



Canada Revenue  
Agency

Agence du revenu du  
Canada

**REQUEST FOR INFORMATION (RFI)**

**NO. 1000404910**

**DECISION MANAGEMENT SUITE SOLUTION  
FOR THE CANADA REVENUE AGENCY**

Closing date and time : July 13, 2022, 2:00 PM (EDT)

## **DISCLAIMER**

Responding to this Request for Information (RFI) is not a prerequisite to receiving or being eligible to bid on any Request for Proposal (RFP) for this requirement. Any RFP will be advertised on the Government Electronic Tendering Service (GETS) commonly referred to as Buy and Sell (<https://buyandsell.gc.ca/>).

This RFI is not to be construed as a solicitation for tenders or proposals. No contract or other form of commitment will be entered into based on responses to this RFI. This RFI is not considered as authorization by the Canada Revenue Agency (CRA) to undertake any work that would result in costs to CRA.

Nothing in this RFI shall be construed as a commitment from CRA to issue an RFP for this program. CRA may use non-proprietary information provided in its review and/or in the preparation of any formal RFP. All responses will be held by CRA on a confidential basis (subject to applicable federal legislation) and remain the property of CRA once they have been received.

CRA may reproduce or photocopy or transcribe the response and any non-proprietary supporting documentation for the purpose of its review and/or inclusion in any resulting RFP document. Vendors responding to this RFI are advised to clearly identify which (if any) portions of their responses are proprietary and may be invited to a meeting to further clarify their responses to questions provided in Appendix A and B herein.

CRA shall not be bound by anything stated herein. CRA reserves the right to change, at any time, any or all parts of the requirements, as it deems necessary. CRA also reserves the right to revise its procurement approach, as it considers appropriate, either based upon information submitted in response to this RFI or for any other reason it deems appropriate.

Responses to this RFI will not be used to pre-qualify or otherwise restrict participation in any future procurement process (e.g. an RFP). Responses will not be formally evaluated.

CRA will not reimburse any expenditure incurred in preparing responses and participating in the presentation sessions related to this RFI.

## **Interactive Demonstration Sessions**

CRA may at its sole discretion entertain presentations/demonstrations with interested respondents who have clearly addressed the Solution Requirements in their response to CRA to provide them with the opportunity for a follow-up to their written response to present their capabilities in relation to this RFI.

Respondents may be contacted within 20 business days of the RFI closing date to schedule the presentations/demonstrations. Specific questions or areas of interest to be covered during the session may also be provided and will be based on responses received.

Presentations/demonstrations will be virtual utilizing MS Team.

The time frame allocated for each session will be a maximum of 2 hours.

Respondents must be familiar with the services capabilities to respond to questions at the presentation/demonstration session.

### **Responses and Enquiries**

Responses for questions must be submitted complete and in writing in the order shown. All requests for information in all sections of this document must be answered as concisely as possible while providing all information necessary to understand the proposed solution. Any deviation from the question or requirements that cannot be satisfied by the vendor, must be clearly identified.

Any information of a confidential or proprietary nature contained in a Vendor's response should be clearly marked 'PROPRIETARY' or 'CONFIDENTIAL' by item or at the top of each page.

The Vendor must provide a contact name, email address and telephone number when submitting their response.

Respondents are requested to submit responses by 2:00PM Eastern Daylight Time (EDT), July 13, 2022. Responses received after this date/time will not be reviewed.

**Electronic submissions are mandatory and should be submitted as one complete package.**

Vendors are requested to submit responses to this RFI using the following e-mail:

E-mail: [fouad.elmellouhi@cra-arc.gc.ca](mailto:fouad.elmellouhi@cra-arc.gc.ca)

All enquiries must be submitted via email to the attention of Fouad Elmellouhi at [fouad.elmellouhi@cra-arc.gc.ca](mailto:fouad.elmellouhi@cra-arc.gc.ca)

## CONTEXT

### Introduction

The Canada Revenue Agency (CRA) seeks to modernize its GST/HST risk assessment platform. One of the core components of the project is a requirement for a Decision Management Suite solution that can support the design and creation of business decisions from inception through deployment and execution.

The purpose of this Request for Information (RFI) is to gather information on industry capabilities and availability of Decision Management Suite solutions.

### The key objectives of the RFI include:

1. Determine vendor capabilities in providing a Decision Management Suite solution that can meet CRA's requirements.
2. Help CRA understand industry standards, best practices, and/or recommendations in terms of using Decision Management Suites in a public service environment.
3. Get a better understanding of the current and future trends of Decision Management Suite solutions.
4. Provide an opportunity for industry to demonstrate and discuss its software functionalities, capabilities, and constraints.
5. Solicit feedback on options for integrating the solution with different platforms and systems.
6. Explain the cost structure breakdown regarding licensing, maintenance and support, growth, and renewal of your solution. Do not include actual license pricing. (ex.: per location, per month, per shipment, etc.) Is the pricing scalable (ex.: discounts based on number of hardware/licenses/sites)?
7. Solicit feedback on the cost structure, schedule, level of effort, hardware requirements and technical architecture.
8. Vendors who establish via their response to the RFI how their products(s) meet the solution requirements may be invited to provide an interactive demonstration and discuss in detail how their solutions meet the listed requirements.

