



## Standard on Optimizing Websites and **Applications for Mobile Devices**

Published: Apr 01, 2013

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Published by Treasury Board of Canada, Secretariat 90 Elgin, Ottawa, Ontario, K1A 0R5, Canada

Catalogue Number: BT48-20/2013E-PDF

ISBN: 978-0-660-20369-0

This document is available on the Government of Canada website, Canada.ca

This document is available in alternative formats upon request.

Aussi offert en français sous le titre : Norme sur l'optimisation des sites Web et des applications pour appareils mobiles

# Standard on Optimizing Websites and Applications for Mobile Devices

#### **Disclaimer**

The Treasury Board of Canada Secretariat is currently reviewing the *Standard on Optimizing Websites and Applications for Mobile Devices* to realign the dates within the standard to the timelines of the Web Renewal Initiative.

#### 1. Effective Date

This standard takes effect April 1, 2013 except for section 6 which takes effect according to the roll-out schedule provided in Appendix G.

## 2. Application

- **2.1** This standard applies to "departments" as defined in section 2 of the *Financial Administration Act*, with the exception of paragraphs (b) and (c), and unless excluded by specific acts, regulations or Orders-in-Council.
- 2.2 Section 6.1 applies to all websites, Web applications and device-based mobile applications that:
  - · Are public-facing (i.e., available to individuals and businesses outside of the Government of Canada); and
  - Are those for which the department is accountable.
- 2.3 Section 6.1 does not apply to the following:
  - Content for which the department is not accountable;
  - Web pages that are archived on the Web; or
  - Device-based mobile applications that are retired from the main corporate store for each mobile operating system.
- 2.4 Sections 6.2 and 6.3 apply to all device-based mobile applications that:
  - · Are public-facing (i.e., available to individuals and businesses outside of the Government of Canada); and
  - Are those for which Government of Canada is accountable.
- **2.5** Sections 6.2 and 6.3 do not apply to the following:
  - Device-based mobile applications that are retired from the main corporate store for each mobile operating system.
- 2.6 Sections 7.2 and 8.2, which relate to the role of the Treasury Board of Canada Secretariat in monitoring compliance and directing consequences for non-compliance do not apply with respect to the Office of the Auditor General, the Office of the Privacy Commissioner, the Office of the Information Commissioner, the Office of the Chief Electoral Officer, the Office of the Commissioner of Lobbying, the Office of the Commissioner of Official Languages and the Office of the Public Sector Integrity Commissioner. The deputy heads of these organizations are solely responsible for monitoring and ensuring compliance with the standard within their organizations, as well as for responding to cases of non-compliance in accordance with any Treasury Board instruments providing principles and guidance on the management of compliance.

#### 3. Context

- **3.1** Canadians are increasingly using <u>mobile devices</u>, such as smartphones and tablets, to access Government of Canada information and services. To keep pace with this demand and to better serve Canadians, the Government of Canada is focused on optimizing its online information and services for mobile devices.
- **3.2** Canadians access Government of Canada information and services from their mobile devices through websites, Web applications and device-based mobile applications.
- **3.3** Websites and Web applications are the Government of Canada's primary means of delivering information and services online. This standard is designed to ensure that websites and Web applications are optimized for mobile devices to ensure that information and services reach the widest possible audience. Device-based mobile applications are provided only where user or business needs for device-specific features cannot be supported through websites or Web applications that are optimized for mobile devices.
- **3.4** This standard introduces an efficient model for building and maintaining device-based mobile applications by reducing duplication through re-use of components, standardization of processes and collaboration on common solutions. This model consists of the following:
  - Departments continue to commission, fund and define requirements as well as develop and maintain content for device-based mobile applications.
  - Departments identified as Government of Canada Centres of Expertise on Mobile or external service providers design,

- develop, test and maintain device-based mobile applications, with the exception of device-based mobile applications that use secure logins.
- The department that is mandated as the Government of Canada publishing entity independently tests, publishes and retires device-based mobile applications.
- **3.5** The layout and design prescribed in the <u>Technical specifications for the Web and Mobile Presence</u> help users recognize Government of Canada information and services.
- **3.6** This standard supports the *Policy on Management of Information Technology*.
- **3.7** This standard is issued under the authority of section 7 of the <u>Financial Administration Act</u> by the Secretary of the Treasury Board pursuant to subsection 6(4) of the <u>Financial Administration Act</u> and section 3.5 of the <u>Policy on Management of Information Technology</u>.
- **3.8** This standard is to be read in conjunction with the <u>Standard on Web Accessibility</u>, the <u>Standard on Web Usability</u> and the <u>Standard on Web Interoperability</u>.

#### 4. Definitions

**4.1** Definitions to be used in the interpretation of this standard appear in Appendix A.

#### 5. Standard Statement

#### 5.1 Objective

- **5.1.1** Government of Canada online information and services reach the widest possible audience.
- **5.1.2** Government of Canada websites, Web applications and device-based mobile applications achieve a high level of accessibility and usability.
- 5.1.3 Government of Canada device-based mobile applications are easy to find and recognize.

#### 5.2 Expected results

- 5.2.1 Government of Canada online information and services are optimized for mobile devices.
- **5.2.2** Government of Canada provides device-based mobile applications only where user and business needs cannot be met by websites or Web applications optimized for mobile devices.
- **5.2.3** Government of Canada websites, Web applications and device-based mobile applications respect internationally accepted guidelines for accessibility and respect usability principles and approaches.
- **5.2.4** Government of Canada device-based mobile applications are published through the <u>department that has been mandated</u> as the Government of Canada publishing entity.

## 6. Policy Requirements

In addition to the requirements contained in this section, websites and Web applications must comply with the <u>Standard on Web Accessibility</u>, the <u>Standard on Web Usability</u> and the <u>Standard on Web Interoperability</u>.

