

Request for Information

TITLE: Gamification - Digital learning game for David Saint-Jacques's mission

1. Purpose and nature of the Request for Information (RFI)

The Canadian Space Agency (CSA) is informing the software, game and education sectors of the Government of Canada's possible intent to launch a Request for Proposal (RFP) to create a youth-oriented digital learning game (gamified learning product) as part of David Saint-Jacques's mission to the International Space Station (ISS).

The objectives of the RFI are as follows:

- To inform the interested industry suppliers of the posting date for a potential RFP;
- To inform the interested industry suppliers of the scope of the work proposed (Appendix A);
- To engage industry suppliers to suggest new ideas and concepts that would be compatible with the objective of the requirement (Appendix B);
- Seek industry ideas of potential solutions to reduce development timelines and costs;
- Collect information and factors to be considered in a potential RFP; and
- Collect information regarding preliminary cost estimates.

This RFI is neither a call for tender nor an RFP. No agreement or contract will be entered into further to this RFI. The issuance of this RFI must not be considered, in any way, as a commitment by the Government of Canada or as an authority to potential respondents to undertake any work that could be charged to Canada. This RFI must not be considered as a commitment to issue a call-up or award contracts for the work described herein. It is important to note that some of the information provided in this RFI may be amended, in part or in whole, or removed prior to the official publication of a potential RFP. Finally, this RFI must not be considered as a commitment with regard to any part of the scope of work described.

Although the information collected may be provided as commercial-in-confidence (and, if identified as such, will be treated accordingly by Canada), Canada may use the information to assist in drafting performance specifications (which are subject to change) and for budgetary purposes.

Respondents are encouraged to identify, in the information they share with Canada, any information that they feel is proprietary, third party or personal in nature. Please note that Canada may be obligated by law (e.g. in response to a request under the *Access of Information and Privacy Act*) to disclose proprietary or commercially-sensitive information about a respondent (for more information: <http://laws-lois.justice.gc.ca/eng/acts/a-1/>).

Respondents are asked to identify if their response, or any part of their response, is subject to the Controlled Goods Regulations.

Respondents will not be reimbursed for any costs incurred by participating in this RFI.

2. Context

Canadian astronaut David Saint-Jacques has been assigned to a mission aboard ISS from November 2018 to May 2019 (dates could change slightly). During his time in space, the astronaut will conduct a series of science experiments, robotic tasks and technology demonstrations. The CSA wants to use David Saint-Jacques's mission to inspire youth to consider STEM-related careers (science, technology, engineering, mathematics).

3. Potential work scope and constraints

As part of this objective, the CSA has identified different key activities and projects for the mission. One of these projects involves an accessible interactive digital game (gamified learning product) that engages youth in space science and technology and inspires them to pursue studies in STEM.

Respondents are asked to provide feedback (using Appendix B) on the information contained in this RFI and in Appendix A. It is important to note that these descriptions may be subject to change, in part or in whole, prior to the official publication of the RFP.

Responses will not be subject to a formal assessment. However, they could be used in the preparation of a potential RFP. Respondents shall take care to provide a contact person and accurate contact information. While no additional exchange on the response in question should be expected, clarification may be requested, as needed.

4. Trade agreements and government policies

Trade agreements and government policies that could impact a potential RFP:

- Trade agreements do not apply;
- The Canadian Content Policy will apply;
- The Controlled Goods Program could apply;
- The Federal Contractors Program for Employment Equity (FCPEE) will apply; and
- The Comprehensive Land Claim Agreements (CLCA) will not apply.

5. Schedule

Publication of the RFP

- For guidance purposes only, the publication of the RFP on the Government Electronic Tendering Service is currently planned for late fall 2017. It should be noted that several factors may influence this date or could lead to the publication being cancelled.

Industry suppliers with gamification experience

- In order to process the information submitted and for it to be considered in the drafting of the RFP, responses must be received by the closing date as published in Article 7.

6. Important notes to respondents:

Interested respondents may submit their responses to the Canadian Space Agency (CSA) contracting authority identified below, preferably via email. However, paper versions will also be considered.

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Changes to this RFI may be made and will be posted on the Government Electronic Tendering Service. Canada asks respondents to visit Buyandsell.gc.ca regularly to check for changes, if any.

7. RFI closing date

Responses to this RFI should be received by the CSA contracting authority identified above no later than October 31st, 2017.

The purpose of the RFI closing date is to ensure that the comments received can be processed. Comments will be accepted until the RFP is published (where relevant); however, due to the scheduled posting date for this RFP, late comments may not be fully considered.

APPENDIX A. DRAFT STATEMENT OF WORK

1. TITLE

Gamification - Digital Learning Game for David Saint-Jacques's Upcoming Mission

BACKGROUND

The Canadian Space Agency (CSA) was established in 1989 by the *Canadian Space Agency Act*. The Agency partners with government, industry, university and international organizations to meet citizens' evolving needs.

