RFI process. The summary requirements in this SSOW outline the expected requirements in the final SOW, and are composed of product requirements, operational service requirements and development service requirements which are outlined below.

The following diagram summarily describes the context of the Solution.

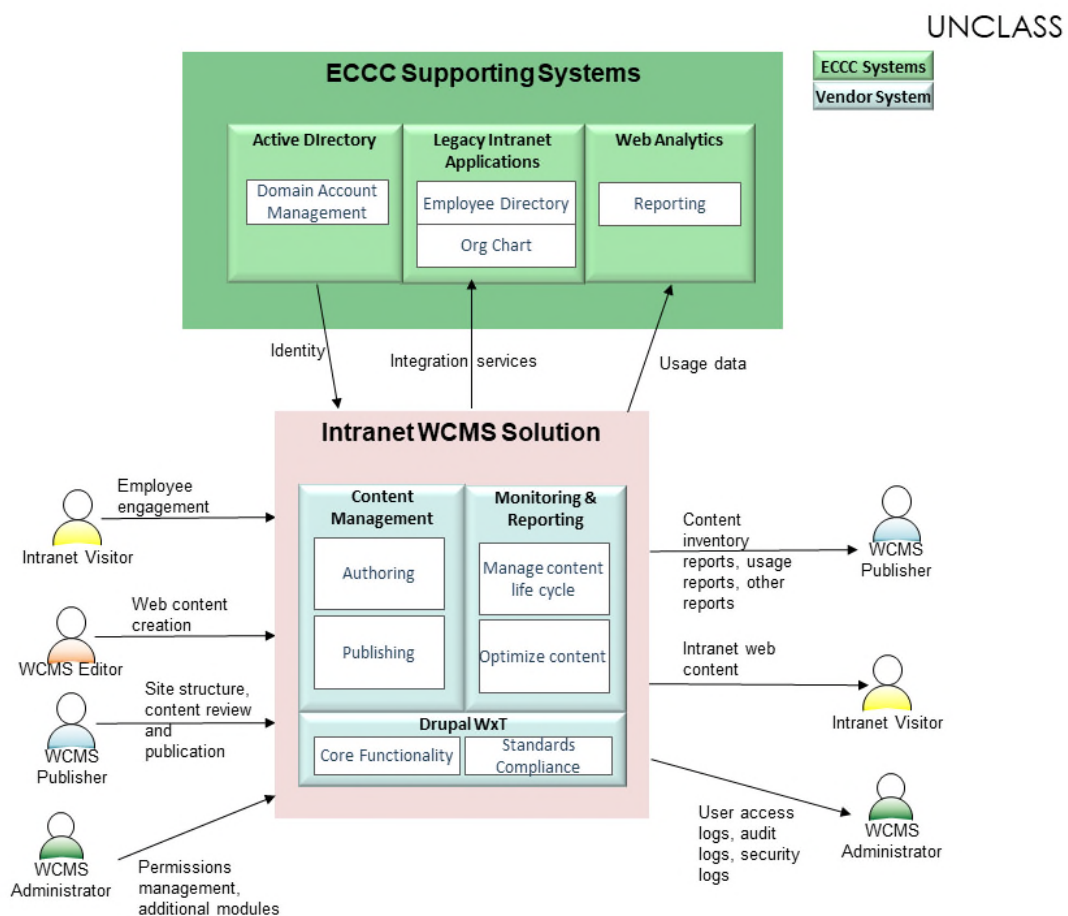


Figure 4-1 – WCMS Vendor Solution – Contextual Diagram

### 4.2.1 Product Requirements

The following requirements reflect the expected attributes of the WCMS product.

- 1) The Contractor must deliver, maintain and operate the Solution including all of the required facility, hardware, resource abstraction and control, platform and applications, operating system, network, services and other necessary technical infrastructure to deliver and host the Solution on a GC-sanctioned cloud environment, where a suite of business capabilities and integrated components



will be provided, configured, managed and operated as a managed service offering configured to meet the functional, non-functional, security, performance and capacity requirements.