#### 6.1 Departments

- 6.1.1 Departmental managers, functional specialists and equivalents who are responsible for websites, Web applications and device-based mobile applications are responsible for the following:
- 6.1.1.1 Websites and Web applications
- **6.1.1.1.1** Ensuring that websites and Web applications are optimized for mobile devices according to the requirements described in the <u>Technical Specifications for the Web and Mobile Presence</u>.
- **6.1.1.1.2** Ensuring that websites and Web applications meet the requirements described in the <u>Technical Specifications for the Web and Mobile Presence</u>.

#### 6.1.1.2 Device-based mobile applications

**6.1.1.2.1** Ensuring that device-based mobile applications are not the sole means of providing information or service. Device-based mobile applications must be provided only to enhance information and services available through Government of Canada websites and Web applications.

- 6.1.1.2.2 Ensuring that device-based mobile application projects meet the project requirements described in Appendix B.
- 6.1.1.2.3 Ensuring that device-based mobile applications meet the accessibility requirements described in Appendix C.
- **6.1.1.2.4** Ensuring that device-based mobile applications meet the usability requirements described in Appendix D.
- 6.1.1.2.5 Ensuring that device-based mobile applications meet the interoperability requirements described in Appendix E.
- **6.1.1.2.6** Ensuring that the publication of device-based mobile applications meets the publishing requirements described in Appendix F.
- **6.1.1.2.7** Ensuring that device-based mobile applications meet the requirements described in the <u>Technical Specifications for</u> the Web and Mobile Presence.
- 6.1.2 The senior departmental official, designated by the deputy head, is responsible for the following:
- **6.1.2.1** Approving device-based mobile application projects before they are commissioned or funded, based on the project requirements described in <u>Appendix B</u>.
- **6.1.2.2** Providing relevant information about each approved device-based mobile application project to the department that has been mandated as the Government of Canada publishing entity, including the title, a brief description, the anticipated testing and publishing dates as well as any other required information.
- **6.1.2.3** Approving publication of each device-based mobile application.
- **6.1.2.4** Outsourcing the publication and retirement of device-based mobile applications to the Government of Canada publishing entity.
- **6.1.2.5** Providing written approval for publication to the department mandated as the Government of Canada publishing entity. Written approval must include confirmation of the following:
  - a. Compliance with this standard;
  - b. Compliance with all the required legal agreements for each supported mobile operating system and associated main corporate store, including applicable legal agreements; and
  - c. Approval of the life cycle.
- **6.1.2.6** Ensuring that for device-based mobile applications:
  - The departmental mandate and priorities are supported;
  - The key performance indicators are defined; and
  - Metrics are collected to measure effectiveness.
- **6.1.2.7** Outsourcing the design, development and maintenance of device-based mobile applications to the departments identified as Government of Canada Centres of Expertise on Mobile or external service providers, with the exception of device-based mobile applications with secure logins.
- **6.1.2.8** Encouraging departmental managers, functional specialists, and equivalents responsible for websites, Web applications and device-based mobile applications to collaborate, share expertise, and build reusable components and tools, both departmentally and interdepartmentally.
- 6.1.3 The departmental Chief Information Officer or equivalent is responsible for the following:
- **6.1.3.1** Ensuring that software and systems acquired or developed by the department can enable websites, Web applications and device-based mobile applications to meet the requirements of this standard.
- **6.1.3.2** Encouraging personnel to collaborate, share expertise and build reusable components and tools, both departmentally and interdepartmentally.
- 6.1.3.3 Provide support and guidance to the senior departmental official regarding implementation of this standard.
- 6.1.4 The head of communications is responsible for the following:
- **6.1.4.1** Ensuring that goals, content owners and target audiences are identified for each of the department's device-based mobile applications.
- **6.1.4.2** Encouraging personnel to collaborate, share expertise and build reusable components and tools, both departmentally and interdepartmentally.
- 6.1.5 Departmental Centres of Expertise, designated by the senior departmental official, are responsible for the following:
- 6.1.5.1 Serving as the primary point of contact between Treasury Board of Canada Secretariat's Chief Information Officer

Branch and their department for questions and communications related to interpretation and implementation of this standard and related guidelines and tools.

**6.1.5.2** Participating in and contributing to the interdepartmental Centres of Expertise forum, chaired by the Treasury Board of Canada Secretariat's Chief Information Officer Branch, to stay current with evolving Web and mobile standards, guidelines and tools.

#### 6.2 Departments identified as Government of Canada Centres of Expertise on Mobile

- 6.2.1 The senior departmental official, designated by the deputy head, or delegate is responsible for the following:
- **6.2.1.1** Facilitating design, development, testing and maintenance of device-based mobile applications on behalf of departments.
- 6.2.1.2 Collaborating, sharing expertise, and building reusable components and tools interdepartmentally.
- **6.2.1.3** Developing and providing to departments a <u>Service Agreement</u> for the responsibilities identified in this section.

#### 6.3 Department mandated as the Government of Canada publishing entity

- 6.3.1 The senior departmental official, designated by the deputy head, or delegate is responsible for the following:
- **6.3.1.1** Managing the process for publishing and retiring Government of Canada device-based mobile applications through the centralized Government of Canada account for the main corporate store of each supported mobile operating system, including entering into applicable legal agreements.
- **6.3.1.2** Independent testing of Government of Canada device-based mobile applications.
- **6.3.1.3** Maintaining an inventory of active device-based mobile application projects approved by senior departmental officials, including the title, brief description and anticipated testing and publishing dates.
- **6.3.1.4** Maintaining an inventory of published Government of Canada device-based mobile applications, including confirmations of compliance with this standard, compliance with applicable legal agreements, and the information required to publish to the main corporate store of each supported mobile operating system.
- **6.3.1.5** Publishing the inventory of active device-based mobile application projects on the Government of Canada Publiservice site.
- 6.3.1.6 Publishing on the Government of Canada website a list of links to public facing Government of Canada:
  - · Websites and Web applications optimized for mobile devices; and
  - Device-based mobile applications.
- **6.3.1.7** Publishing on the Government of Canada website a list of mobile operating systems that can be supported at a maximum as per Appendix B requirement 1.
- **6.3.1.8** Reviewing and communicating, in consultation with legal services, any updates to applicable legal agreements for each supported mobile operating system and the associated main corporate stores.
- **6.3.1.9** Being the conduit for addressing issues or questions between departments and the main corporate store for each supported mobile operating system.
- **6.3.1.10** Providing departments with or facilitating access to analytics regarding their device-based mobile applications, based on data from the main corporate store of each supported mobile operating system.
- **6.3.1.11** Collaborating, sharing expertise, and building reusable components and tools interdepartmentally.
- **6.3.1.12** Developing and providing to departments a <u>Service Agreement</u> for the responsibilities identified in this section.