Canadian astronaut David Saint-Jacques has been assigned to a mission aboard the International Space Station (ISS). During his time in space, the astronaut will conduct a series of science experiments, robotic tasks, technology demonstrations and regular daily activities. The CSA wants to engage young Canadians in this space mission and inspire them to consider STEM-related careers (science, technology, engineering, mathematics).

OBJECTIVE

The CSA seeks to identify a contractor to create an accessible interactive digital game (gamified learning product) that engages youth in space science and technology.

TARGET AUDIENCE

The game is mainly geared toward children aged 8–12 and their families, with a secondary focus on educators.

SCOPE OF WORK / TASKS

The digital learning game shall be focused on the theme of an astronaut mission that takes place aboard the ISS. Players should be able to:

- build a personalized avatar for the game or select a pre-designed avatar;
- select a STEM-related career path or a role (e.g. astronaut, scientist, mission controller) or get involved with different STEM-related careers during the game;

- complete different tasks (e.g. conduct a science experiment, repair the ISS water filtration system, do a spacewalk, conduct robotics operations, talk with mission control, prepare a meal, take pictures of the Earth);
- complete each mission by testing their knowledge in STEM-related fields at a level appropriate for their age, get feedback for each question and obtain certificates/diplomas/badges/points (progress mechanics) when they succeed; and
- have access to “secret levels” (special/fun activities) during the game.

The contractor must also meet the following technical requirements:

- The game should be available on Web-based and mobile (Apple and Android) platforms;
- The game must be available in both English and French;
- The game should provide instructions on how to play;
- The game should provide the possibility to replay;
- The platform should deliver, enable and support the functionality to manage usernames and passwords, provide forgotten passwords recovery, provide a timed lock-out function after a configurable number of failed login attempts and provide an automatic logoff after a configurable period of inactivity;
- The game should have been pretested before it is officially launched;
- The contractor should provide a solution where the game would either be hosted on a Government of Canada server or cloud (specify the technology required, the cost for acquisition and annual charges) or the contractor server or cloud (specify the cost for acquisition and annual charges);
- The contractor should provide a list of annual maintenance items and charges to keep the game up to date (on-going troubleshooting, support and maintenance as well as offer post-launch content changes);
- The contractor should deliver usage analysis and reports to the CSA on a monthly basis to demonstrate individual learning experiences and provide management level information on usage statistics and performance of learners. The specific statistics we wish to track should include, but are not limited to:
 - Number of active users per day/month
 - Group age of active users
 - Amount of time (minutes) played per user
 - Average amount of time spent for all users
 - Number of questions answered per user
 - Number of questions correct

- Average percentage of questions correct;
- The game should be developed with an open source code and follow the specifications for an [Open Government Licence - Canada](#); and
- The intellectual property of the game and its components (e.g. source code) will belong to the CSA.

SUPPORT FROM THE CSA

The CSA will provide the contractor with relevant background information and access to data, if required. Every attempt will be made, throughout the course of the contract, to provide additional information requested by the contractor, if deemed relevant to the project. In addition, the CSA will be available to respond to inquiries from the contractor.

The CSA will provide the contractor with specific instructions on each milestone of the project, including:

- ✓ work to be done;
- ✓ objectives and desired outcomes;
- ✓ relevant and necessary information;
- ✓ deliverables expected; and
- ✓ timelines.

WORK LOCATION

The contractor is responsible for finding a location/office to work on the project.

The contractor will also have meetings with the CSA, either by teleconference or in person at the CSA office.

TRAVEL

If travel is required, the contractor shall be reimbursed for travel and living expenses as per the [National Joint Council's Travel Directive](#). A contractor that is located in the Greater Montreal Area shall not be reimbursed for travel to/from/within this region.

SCHEDULE

The digital learning game should be ready for David Saint-Jacques's mission in November 2018. A precise schedule with milestones will be created and discussed with the contractor.

APPENDIX B. RFI Feedback Form

Respondents to this RFI are encouraged to provide feedback by completing this form. Any other information, deemed relevant by the respondent, may be attached to this form.

Name of organization:

Contact (name, address, phone, email):

Description of the proposed concept of the game (1–2 pages):

Technology used to develop the game:

Development schedule of the game:

Hosted solution, technology required and costs:

Conditions, ideas and suggestions for reducing delivery timeline:

Conditions, ideas and suggestions for reducing costs:

Other feedback (if any):

Cost of the development and maintenance of the game (fixed cost pricing):

ITEM	UNIT	FIXED COST
1. Hosting the game: specify which solution you chose (Government of Canada server/cloud or the contractor server/cloud).	Per year	
2. Development of the game (see Appendix A, scope of work / tasks for details).	Per game	
3. Delivery of usage analysis and reports to the CSA on a monthly basis (see Appendix A, scope of work / tasks for details).	Per year	

4. Provision of on-going troubleshooting, support and maintenance.	Per year	
5. Post-launch content changes.	Per Question? Word? Game? Activity? Hourly?	