- 2) The Contractor must provide and deliver the Solution as a suite of business capabilities and integrated components which utilize the Drupal WxT Common Distribution to provide core WCMS functionality. The Solution business capabilities and integrated components include, but are not limited to:
  - a) Drupal WxT Common Distribution Functionality
  - b) Authoring Functionality
  - c) Publishing Functionality
  - d) Monitoring & Reporting
  - e) Legacy Intranet Application Support
  
- 3) The Contractor must provide the following services and deliver the Solution as required through design, configuration, test, integration, training, deployment, operation and support of ECCC Programs that:
  - a) meet the specific functional requirements;
  - b) meet the specific non-functional requirements, specifically the Contractor must:
    - i) provide the accessibility services
    - ii) provide the interfaces, reports and reporting services
    - iii) provide the testing services
    - iv) Provide data migration services
    - v) implement the required interfaces to interoperate with ECCC internal systems and Partners' System
    - vi) meet the specific security requirements
    - vii) deliver a Solution that meets the SA&A process
    - viii) provide Solution Deployment services
    - ix) provide Solution Configuration services
    - x) provide Solution Development services
    - xi) provide Solution Migration services
    - xii) provide Solution Maintenance and support services
    - xiii) provide ongoing Solution Operations including ongoing technical and operational support services
    - xiv) provide the training of system administrators
    - xv) provide project documentation services
    - xvi) provide the transition-out services
  
- 4) The Contractor must deliver WCMS requirements for authoring, publishing & monitoring/reporting functionality not supported by Drupal WxT core functionality. These WCMS requirements will be designed, configured, implemented, tested, integrated, deployed, operated and supported by the Contractor. This includes the utilization, extension and maintenance of Drupal WxT components and Drupal add-on modules as necessary to meet priority business requirements not supported by out-of-the-box Drupal WxT functionality, while still maintaining compliance with GC Web Standards and forward compatibility with future Drupal WxT upgrades. Additions to the Drupal WxT Common Distribution and/or custom Drupal module development performed to fulfill WCMS business requirements would be contributed back to the Drupal & Drupal WxT open source communities.



- 5) The Contractor must deliver support for External Interface Requirements that include integration with departmental Web Analytics systems, as well as enabling the continued operations of legacy Intranet applications that utilize the legacy WCMS web assets to define their web styles, headers, menus, and footers. Support for legacy WCMS web assets is expected to include the ability to use a header, footer, menu or combination thereof to align the look & feel of web applications with the CMS.
- 6) The Contractor is expected to deliver a WCMS service that is deployed to a GC sanctioned cloud environment provided via ECCC's Cloud Centre of Expertise, or via an alternative cloud hosting service that is provided through the GC Cloud Brokerage Service. The Solution will be fully managed, maintained and supported by the vendor regardless of the Cloud host that is utilized. The cloud hosting service technical requirements are expected to include, but are not limited to:
  - a) Limiting network access to Intranet users
  - b) Storage space for file and media assets distributed via the WCMS
  - c) Integration with Active Directory services
  - d) Scalability to host additional Drupal WxT instances as necessary
  - e) Utilize DNS management services provided by ECCC

Appendix C – Cloud Hosting Requirements details cloud hosting service technical requirements that are expected to be included in the final Statement of Work.

- 7) The Contractor is expected to deliver a WCMS service that implements the security control requirements as specified by the GC for Unclassified/Low/Low (ULL) systems deployed via SSC Cloud Brokerage Services. The Contractor will be expected to ensure that the final security architecture of the Solution is in alignment with Canada's security requirements including documenting this compliance with the security requirements as set out in the SOW (RFP stage) and as these evolve from time to time. The Contractor will be required to develop and deliver all security artefacts and facilitating review and approval checkpoints.

#### **4.2.2 Operational Service Requirements**

The following requirements reflect the expected requirements for Operational Services required to support the WCMS product.

- 1) Operational Change Services – The contractor will be expected to provide services that would perform managed operational change services for the WCMS product. These operational change services would be expected to perform the planning, deployment and quality assurance activities necessary for implementing changes to the WCMS production platform.
- 2) Management Services – The contractor must provide management services that would support the design, delivery and operations of the WCMS platform as well as support ongoing operations and incremental improvements in business capabilities. These management services would include



project management of deliverables, stakeholder engagement to elicit, define, review and confirm WCMS business requirements, progress reporting and ongoing reporting of operational health.