## 7. Monitoring and Reporting Requirements

#### Senior departmental official

**7.1** The senior departmental official, designated by the deputy head, is responsible for supporting his or her deputy head by overseeing the implementation and monitoring of this standard in his or her department, bringing to the deputy head's attention any significant difficulties, gaps in performance or compliance issues and developing proposals to address them, and reporting significant performance or compliance issues to the Chief Information Officer Branch of Treasury Board of Canada Secretariat.

#### **Government-wide**

7.2 The Treasury Board of Canada Secretariat will monitor compliance with this standard in a variety of ways, including but not limited

to, the following:

- Assessments under the Management Accountability Framework;
- Examinations of Treasury Board submissions, Departmental Performance Reports, results of audits, evaluations and studies;
- Work performed in collaboration with departments.

**7.3** The Treasury Board of Canada Secretariat will review this standard and its effectiveness at the five-year mark from the effective date of the standard (or earlier if warranted).

## 8. Consequences

- **8.1** In instances of non-compliance, deputy heads are responsible for taking corrective measures, within their organization with those responsible for implementing the requirements of this standard.
- **8.2** Consequences of non-compliance with this standard can include any measure allowed by the *Financial Administration Act* that the Treasury Board would determine as appropriate and acceptable in the circumstances.
- **8.3** Senior departmental officials are to ensure that corrective actions are taken to address instances of non-compliance with the requirements of this standard. Corrective actions can include requiring additional training, changes to procedures and systems, disciplinary action, and other measures as appropriate.
- **8.4** For a range of consequences of non-compliance, refer to Appendix C and Appendix D of the <u>Framework for the Management of Compliance</u>.

## 9. Roles and Responsibilities of Government Organizations

## 9.1 Responsibilities of the Treasury Board of Canada Secretariat (Chief Information Officer Branch), in consultation with other departments

- 9.1.1 Developing standards, guidelines, and tools, and providing interpretive advice and guidance on these instruments.
- **9.1.2** Communicating, engaging and supporting the government-wide Web and mobile communities, including the Chief Information Officer Council and other committees and working groups, on the plans, progress, risks and challenges associated with implementing this standard and its supporting instruments in the federal government.
- 9.1.3 Identifying the departments that will serve as the Government of Canada Centres of Expertise on Mobile.
- **9.1.4** Amending the <u>Technical Specifications for the Web and Mobile Presence</u> as required, in consultation with Strategic Communications and Ministerial Affairs.

#### 9.2 Government of Canada departments are responsible for the following

**9.2.1** Commissioning, funding, defining requirements, and developing and maintaining content for device-based mobile applications.

#### 10. References

#### 10.1 Relevant legislation

- Canadian Charter of Rights and Freedoms
- Canadian Human Rights Act
- Financial Administration Act
- Official Languages Act
- Privacy Act

#### 10.2 Related policy instruments and publications

- Common Services Policy
- Communications Policy of the Government of Canada
- Directive on Official Languages for Communications and Services
- Directive on the Management of Information Technology
- Federal Identity Program Policy
- Foundation Framework for Treasury Board Policies
- Framework for the Management of Compliance
- Guideline on Service Agreements: An Overview
- Guideline on Service Agreements: Essential Elements
- Operational Security Standard: Management of Information Technology Security (MITS)
- Policy Framework for Service Improvement in the Government of Canada

- Policy on Evaluation
- Policy on Government Security
- Policy on Information Management
- Policy on Internal Audit
- Policy on Management of Information Technology
- Policy on Official Languages
- Policy on Privacy Protection
- Standard on Privacy and Web Analytics
- · Standard on Social Media Account Management
- Standard on Web Accessibility
- Standard on Web Usability
- Standard on Web Interoperability

#### 10.3 Related External Standards and Specifications

- HTML5
- UTF-8 [RFC 3629]
- Web Content Accessibility Guidelines (WCAG) 2.0

## 11. Enquiries

Please direct enquiries about this standard to your departmental <u>Centre of Expertise</u>. For interpretation of this standard, departmental Centres of Expertise should contact:

Web Standards Office Chief Information Officer Branch Treasury Board of Canada Secretariat Ottawa ON K1A 0R5

E-mail: Contact Web Standards Office by email: webstandards@tbs-sct.gc.ca

## Appendix A: Definitions

archived Web page (page Web archivée)

A Web page that is:

- Maintained for reference, research or recordkeeping purposes;
- Not altered or updated after the date of archiving; and
- · Stored in a digital repository.

An archived Web page may be provided on the Web, but must be clearly identified as being archived.

#### device-based mobile application (application mobile axée sur l'appareil)

An application that is installed locally on a mobile device and developed either entirely with the operating system software development kit (SDK) or in combination with Web technologies. Application components developed with Web technologies can be installed with the device-based mobile application or hosted on a remote server.

main corporate store (for a mobile operating system) (Dépôt organisationnel principal (d'un système d'exploitation mobile))

Online store provided by the owner of a mobile operating system.