### Background Information

The Canada Revenue Agency aims to identify and, where possible, stop the payment of unwarranted GST/HST refunds. This initiative is expected to modernize the risk assessment of GST/HST returns by implementing near-real-time data replication software for risk assessment as returns are filed. This will permit the deployment of complex risk models that use all of the available data and identify the riskiest accounts and refund claims in near real time without compromising the continuous processing of GST/HST and Income Tax returns.

## Requirements

1. Ability to author decisions using graphical components (i.e. drag and drop, flows, diagramming, etc.)
2. Ability to author decisions with freeform rules-logic creation with out of the box rule language
3. Ability to re-use decision elements to create more complex decisions
4. Support for multiple decision building methods like Decision Tables, Decision Trees, Decision Requirements Diagrams or Flows, Rule Chaining, etc.
5. Contextual IDE help, user guides, administration guides, tutorials, samples, best practices
6. Strong management and organization of large number of decisions
7. Handle high volume of decisions with low latency for real-time decision-making
8. Integration with external routines like Machine Learning models
9. Detailed rule validation, debugging, and tracing
10. Full search capabilities on decisions, including metadata such as who or when the element was last modified
11. Robust centralized repository with version management
12. Governance and release management that supports development, testing, and production states including rollback to previous versions or point in time
13. Manage data from a wide variety of sources like tables, files, etc.
14. Auditable and explainable decision results with a wide variety of key performance indicators via dashboards and alerts
15. Able to support high availability and fault tolerance configurations
16. Role-based access to manage users, groups, custom permissions to administrative functions, release management, and access levels for decisions

## Potential Use Cases:

Describe how your solution can be used to implement the following use cases:

- Author a Decision containing many rules, sub-decisions, or multi-stage decision flows
- Author a Decision that integrates with Machine Learning models
- Move a Decision through the lifecycle from authoring to deployment by business experts
- Audit a Decision to explain the results and the logging process
- Display key performance indicators via alerts or dashboard when a Decision deviates from expected parameters

## **Constraints to be considered for the proposed solution**

**Official Languages** - Must meet the Government of Canada standard under the Official Languages Act (accessible via the following hyperlink <http://laws-lois.justice.gc.ca/eng/acts/o-3.01/>).

Specifically – user interfaces, functionality and documentation in English and French.

**Accessibility** – Must meet the Government of Canada standard under the Accessible Canada Act (accessible via the following hyperlink <https://laws-lois.justice.gc.ca/eng/acts/A-0.6/>).

To accomplish this, the CRA has adopted the [EN 301 549 V2.1.2 \(2018-08\) Harmonised European Standard](#) for internally facing Information and Communication Technology (ICT) products and services and the [Web Content Accessibility Guidelines \(WCAG\) 2.0 Level AA](#) for externally facing ICT products and services. Additionally, the CRA's goal is for products and services to be more accessible to and more usable by the broadest range of government officials and Canadians who use them, including those with disabilities. As such, the CRA is planning to adopt the [EN 301 549 V2.1.2 \(2018-08\) Harmonised European Standard](#), which includes the latest version of the Web Content Accessibility Guidelines (WCAG) 2.1 AA (2018), for externally facing ICT products and services as well by March 2021 (final date subject to change).

**Privacy** - Must meet the Government of Canada standard under the Privacy Act (accessible via the following hyperlink <http://laws-lois.justice.gc.ca/eng/acts/p-21/>).

**User access** – Must support limiting user access (user profiles) and configuration.

### **RFI Questions:**

**Responders are required to answer RFI questions in Appendix A and B .**

## Appendix A – General Questions

The following questions are representative of the type of information the CRA is seeking as it considers how to structure any RFP that might follow this RFI process.

Vendors must note that this list of questions is not exhaustive; vendors are invited to provide any additional information that might prove useful and/or beneficial to the CRA in preparing any subsequent RFP.