- 3) Operations Services – The contactor will provide operational services to monitor and provide reports on the operational health of the Solution, respond to outages and provide bilingual technical support during regular business hours.
- 4) Maintenance & Support Services – The contractor will provide maintenance and support services that will ensure the ongoing upgrade of WCMS components including, but not limited to the Drupal WxT Common Distribution, added Drupal Modules, and supporting libraries that compose the WCMS. The Contractor must also provide operational services that ensure ongoing backups, disaster recovery and proactive maintenance of the WCMS takes place.

### 4.2.3 Development Service Requirements

- 1) The following requirements reflect the expected requirements for Development Services required to support the implementation of the WCMS product. These services are expected to be delivered as part of initial delivery of contract requirements for the WCMS Solution, but may also be required via task authorization requests completed on a per diem rate.
- 2) Process Design & Development Services – The contractor must provide process design & development services that enable the implementation of WCMS requirements requiring the development of workflows or multi-stage editing processes that affect the manner in which Drupal WxT is deployed, utilized and operated as part of the greater WCMS Solution.
- 3) Data Conversion Services – The contractor must provide data conversion services that will aid in the migration and import of CMS content from the legacy CMS into the WCMS solution. The contractor must also provide data conversion services that ensure ECCC is able to readily extract data from the WCMS Solution as part of a greater exit strategy.
- 4) Technical Design & Development Services – The contractor must provide Technical Design & Development services that are capable of expanding the capabilities of the WCMS Solution by making contribution to the open source Drupal WxT project or through development of Drupal modules. These services must be delivered in an agile and iterative manner that involves a user-centric approach to design, implement, demonstrate, validate and test deliverables requested.
- 5) Application Integration Services – The contractor must provide services that would assist with the integration of external application components with the WCMS Solution. Such services would be responsible for providing domain knowledge, recommendations, technical analysis, technical design, implementation and quality assurance of application integrations. Additional application integrations may be required based on a per diem rate, however known integrations expected to be delivered as part of the WCMS Solution core requirements include:
  - a) Integration with departmental web analytics platform
  - b) Integration of legacy ASP.NET applications including:



- i) EnviroTel employee directory application
  - ii) GCWCCC Auction & Bingo game applications
  - iii) Org Chart applications
- 6) Infrastructure Integration Services – The contractor must provide services that would support the integration of WCMS component with target infrastructure components. These services will work with ECCC technical resources to integrate the WCMS solution with on-premises services and supporting cloud hosted services. These services are expected to include elements such as integration with identity management services, traffic filtering rules, integration with to-be Ground 2 Cloud or Cloud 2 Cloud connectivity, accessibility of WCMS storage services, etc.

### 4.3 Solution Timeline

Currently the procurement timelines (subject to change) are as follows:

- RFP posted following the conclusion of the RFI phase (target date February/March 2021)
- Contract award is anticipated for April/May 2021.
- It is anticipated that the Contractor will start date no more than one month after contract award.
- Within the first month of contract award, delivery to ECCC of an interim Drupal WxT development environment to enable research & development as well as migration planning.
- Web sites operational and ready to accept web content from ECCC publishers/editors:
  - a. GCWCC (Gcwcc-ccmtgc.ec.gc.ca) web site operational – August 2021
  - b. ECCC Intranet (Intranet.ec.gc.ca) web site operational – September 2021
  - c. Atrium (Atrium.ceaa-acee.gc.ca) web site operational – October 2021
  - d. Other Web Sites / Projects – No target dates defined
- Ongoing maintenance and support



## Appendix A – Glossary of Terms & Acronyms

Acronym	Definition
API	Application Programming Interface
Atrium	IAAC intranet site
CCCS	Canadian Center for Cyber Security
CSP	Cloud Service Provider
DSO	Departmental Security Officer
ECCC	Environment and Climate Change Canada
ECONET	ECCC Corporate Network
GC	Government of Canada
GCWCC	Government of Canada Workplace Charitable Campaign
IAAC	Impact Assessment Agency of Canada
IM	Information Management
IM/IT	Information Management and Information Technology
MVR	Minimum Viable Requirements
PSPC	Public Services and Procurement Canada
RFP	Request for Proposal
SC	Steering Committee
SDLC	System Development Lifecycle
SLA	Service Level Agreement
SOW	Statement of Work
SSC	Shared Services Canada
TA	Task Authorization
TB	Treasury Board
TBS	Treasury Board Secretariat
VPN	Virtual Private Network
WBS	Work Breakdown Structure
WCMS/CMS	Web Content Management System



## Appendix B – Minimal Viable Product Requirements

The following functional requirements describe a subset of the requirements that will be published with the final RFP.