#### mobile device (appareil mobile)

A portable wireless electronic device that enables the user to send and receive information. Examples of mobile devices are smartphones and tablets.

#### mobile operating system (système d'exploitation mobile)

A collection of software that manages the hardware and software resources of a mobile device. Examples of mobile operating systems are Android, iOS, BlackBerry OS and Windows Phone.

#### process (processus)

Series of user actions where each action is required in order to complete an activity. For further information and examples please consult the definition for "process" in the Web Content Accessibility Guidelines (WCAG) 2.0, Appendix A.

system (système)

Organized collections of hardware, software, supplies, policies, procedures and people, to capture, transmit, store, retrieve, manipulate, or display information resources in support of an organization's day-to-day operations.

#### Web page (page Web)

A non-embedded resource obtained from a single Uniform Resource Identifier (URI) using HTTP plus any other resources that are used in the rendering or intended to be rendered together with it by a <u>user agent</u>.

Note 1: Although any "other resources" would be rendered together with the primary resource, they would not necessarily be rendered simultaneously with each other.

Note 2: For the purposes of conformance with these guidelines, a resource must be "non-embedded" within the scope of conformance to be considered a Web page.

For further information and examples, please consult the definition for "Web page" in the Web Content Accessibility Guidelines (WCAG) 2.0, Appendix A.

## **Appendix B: Project requirements**

Websites and Web applications are the Government of Canada's primary means of delivering information and services online. Device-based mobile applications must only be provided to enhance information and services available through Government of Canada websites and Web applications. This appendix prescribes requirements for device-based mobile application projects, including a process for determining whether there is sufficient justification for each project.

Managers, functional specialists, and equivalents are responsible for ensuring the following for device-based mobile application projects:

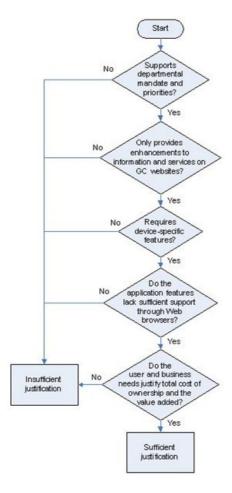
- 1. Support at a maximum the mobile operating systems that have at least 5 per cent of either the world or Canadian mobile market share;
- 2. Have sufficient justification according to this standard's "Project justification" section.
- Develop components of the device-based mobile application using Web technologies, where there is sufficient support. A
  component is considered to be sufficiently supported when performance does not significantly interfere with task completion;
  and
- 4. Are approved by the senior departmental official.

#### **Project justification**

This section provides a process for determining whether there is sufficient justification for a device-based mobile application project. A graphical depiction is provided in Figure 1.

- 1. Will the information and services provided by the device-based mobile application support the departmental mandate and priorities?
  - a. **Yes:** Proceed to step 2.
  - b. **No:** Insufficient justification for a device-based mobile application.
- 2. Will the device-based mobile application only be provided to enhance information and services available through Government of Canada websites and Web applications?
  - a. Yes: Proceed to step 3.
  - b. No: Insufficient justification for a device-based mobile application.
- 3. Will the device-based mobile application require device-specific features (e.g., camera, GPS)?
  - a. Yes: Proceed to step 4.
  - b. **No:** Insufficient justification for a device-based mobile application.
- 4. Are any of the required device-specific features lacking sufficient support through Web browsers for the mobile operating systems that will be supported by the project? A device-specific feature is considered to be insufficiently supported when performance significantly interferes with task completion.
  - a. Yes: Proceed to step 5.
  - b. No: Insufficient justification for a device-based mobile application.
- 5. Do user and business needs justify the total cost of ownership and the value added of the device-based mobile application?
  - a. Yes: Sufficient justification for a device-based mobile application.
  - b. No: Insufficient justification for a device-based mobile application.

Figure 1. Graphical Depiction of the Project Justification Process



## Appendix C: Accessibility requirements

Providing information and services through mobile devices is an important part of the Government of Canada's commitment to multichannel access and service delivery. The Government of Canada is committed to ensuring that a high level of accessibility is applied uniformly across device-based mobile applications.

Mobile technologies and standards are constantly evolving and accessibility plays a major role in making Government of Canada service delivery more effective and inclusive. To meet the Government of Canada commitment to accessibility, the Government of Canada has adopted WCAG 2.0 for device-based mobile applications. WCAG 2.0 states: "Following these guidelines will make content accessible to a wider range of people with disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity and combinations of these. Following these guidelines will also often make your Web content more usable to users in general."

Managers, functional specialists, and equivalents responsible for device-based mobile applications are responsible for:

- 1. Ensuring that each device-based mobile application meets all five <u>WCAG 2.0 conformance requirements</u>. For the purposes of this standard, requirements that apply to <u>Web pages</u> equally apply to device-based mobile applications screens.
  - <u>Conformance requirement 1 (Conformance level)</u> defines the levels of conformance.
     It can be met only if the following are true:
    - Level AA conformance is met in full.
    - Common failures are avoided for all applicable success criteria.
    - Sufficient techniques are used to meet all applicable success criteria.
    - Sufficient techniques specific to each <u>technology</u> (that is <u>relied upon</u>) are used where applicable.
  - Conformance requirement 2 (Full pages) defines what needs to be assessed for a device-based mobile application.
  - <u>Conformance requirement 3 (Complete processes)</u> defines what needs to be assessed for a device-based mobile application that is part of a <u>process</u>.
  - Conformance requirement 4 (Only accessibility-supported ways of using technologies) defines the ways of using technologies that can be relied upon to satisfy the success criteria. It can be met only by use of the following technologies:
    - HTML5 or later excluding <u>obsolete features</u>;
    - Technologies with sufficient techniques (specific to each technology) to meet all applicable success criteria; or
    - Technologies native to the supported mobile operating systems.
  - Conformance requirement 5 (Non-interference) defines requirements for ways of using technologies that are not relied upon to satisfy the success criteria.