| <b>A.1 – General Information</b>                  |   |
|---|---|
| <b>A.1.1</b>                                      | Describe how your solution meets the Government of Canada standard under the Official Languages Act (accessible via the following hyperlink <a href="http://laws-lois.justice.gc.ca/eng/acts/o-3.01/">http://laws-lois.justice.gc.ca/eng/acts/o-3.01/</a> ). Specifically, describe in what capacity your solution provides user interface functionality and documentation in English and French. |
| <b>A.1.2</b>                                      | Describe how your solution meets the Government of Canada standard under the Accessible Canada Act (accessible via the following hyperlink <a href="https://laws-lois.justice.gc.ca/eng/acts/A-0.6/">https://laws-lois.justice.gc.ca/eng/acts/A-0.6/</a> ).   |
| <b>A.1.3</b>                                      | Describe how your solution meets the Government of Canada standard under the Privacy Act (accessible via the following hyperlink <a href="http://laws-lois.justice.gc.ca/eng/acts/p-21/">http://laws-lois.justice.gc.ca/eng/acts/p-21/</a> ).   |
| <b>A.1.4</b>                                      | Provide two examples where your solution was implemented. Include implementation time, common success factors, and obstacles in standardizing this solution.  |
| <b>A.2 – Licensing</b>                            |   |
| <b>A.2.1</b>                                      | What are the available licensing models, including maintenance and support models?  |
| <b>A.2.2</b>                                      | How is your solution's price constructed? (e.g. site licences, concurrent users, etc.)  |
| <b>A.3 – Training, Documentation, and Support</b> |   |
| <b>A.3.1</b>                                      | Indicate and describe the type of technical documentation do you provide for your application (e.g. white paper, installation and configuration instruction, release notes, user guides, etc.)?   |
| <b>A.3.2</b>                                      | Describe the different types of training you provide for this type of solution.   |
| <b>A.3.3</b>                                      | Do you offer standard and customized training?  |
| <b>A.4 – Deployment and Technical Support</b>     |   |
| <b>A.4.1</b>                                      | Describe your release schedule, including major and minor enhancements of your software. How often do you release software updates? How does the upgrade impact the implementation of existing services?  |
| <b>A.4.2</b>                                      | Does your solution include 3rd party or open source software? If so, please list them.  |
| <b>A.4.3</b>                                      | Describe the activities and the type/level of expertise required to maintain the solution on an on-going basis.   |
| <b>A.4.4</b>                                      | Describe your maintenance and support offerings (e.g. pre-deployment, post-deployment, consulting, after-hours support, 7/24 on-call support, etc.)   |

| <b>A.5 – Functional</b> |  |
|-------------------------|--|
| <b>A.5.1</b>            | Describe what functional components are included in the base solution and what additional components are available.  |
| <b>A.5.2</b>            | Is there any customization required before the system is operational. Can this be done by a customer or does it require vendor setup?                            |
| <b>A.5.3</b>            | Describe any special supporting IT infrastructure, capacity, or environmental dependencies required by your solution.  |
| <b>A.5.4</b>            | Presuming the necessary IT infrastructure was already in place, how long would it take to install your solution, configure it, and make it ready for production? |



## Appendix B – Technical Questions

The following questions are representative of the type of information the CRA is seeking as it considers how to structure any RFP that might follow this RFI process.

Vendors must note that this list of questions is not exhaustive; vendors are invited to provide any additional information that might prove useful and/or beneficial to the CRA in preparing any subsequent RFP.

| <b>B.1 – General Technical Questions</b> |  |
|--|--|
| <b>B.1.1</b>                             | List and describe all the features and components that comprise your solution. Which open source and proprietary protocols, data formats are supported by your solution?   |
| <b>B.1.2</b>                             | Describe the architecture of your solution including components that need to be deployed to author decisions, store decisions, govern deployment options, manage DEV/TEST/PROD states, execute decisions, and monitor decisions. |
| <b>B.1.3</b>                             | Describe different backup, recovery, and fault tolerance options available in your solution. In case of failure, how fast and easy is it to get the system back in production?   |
| <b>B.1.4</b>                             | Does your solution support a cloud and/or hybrid implementation? How does it integrate with on premise legacy systems? Describe any clustering, high availability, or scalability features of your solution.                     |
| <b>B.1.5</b>                             | Describe any dashboard capabilities for monitoring and reporting key performance indicators.   |
| <b>B.1.6</b>                             | List the various deployment platforms supported by your platform.  |
| <b>B.1.7</b>                             | Describe how your platform can scale to meet higher volumes of decisions for real-time decision-making.  |
| <b>B.1.8</b>                             | Does your platform integrate with or provide any method of handling event stream processing?   |
| <b>B.2 – Decisions</b>                   |  |
| <b>B.2.1</b>                             | Describe any out of the box rule language supported by your solution. Is Decision Model and Notation supported?  |
| <b>B.2.2</b>                             | Can decisions be authored solely via visual builders? Provide details  |
| <b>B.2.3</b>                             | Describe how decisions are being stored, searched, categorized and archived for the purpose of tracking, auditing, and reporting.  |
| <b>B.2.4</b>                             | Describe the validations that can be applied by your solution to decisions throughout the life cycle.  |
| <b>B.2.5</b>                             | Describe how your solution handles data transformation and mapping between different data formats.   |

|                                   |  |
|-----------------------------------|--|
| <b>B.2.6</b>                      | Describe the various methods of triggering the execution of the decisions within your solution.  |
| <b>B.2.7</b>                      | Describe your solution's logging capability for debugging and auditing purposes.                 |
| <b>B.3 – Security &amp; Audit</b> |  |
| <b>B.3.1</b>                      | Describe your solution's security features in detail.  |
| <b>B.3.2</b>                      | Describe your solution's authentication and authorization options.                               |
| <b>B.3.3</b>                      | Explain how your solution can integrate with existing authentication and authorization systems.  |
| <b>B.3.4</b>                      | Describe how security patches and fixes are implemented on your solutions.                       |
| <b>B.3.5</b>                      | Provide all available Security certifications and assessments for the proposed solution, if any. |