Following an options analysis at the outset of this process, these requirements represented functionality that is expected to either be delivered immediately through Drupal WxT out-of-the-box capabilities, or are sufficiently important to stakeholders that they are included as part of a minimal viable scope for the final product.

### 1) The solution must meet the following requirements for **WCMS users**:

- (a) shREQ-WC0002: WCMS users must be able to search for indexed content.
- (b) shREQ-WC0044: WCMS users should be able to use employee engagement tools on the intranet.
- (c) shREQ-WC0001: WCMS users must be able to access content using integrated authentication from departmental Active Directory without having to enter passwords.
- (d) shREQ-WC0039: WCMS users must be able to easily toggle between both official languages.
- (e) shREQ-WC0043: WCMS users must be able to view content in accessible format in accordance with GC Standard on Web Accessibility.
- (f) shREQ-WC0041: WCMS users must be able to access mobile friendly content.

### 2) The solution must meet the following requirements for **WCMS Editors**:

- (a) shREQ-WC0007: WCMS Editors must be able to create and edit content in the WCMS solution via a feature-complete implementation of Drupal WxT
- (b) shREQ-WC0019: WCMS Editors should be able to use Web Experience toolkit (WET) to format intranet pages
- (c) shREQ-WC0080: WCMS Editors should be able to create simple forms which users can fill out and submit
- (d) shREQ-WC0011: WCMS Editor must be able to use industry standard internet media formats in the WCMS solution
- (e) shREQ-WC0047: WCMS Editors should be able to use social intranet features to facilitate more user engagement
- (f) shREQ-WC0009: WCMS Editors must be able to add and edit meta data associated with content to facilitate indexing and searching functionality
- (g) shREQ-WC0091: WCMS Editors should be able to use shared assets libraries in WCMS solution
- (h) shREQ-WC0055: WCMS Editor must be able to search for and retrieve specific pages, content and digital assets within WCMS solution
- (i) shREQ-WC00: WCMS Editors must be able to embed videos from sources such as YouTube.
- (j) shREQ-WC0077: WCMS Editors must be able to link to content hosted on web accessible hosting platforms external to the WCMS platform.
- (k) shREQ-WC0020: WCMS Editor must be able to preview content in staging environment to verify the content formatting before publishing on Intranet
- (l) shREQ-WC0010: WCMS Editors must submit content to WCMS Publishers for approval before publishing on Intranet





- (m) shREQ-WC0024: WCMS Editor must be able life-cycle manage content, including creation, publication, archival and deletion
  - (n) shREQ-WC0082: WCMS Editors should be able to redirect pages to ensure there are no broken links when web pages are deleted or moved
  - (o) shREQ-WC0050: WCMS Editors may be able to use WCMS solution in the official language of choice
  - (p) shREQ-WC0073: WCMS Editors must be able to use a CSS framework with style guides, JavaScript and predefined functions to setup content pages
- 3) The solution must meet the following requirements for **WCMS Publishers**:
- (a) shREQ-WC0071: WCMS Publishers must approve content to be published on Intranet
  - (b) shREQ-WC0079: WCMS Publishers must be able to modify the HTML/CSS code of a page as required, including access to the <head> and <footer> content.
  - (c) shREQ-WC0025: WCMS Publishers must be able restore previous versions from historical versions of a content item.
  - (d) shREQ-WC0087: WCMS Publishers should be able to archive the intranet content.
  - (e) shREQ-WC0067: WCMS Publishers should be able to customize path of the URL that identifies the resource on intranet site.
  - (f) shREQ-WC0069: WCMS Publishers should be able to create, edit, delete vanity URLs to be used for campaigns or as shortened links to specific sections of the site.
  - (g) shREQ-WC0026: WCMS Publishers should be able to pre-schedule content to be published on a selected date to ensure timely provision of content.
  - (h) shREQ-WC0021: WCMS Publishers should be able to produce content inventory reports in WCMS.
  - (i) shREQ-WC0054: WCMS Publishers may integrate feeds from social media channels to intranet sites in order to display information related to the organizational mandate.
  - (j) shREQ-WC0078: WCMS Publishers may be able to upload and use common files such as PDFs, Word, Excel, and Power Point documents in WCMS solution.
- 4) The solution must meet the following requirements for **WCMS Administrators**:
- (a) shREQ-WC0035: WCMS Administrator must be able to add, configure and remove web sites to be managed in the WCMS solution
  - (b) shREQ-WC0031: WCMS Administrator must manage access permissions for other users
  - (c) shREQ-WC0058: WCMS Administrator must be able to create and map site architecture in the WCMS solution
  - (d) shREQ-WC0085: WCMS Administrator must be able to edit and delete the site structure, or sections there of
  - (e) shREQ-WC0057: WCMS Administrator should be able to setup workflows to effectively manage content in WCMS
  - (f) shREQ-WC0064: WCMS Administrators may require programmatic access to query content and datastores associated with the WCMS via APIs
  - (g) shREQ-WC0032: WCMS Administrators must be able to manage web templates in the system.
  - (h) shREQ-WC0061: WCMS Administrators must have access to WCMS user access logs, audit logs, and security logs audit purposes.
  - (i) shREQ-WC0023: The solution must integrate with ECCC's legacy on premises analytics tool (Webtrends) and allow for migration to a new analytics platform in the future if necessary (e.g. Google Analytics).