#### List of exclusions

annually as technology advances. Exclusions include:

Content	Requirements
Complex maps (text alternatives)	WCAG 2.0 Success Criterion 1.1.1 Non-text content
Live video captions (closed captions)	WCAG 2.0 Success Criterion 1.2.4 Captions (live)
Audio description (pre-recorded video) except where the video provides information related to the health and safety of Canadians	WCAG 2.0 Success Criterion 1.2.5 Audio description

Exclusions for a 10 business day grace period:

• Pre-recorded videos have a 10 business day grace period from the time of publication to when closed captions and transcription of videos must be provided.

Live video captions exclusions refer to closed captioning and transcription of live video.

Audio description (pre-recorded videos) is required only for videos that relate to the health and safety of Canadians; for other pre-recorded videos, audio description is not required.

Complex maps: A map that associates information with one or more locations that cannot be represented by postal addresses or proper names such as intersections, landmarks, cities, or regions. An example of a complex map is one that shows the location and intensity of precipitation detected by a radar network.

Two clarifications:

- "Essential" images of text are defined as logos, brand names and advertisements for government initiatives and marketing campaigns. As per WCAG 2.0, these "essential" images of text are not required to meet WCAG 2.0 Success Criterion 1.4.5 Images of text.
- WCAG 2.0 allows multiple versions of content (including videos) to be made available; however, there must be at least one version (conforming alternate version) that complies with WCAG 2.0.

## Appendix D: Usability requirements

This appendix prescribes the mandatory elements that apply to device-based mobile applications. Common layout and design across device-based mobile applications, where appropriate, results in an appropriate degree of consistency. This consistency helps users anticipate how to interact with these services while giving departments the flexibility to use evolving technologies and to develop device-based mobile applications for their target audiences, information, and services.

For the purposes of this standard, usability is defined as the extent to which specified users can find, understand and utilize information and services through device-based mobile applications. Usability can be measured through the effectiveness and efficiency with which users can complete defined tasks through device-based mobile applications, i.e.:

- 1. Ensuring that websites and Web applications contain the mandatory elements described in this appendix's "Mandatory elements for device-based mobile applications" section;
- 2. Ensuring that device-based mobile applications meet the requirements for global notices described in this appendix's "Global notices" section;
- 3. Ensuring that device-based mobile applications meet the requirements for context-sensitive notices described in this appendix's "Context-sensitive notices" section;
- 4. Provides the End User Licence Agreement, or a mechanism for accessing it, in the main corporate store for each supported mobile operating system; and
- 5. Displays the notices in this appendix's "Context-sensitive notices" section where appropriate.

#### Mandatory elements for device-based mobile applications

The following elements are mandatory for each device-based mobile application:

- 1. The Government of Canada signature and the Canada Wordmark, with the following exceptions:
  - Departments identified by the Arms of Canada use the Government of Canada signature or their approved Arms of Canada signature.
  - b. Agents of Parliament are identified by their Arms of Canada signature, and are not required to display the Canada Wordmark.
  - c. Departments that have received Treasury Board approval to be identified by a symbol other than the flag symbol or the Arms of Canada use the Government of Canada signature or their approved symbol.
- 2. Mechanism for accessing the mobile application in each language in which it is available.

- 3. Descriptive application title.
- 4. Descriptive screen title for each screen of the mobile application, with the following exception:
  - a. Single-screen mobile application
- 5. Contact information.
- 6. Version identifier.
- 7. Mechanism for returning to the mobile application's home screen, with the following exceptions:
  - a. The mobile application does not have a home screen
  - b. Single-screen mobile application
- 8. Mechanism for accessing the End User Licence Agreement, which contains the notices listed in this appendix's "Global notices" section or links to those same notices.

The layout and design for Government of Canada device-based mobile applications are described in the <u>Technical</u> specifications for <u>Web and mobile presence</u>.

#### **Global notices**

The following requirements ensure that departments provide notices on their websites and Web applications that inform users about their rights, responsibilities and legal obligations, as well as those of the department providing the device-based mobile application.

<u>Sample notices</u>, referred in this appendix, are provided in the <u>Web Standards for the Government of Canada</u> section of the <u>Treasury Board of Canada Secretariat website</u>.

#### 1. Government of Canada Privacy Notice

The Privacy Notice assures users that information automatically acquired through the use of any Government of Canada device-based mobile application will not be used other than for the express purposes of maintenance, analytics and security.

One of the differences between electronic communications and paper-based communications is that it may not be obvious to the individuals involved whether personal information is being collected. The Privacy Notice must provide enough detail to allow users to understand what and how information is collected as well as when and how it will be protected in order to make an informed decision concerning whether to use the information or service.

Privacy notices must meet the requirements in the <u>Directive on Privacy Practices</u> and the <u>Standard on Privacy and Web Analytics</u>.

Departments can use the <u>sample Privacy Notice</u> or modify it to meet their needs.

#### 2. Third-Party Server Notice

The Third-Party Server Notice informs users that certain files (such as open source libraries, images and scripts) may be delivered automatically to the user's mobile device via a trusted third-party server or content delivery network in order to improve performance.

Departments can use the sample Third-Party Server Notice or modify it to meet their needs.

#### 3. Official Languages Notice

The Official Languages Notice informs users of their official languages rights when receiving services from or communicating with the Government of Canada.

The Official Languages Notice is provided for departments to use on their device-based mobile applications.

#### 4. Hyperlinking Notice

The Hyperlinking Notice informs users that links to websites and Web applications not under the control of Government of Canada, including social media platforms, are provided solely for the convenience of users. The Hyperlinking Notice must also inform users that the Government of Canada does not guarantee the accuracy, currency or reliability of content, and that the content is not subject to official languages, privacy and accessibility requirements of the Government of Canada.

Hyperlinks to websites and Web applications not under the control of the Government of Canada, including those that incorporate social media icons, do not express or imply endorsement of these products or services.

