SHARED SERVICES CANADA

Challenge-Based Solicitation (CBS)

For Discoverable and Trusted Data Assets in Support of Decision Making

	Solicitation No.	2BM067557	Date	June 24, 2020
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Issuing Office	Shared Services Canada 180 Kent Street, 13 th Floor Ottawa, Ontario K1P 0B5			
Contracting Authority (The Contracting Authority is the	Title	Procurement Team Leader, Procurement Directorate		
contact for all aspects of the procurement process, including	Telephone No.	(343) 571-0228		
questions and comments about this document)	Email Address	ssc.coeaip-ceaan.spc@canada.ca		
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Closing Date and Time	July 24, 2020 at 15:00 EDT			
Time Zone	EDT			
Destination of Goods/Services	Ottawa, Canada			

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ATTACHMENT 3 - FINANCIAL BID FORM (PROVIDED AS A DISTINCT DOCUMENT)

ATTACHMENT 4 - TECHNICAL BID FORM (this form is not to be provided at bid closing)

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ANNEX A - STATEMENT OF CHALLENGE (SOC)

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PART 1 - GENERAL INFORMATION

The Center of Expertise in Agile and Innovative Procurement (CoEAIP) is currently piloting a renewed contracting framework: Procurement Process 3.0 (PP3.0). PP3.0 proposes tools and flexible contracting mechanisms to improve the ability of Canada to move quicker and produce better results leveraging the procurement function. This challenge-based solicitation is one of pilot of the CoEAIP.

1.1 Requirements

Shared Services Canada (SSC) stands to be a key enabler of the Government of Canada (GC) digital agenda with a unique dual role; offering IT services and infrastructure across the GC to support the Data Strategy and digital transformation, while offering those same services internally to the department.

Coincidentally, the digital agenda is also producing increased service delivery pressure for SSC as partner departments all embark on digital modernization at once: federal departments are not only procuring but they are also innovating with technology at a rapid rate. This modernization is creating infrastructural demands within individual departments resulting in downstream response pressure for SSC. The realities of a digital environment produce high needs/high demands coming from all 43 partner departments where the expectation will be for SSC to reply with speed and agility.

It is in this context that SSC faces a fundamental challenge. Due to reasons including fragmented business processes, siloed data management practices and widely distributed systems, its decision makers face significant impediments in fully leveraging data in decision-making, thereby fuelling continued reliance on tribal knowledge.

While SSC is actively working on all components of the above-mentioned challenge, the following business problem is foundational to its data-driven agenda: SSC data consumers do not know what data is available, where it resides, what it means, who governs it, and whether it can be trusted (i.e. complete, accurate, consistent, valid, with known source of origin and clear definition.) As long as the full offering of SSC data remain little known assets, SSC cannot position itself to leverage data in its service improvement agenda.

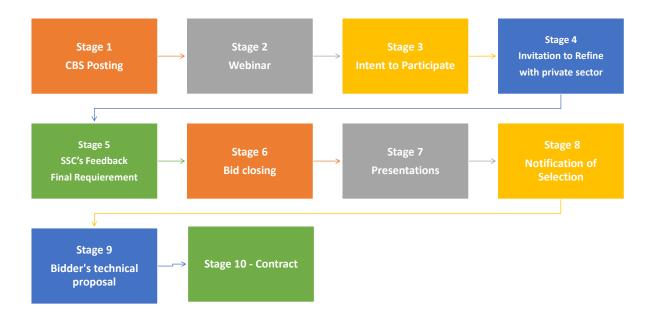
Three critical issues have been defined with a mandate to resolve:

- 1. Business vocabulary within SSC is varied resulting in inconsistent representation of data in reporting products
- 2. An inability to identify where authoritative data lie within the department and who governs this data
- 3. Data gaps exist for key business processes and are not being incorporated into authoritative systems resulting in the creation of non-authoritative sources (i.e. black books)

With the mandate to resolve these challenges, SSC seeks a solution enabling users to find, understand and explore the SSC data assets via metadata management capability. As such, the objective of this procurement process is to secure a solution to house SSC's Business Glossary and support metadata management as a capability. A successful procurement process will enable resolution of the challenge identified above.

1.2 Procurement Process

The following are the key Stages of the procurement process. Details could be found in upcoming sections.



Stage 1- CBS Posting: In comparison to a traditional procurement, where the requirement is fully defined, this solicitation discloses the requirement as problem statements, challenges, and minimal requirements and invites Bidders to propose Solution(s) to resolve them. In the Statement of Challenges (SOC), Bidders will find details about those elements.

Stage 2 – Webinar: During the webinar Canada will provide an overview of the approach and collect feedback from the private sector on the proposed procurement process and evaluation framework.

Stage 3 – Intent to Participate: Bidders will confirm their intention to participate to the Invitation to Refine session. If the number of Bidders that expressed intent to participate exceeds 10, Canada reserves the right to use the screening to identify the Bidders who will be invited to refine. In such case, the screening process will be established through a formal clarification/ amendment to the CBS.

Stage 4 - Invitation to Refine

Bidders will be invited to provide feedback on the problems statements, challenges and minimal requirements. The participation to the Stage 4 is not mandatory to submit a bid but is highly recommended. Bidders will also be invited to make virtual presentations and interact with endusers of the solution.