- (a) shREQ-WC0083: WCMS Administrators must be able to restrict users with roles to specific sections/pages.



## Appendix C – Cloud Hosting Requirements

- 1) The platform must have the capacity to scale up to support multiple WCMS Projects with each project provided with the following capabilities
  - (a) A feature complete deployment of Drupal WxT distribution or its variants, as directed by ECCC
  - (b) A multi-stage environment providing instances to support activities around development, pre-production & production environments. Characteristics of the environment include:
    - i. Production environment must be continuously available
    - ii. Staging environment is able to be refreshed with production data on demand and available through regular business hours at a minimum, or on an extended schedule if required
    - iii. Development/testing/training environments will be made available on an ad hoc basis and populated with a current version of production or staging data. These environments will be transitory and expected to be kept online up to a maximum number of days before being deleted and/or recreated (i.e. 90 days)
  - (c) Logical separation of content databases and file hosting necessary to deliver WCMS functionality
  - (d) Each WCMS project delivered by the platform should be able to be uniquely configured based on individual project requirements specified with each Task Authorization. Capabilities that are expected to vary between WCMS Projects include, but are not limited to:
    - i. Capabilities delivered by external supporting services such as Web Analytics
    - ii. Capability to restrict network access via networking rules or other relevant mechanism
    - iii. Capability to uniquely define and configure Roles Based Access Controls and Identity Management capabilities
    - iv. Capability to configure unique domain names for each WCMS Project
    - v. Capability to independently measure WCMS Project consumption of Cloud Services for cost transferal to WCMS Projects business owners
- 2) The platform must provide the necessary service management tools and connectivity required for platform administrators to access the WCMS environments in a secure manner
- 3) The platform should seek to utilize containerized hosting of Drupal WxT and make operational images available via a Container Registry.
- 4) The solution will be deployed in a manner that is consistent with the security and access requirements of an Intranet, meaning that it will only be accessible from the ECCC network or other networks as directed. If a solution is to be made available to the Internet and not require such access restrictions, it will be explicitly requested.
- 5) The solution must be able to store videos, graphic, image files and any other special format items and must not be limited to physical storage volumes and utilize scalable cloud storage that can grow to volumes in the terabyte (TB) range.
- 6) The solution must provide user account based direct access to CMS storage to allow CMS administrators access to manage storage contents.



- 7) The WCMS content, configuration and data stores must be backed up for disaster recovery.
- 8) The solution must be backed up frequently. A consistent schedule will be determined based on the content update frequency.
- 9) The WCMS and associated services must be restored to the most recent backup point within 48 hours in case of service outage or failure.
- 10) The Contractor must provide, as part of the hosting service patch management and security safeguards, to the underlying operation systems and databases throughout the duration of the Contract. This must include database, operating systems and hardware upgrades.