Departments can use the <u>sample Hyperlinking Notice</u> or modify it to meet their needs.

#### 5. Copyright Notices

The Copyright Notice informs users of content ownership and the conditions associated with reproduction of materials provided through Government of Canada device-based mobile applications.

The Copyright Notice is provided for departments to use on their device-based mobile applications.

#### 6. Trademark Notice

The Trademark Notice informs users that the official symbols of the Government of Canada, including the Canada Wordmark and corporate signatures incorporating the flag symbol or the Arms of Canada, cannot be reproduced for commercial or non-commercial purposes without prior <u>written authorization</u>.

The Trademark Notice is provided for departments to use on their device-based mobile applications.

#### 7. Accessibility Notice

The Accessibility Notice informs users that all efforts have been made to achieve a high level of accessibility. It also states that alternative formats can be obtained by contacting the department that provided the information or service.

The Accessibility Notice is provided for departments to use on their device-based mobile applications.

#### 8. Social Media Notice

This Social Media Notice informs users of their rights and obligations when interacting with the Government of Canada via social media, as well as what they should expect from Government of Canada social media accounts.

This Social Media Notice includes the following:

- 1. Content, communication frequency and response time expectations;
- 2. Explanation of links to other websites and to ads;
- 3. Explanation of followers, favourites or subscribers;
- 4. Comment guidance for:
  - a. Topical posts or comments;
  - b. Personal information and other protected or classified information;
  - c. Advertising, solicitation or spam;
  - d. Profanity;
  - e. Attacks; and
  - f. Discrimination on the basis of race, national or ethnic origin, colour, religion, sex, age, mental or physical disability, or sexual orientation;
- 5. Consequences for violating the commenting guidance;
- 6. A statement explaining that sharing content does not imply endorsement; and
- 7. Accessibility, copyright, privacy and official languages notices which include links to the corresponding legislation or Treasury Board or departmental policies.

Departments can use the <u>sample Social Media Notice</u> or modify it to meet their needs.

#### **Context-sensitive notices**

The following requirements ensure that departments provide context-sensitive notices that inform users about their rights, responsibilities and legal obligations, as well as those of the department providing the information or service. The following notices are available to users within the context described below.

<u>Sample notices</u>, referred in this appendix, are provided in the <u>Web Standards for the Government of Canada</u> section of the <u>Treasury Board of Canada Secretariat website</u>.

#### 1. Personal Information Collection Statement

A Personal Information Collection Statement informs users that personally identifiable information will be collected. This notice, or a link to this notice, must be prominently provided where users are requested to enter personal information. Where technology permits, users are provided with the information on how to opt-out of using functionality in which additional personal information may be collected, for example, when accessing geo-location services.

The Personal Information Collection Statement must comply with sections 6.2.9 and 6.2.10 of the <u>Directive on Privacy Practices</u> and sections 6.1.1 and 6.1.2 of the <u>Directive on Social Insurance Number</u>.

Departments can use the <u>sample Personal Information Collection Statement</u> or modify it to meet their needs.

#### 2. Third-party information liability disclaimer

A third-party information liability disclaimer, or a link to the disclaimer, is placed within each screen that includes third-party information and immediately before the third-party content that is hosted on the device-based mobile application. The disclaimer informs users that the information is not under the control of the Government of Canada and is provided solely for the convenience of users. The disclaimer must also inform users that the department does not guarantee the accuracy, currency, or reliability of content, and that the content is not subject to official languages, privacy and accessibility requirements.

Departments can use the sample third-party information liability disclaimer or modify it to meet their needs.

#### 3. Crown copyright symbol

In exceptional circumstances in which the department believes that application of the Crown copyright symbol is necessary to protect specific material on its device-based mobile application, one of the following formats is used:

- © Her Majesty the Queen in Right of Canada, [year]
- © Her Majesty the Queen in Right of Canada, as represented by the Minister of [legal name of department], [year]
- © [legal title of department], [year]

#### 4. Language Notice

Where a link is provided to a Web page that is not available in the language of the current screen, a Language Notice informs users of the language of the Web page that is being linked.

For example:

- "(French only)" is added to the end of the link text for each link on an English screen that is available only in French.
- "(anglais seulement)" is added to the end of the link text for each link on a French screen that is available only in English.

#### 5. Third-party icons

Where third-party icons are displayed to facilitate the sharing of content via social media, a disclaimer is provided indicating that no endorsement is implied or expressed.

#### **User-Centred Design**

The following requirements ensure that users can find, understand and utilize the information and services provided through device-based mobile applications with effectiveness and efficiency.

Managers, functional specialists, content owners and equivalents are responsible for ensuring that, for device-based mobile applications:

- 1. User research methods are used to define:
  - a. The users of the device-based mobile application;
  - b. The tasks the users will accomplish using the device-based mobile application; and
  - c. The contexts in which the users will use the device-based mobile application to accomplish their tasks.
- 2. The users, their tasks and the contexts in which the users accomplish their tasks form the basis for the design of the mobile application.
- 3. The device-based mobile application is designed iteratively; the design process starts with low-fidelity methods, such as mock-ups, and progressively moves to higher-fidelity methods, such as prototypes.
- 4. The design of the device-based mobile application is regularly evaluated and improved through usability testing, such as observing users completing tasks, with actual users throughout its lifecycle.
- 5. The design of the device-based mobile application takes into consideration the other service channels, such as telephone and in-person, used to obtain information and services from the Government of Canada.

## Appendix E: Interoperability requirements

Providing information and services through mobile devices is an important part of the Government of Canada's commitment to multichannel access and service delivery. As Canadians are becoming increasingly reliant upon mobile devices and data-centric technologies, the Government of Canada is committed to ensuring the reuse and the portability of information and services across applications, platforms and devices.

For the purposes of this standard, interoperability is defined as the ability of different types of platforms, devices, networks and applications to work together effectively, without prior communication, to find, retrieve, exchange and re-use content in a useful and meaningful manner.

Managers, functional specialists, and equivalents responsible for device-based mobile applications are responsible for:

- 1. Ensuring that text-based resources of device-based mobile applications, such as HTML, XML and CSS, are encoded in UTF-
- 2. Ensuring that parts of device-based mobile applications that are in HTML or XHTML:
  - a. Are built using HTML5 or later. HTML5 can also be written in XHTML syntax, known as XHTML5; and
  - b. Apply HTML5 elements and "rel attribute" values according to the HTML5 specification.

## Appendix F: Publishing requirements

Government of Canada departments offer a wide variety of informational and transactional services for individuals and businesses through multiple channels. In the case of device-based mobile applications, they are offered through the main corporate store of each supported mobile operating system. Publishing device-based mobile applications together makes it easier for users to both find and recognize Government of Canada device-based mobile applications in these main corporate stores. In addition, it will help reduce

departmental costs for publishing the device-based mobile applications.

The department mandated as the Government of Canada publishing entity is responsible for publishing all device-based mobile applications on behalf of each department, while each department is accountable for its own mobile applications.

Managers, functional specialists and equivalents responsible for device-based mobile applications are responsible for:

- 1. Ensuring that each device-based mobile application is published through the department mandated as the Government of Canada publishing entity.
- 2. Ensuring that all information required to publish to the main corporate store of each supported mobile operating system is provided to the department mandated as the Government of Canada publishing entity.
- 3. Ensuring that the life cycle for each device-based mobile application is provided to the department mandated as the Government of Canada publishing entity, including the publication, support and disposal of each version.
- 4. Ensuring that written confirmation of the following is provided by the senior departmental official to the department mandated as the Government of Canada publishing entity for each device-based mobile application:
  - a. Compliance with this standard;
  - b. Compliance with the applicable legal agreements for each supported mobile operating system and associated main corporate store;
  - c. Approval for publication to the main corporate store of each supported mobile operating system; and
  - d. Approval of the life cycle.

## Appendix G: Roll-out schedule for the Standard on Optimizing Websites and Applications for Mobile Devices

The requirements for the *Standard on Optimizing Websites and Applications for Mobile Devices* come into effect beginning on April 1, 2013, and ending on April 1, 2016. The roll-out schedule is as follows:

#### **April 1, 2013**

#### 6.1 Departments

- 6.1.2 The senior departmental official, designated by the deputy head, is responsible for the following:
  - **6.1.2.1** Approving device-based mobile application projects, before they are commissioned or funded, based on the project requirements described in <u>Appendix B</u>.
  - 6.1.2.3 Approving publication of each device-based mobile application.
  - **6.1.2.6** Ensuring that for device-based mobile applications:
    - The departmental mandate and priorities are supported;
    - The key performance indicators are defined; and
    - Metrics are collected to measure effectiveness.
  - 6.1.2.8 Encouraging departmental managers, functional specialists, and equivalents responsible for websites, Web applications and device-based mobile applications to collaborate, share expertise and build reusable components and tools, both departmentally and interdepartmentally.
- 6.1.3 The departmental Chief Information Officer or equivalent is responsible for the following:
  - 6.1.3.1 Ensuring that software and systems acquired or developed by the department can enable
    websites, Web applications and device-based mobile applications to meet the requirements of this
    standard.
  - 6.1.3.2 Encouraging personnel to collaborate, share expertise and build reusable components and tools, both departmentally and interdepartmentally.
  - 6.1.3.3 Provide support and guidance to the senior departmental official regarding implementation of this standard.
- 6.1.4 The head of communications is responsible for the following:
  - **6.1.4.1** Ensuring that goals, content owners and target audiences are identified for each of the department's device-based mobile applications.
  - **6.1.4.2** Encouraging personnel to collaborate, share expertise and build reusable components and tools, both departmentally and interdepartmentally.
- 6.1.5 Departmental Centres of Expertise, designated by the senior departmental official, are responsible for the following:
  - 6.1.5.1 Serving as the primary point of contact between Treasury Board of Canada Secretariat's Chief Information Officer Branch and their department for questions and communications related to interpretation and implementation of this standard and related guidelines and tools.
  - 6.1.5.2 Participating in and contributing to the interdepartmental Centres of Expertise forum, chaired by the Treasury Board of Canada Secretariat's Chief Information Officer Branch, to stay current with evolving Web and mobile standards, guidelines and tools.

#### September 1, 2013

#### 6.1 Departments

6.1.1 Departmental managers, functional specialists and equivalents who are responsible for websites,

#### Web applications and device-based mobile applications are responsible for the following:

- 6.1.1.1 Websites and Web applications (launched on or after September 1, 2013):
  - 6.1.1.1.1 Ensuring that websites and Web applications are optimized for mobile devices
    according to the requirements described in the <u>Technical Specifications for the Web
    and Mobile Presence</u>.
  - **6.1.1.1.2** Ensuring that websites and Web applications meet the requirements described in the *Technical Specifications for the Web and Mobile Presence*.
- 6.1.1.2 Device-based mobile applications (launched on or after September 1, 2013):
  - 6.1.1.2.1 Ensuring that device-based mobile applications are not the sole means of
    providing information or service. Device-based mobile applications must be provided
    only to enhance information and services available through Government of Canada
    websites and Web applications.
  - 6.1.1.2.2 Ensuring that device-based mobile application projects meet the project requirements described in Appendix B.
  - **6.1.1.2.3** Ensuring that device-based mobile applications meet the accessibility requirements described in <u>Appendix C</u>.
  - **6.1.1.2.4** Ensuring that device-based mobile applications meet the usability requirements described in <u>Appendix D</u>.
  - **6.1.1.2.5** Ensuring that device-based mobile applications meet the interoperability requirements described in <u>Appendix E</u>.
  - **6.1.1.2.7** Ensuring that device-based mobile applications meet the requirements described in the *Technical Specifications for the Web and Mobile Presence*.

#### **January 1, 2014**

#### 6.1 Departments

- 6.1.1 Departmental managers, functional specialists and equivalents who are responsible for websites,
   Web applications and device-based mobile applications are responsible for the following:
  - 6.1.1.2 Device-based mobile applications (launched on or after September 1, 2013):
    - **6.1.1.2.6** Ensuring that the publication of device-based mobile applications meets the publishing requirements described in <u>Appendix F</u>.
- 6.1.2 The senior departmental official, designated by the deputy head, is responsible for the following:
  - 6.1.2.2 Providing relevant information about each approved device-based mobile application project to
    the department that has been mandated as the Government of Canada publishing entity, including the
    title, a brief description, the anticipated testing and publishing dates as well as any other required
    information.
  - 6.1.2.4 Outsourcing the publication and retirement of device-based mobile applications to the Government of Canada publishing entity.
  - **6.1.2.5** Providing written approval for publication to the department mandated as the Government of Canada publishing entity. Written approval must include confirmation of the following:
    - Compliance with this standard;
    - Compliance with all the required legal agreements for each supported mobile operating system and associated main corporate store, including applicable legal agreements; and
    - Approval of the life cycle.

#### 6.3 Department mandated as the Government of Canada publishing entity

- 6.3.1The senior departmental official, designated by the deputy head, or delegate is responsible for the following:
  - 6.3.1.1 Managing the process for publishing and retiring Government of Canada device-based mobile
    applications through the centralized Government of Canada account for the main corporate store of
    each supported mobile operating system, including entering into applicable legal agreements.
  - **6.3.1.2** Independent testing of Government of Canada device-based mobile applications.
  - 6.3.1.3 Maintaining an inventory of active device-based mobile application projects approved by senior departmental officials, including the title, brief description and anticipated testing and publishing dates.
  - 6.3.1.4 Maintaining an inventory of published Government of Canada device-based mobile
    applications, including confirmations of compliance with this standard, compliance with applicable legal
    agreements, and the information required to publish to the main corporate store of each supported
    mobile operating system.
  - 6.3.1.5 Publishing the inventory of active device-based mobile application projects on the Government of Canada Publiservice site.
  - **6.3.1.6** Publishing on the Government of Canada website a list of links to public-facing Government of Canada:
    - Websites and Web applications optimized for mobile devices; and
    - Device-based mobile applications.
  - **6.3.1.7** Publishing on the Government of Canada website a list of mobile operating systems that can be supported at a maximum as per <a href="Appendix B requirement 1">Appendix B requirement 1</a>.
  - 6.3.1.8 Reviewing and communicating, in consultation with legal services, any updates to applicable

- legal agreements for each supported mobile operating system and the associated main corporate stores.
- **6.3.1.9** Being the conduit for addressing issues or questions between departments and the main corporate store for each supported mobile operating system.
- 6.3.1.10 Providing departments with or facilitating access to analytics regarding their device-based mobile applications, based on data from the main corporate store of each supported mobile operating system.
- 6.3.1.11 Collaborating, sharing expertise, and building reusable components and tools interdepartmentally.
- 6.3.1.12 Developing and providing to departments a <u>Service Agreement</u> for the responsibilities identified in this section.

#### July 1, 2014

#### 6.1 Departments

- 6.1.2 The senior departmental official, designated by the deputy head, is responsible for the following:
  - 6.1.2.7 Outsourcing the design, development and maintenance of device-based mobile applications to the departments identified as Government of Canada Centres of Expertise on Mobile or external service providers, with the exception of device-based mobile applications with secure logins.

#### 6.2 Departments identified as Government of Canada Centres of Expertise on Mobile

- 6.2.1 The senior departmental official, designated by the deputy head, or delegate is responsible for the following:
  - 6.2.1.1 Facilitating design, development, testing and maintenance of device-based mobile applications on behalf of departments.
  - 6.2.1.2 Collaborating, sharing expertise, and building reusable components and tools interdepartmentally.
  - 6.2.1.3 Developing and providing to departments a <u>Service Agreement</u> for the responsibilities identified in this section.

#### **April 1, 2016**

#### 6.1 Departments

- 6.1.1 Departmental managers, functional specialists, and equivalents who are responsible for websites, Web applications and device-based mobile applications are responsible for the following:
  - 6.1.1.1 Websites and Web applications (all):
    - 6.1.1.1 Ensuring that websites and Web applications are optimized for mobile devices
      according to the requirements described in the <u>Technical Specifications for the Web</u>
      and Mobile Presence.
    - **6.1.1.1.2** Ensuring that websites and Web applications meet the requirements described in the <u>Technical Specifications for the Web and Mobile Presence</u>.
  - 6.1.2 Device-based mobile applications (all):
    - 6.1.1.2.1 Ensuring that device-based mobile applications are not the sole means of
      providing any particular information or service. Device-based mobile applications must
      be provided only to enhance information and services available through Government of
      Canada websites and Web applications.
    - **6.1.1.2.2** Ensuring that device-based mobile application projects meet the project requirements described in <u>Appendix B</u>.
    - 6.1.1.2.3 Ensuring that device-based mobile applications meet the accessibility requirements described in <u>Appendix C</u>.
    - 6.1.1.2.4 Ensuring that device-based mobile applications meet the usability requirements described in <u>Appendix D</u>.
    - 6.1.1.2.5 Ensuring that device-based mobile applications meet the interoperability requirements described in <u>Appendix E</u>.
    - **6.1.1.2.6** Ensuring that the publication of device-based mobile applications meets the publishing requirements described in <u>Appendix F</u>.
    - **6.1.1.2.7** Ensuring that device-based mobile applications meet the requirements described in the *Technical Specifications for the Web and Mobile Presence*.