Stage 5 - Final Requirement

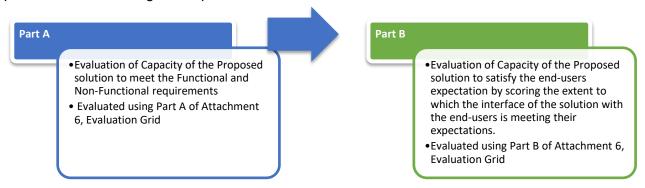
Based on feedback received, Canada will issue an amendment to the solicitation (if required). Canada will also provide feedback on all presentations and the demonstrated capacity of the solution to adjust to the unique Canada context.

Stage 6 - Bid Closing

Bidders will submit their bids. Unlike a traditional solicitation, Bidders are not asked to provide a comprehensive written technical bid at Stage 6. Refer to Instruction to Bidders, Part 2 and 3.

Stage 7 – Presentation

Bidders that comply with the mandatory procedural requirements will be invited to make a presentation consisting of two parts as follows:



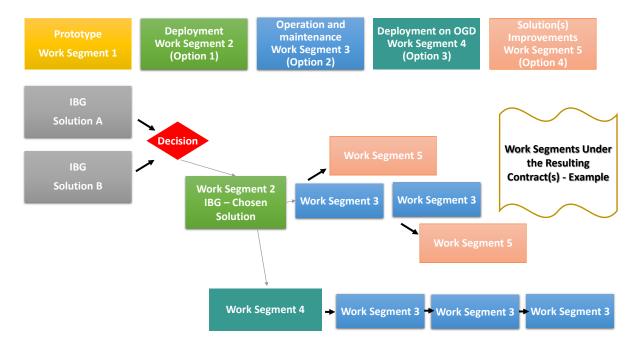
Stage 8 - Notification of Selection

Based on the results of the selection process (further defined in sections 3 and 4), the highest ranked Bidders will be notified of Canada's intent to proceed with contract award(s).

Stage 9 - Bidder's Technical Bid

Bidders notified in Stage 8 will be invited to submit their technical bid, in accordance with the form in Attachment 4, describing in writing the elements demonstrated in Stage 7 as well as any additional requirements the Bidder feels are needed in order to resolve the problem(s).

Stage 10 - Contract Award - Prototypes



1.3 Prototypes

Canada expects to award multiple option-based contracts to prototype the selected solutions in parallel. The duration of the prototype stage is 3 months. The maximum contract value for Stage 10 is CAD \$25,000.

1.4 Assessment of Corporate Capability

During Stage 10, Canada may request information to verify a Bidder's fiduciary capacity to deploy its solution in full on the Canada environment and possibly on other government department systems.

1.5 Choice of the solution to be deployed

Based on the results of the solutions prototyped by the selected Bidders, Canada will make the choice of the solution(s) to be deployed in full on Canada systems. The parameters that will be considered by Canada to choose the solution(s) to be deployed are defined in the SOC.

Option 1 - Deployment on Canada environment

If the results of the prototypes are conclusive, Canada may exercise option 1 to deploy the solution(s) on the SSC's environment.

Option 2 - Operation and Maintenance

Canada may exercise option 2 to request operation and maintenance services.

Option 3 - Deployment on Other Departments

Canada may exercise option 3 to deploy the solution(s) on other Government of Canada departments' environments (Other than SSC).

Option 4 – Solution Improvements

Canada may exercise option 4 to request improvements to the deployed solution(s).

PART 2 - BIDDERS' INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

- a) All instructions, clauses and conditions identified in the CBS by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services.
- b) Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the CBS and accept the clauses and conditions of the resulting contract.
- c) The 2003 (2019-03-04) Standard Instructions Goods or Services Competitive Requirements are incorporated by reference into and form part of this solicitation, but are amended as follows.

Section 03, Standard instructions, clauses and conditions:

Delete: "Pursuant to the *Department of Public Works and Government Services Act*, S.C. 1996, c.16."

Section 09, Customs clearance: deleted in its entirety.

Section 13, Communications – solicitation period

Delete: To ensure the integrity of the competitive bid process, enquiries and other communications regarding the bid solicitation must be directed only to the Contracting Authority identified in the bid solicitation. Failure to comply with this requirement may result in the bid being declared non-responsive.

Insert: Single Point of Contact: To ensure the integrity of the competitive procurement process, all formal questions and other communications regarding the solicitation must be directed only to the Contracting Authority identified in the solicitation. While public servants (who may or may not be involved in this procurement) may engage in exchanges in other fora, such as social media, official information that is binding on Canada will only be made available by the Contracting Authority and Bidders relying on information found do so at their own risk.

Section 14, Price justification:

Delete: In the event that the Bidder's bid is the sole responsive bid received, the Bidders must provide, on Canada's request, one or more of the following price justification:

Insert: On Canada's request, the Bidder must provide one or more (as requested) of the following forms of price justification:

If there is a conflict between the provisions of Standard Instructions 2003 and this document, this document prevails. All references to PWGSC contained within the Standard Instructions will be interpreted as a reference to Canada.

2.2 Enquiries – Solicitation

Questions and comments regarding this solicitation may be submitted in accordance with Section 13 of 2003, Standard Instructions entitled "Communication". However, instead of the deadline indicated in standard instructions, there will be 2 question periods, as follows:

- a) **Question Period 1**: All inquiries are requested to be submitted in writing to the Contracting Authority no later than three (3) calendar days before the Webinar's date. Inquiries received that do not meet this condition may not be answered during the Webinars.
- b) **Question Period 2**: All enquiries are requested to be submitted in writing to the Contracting Authority no later than five (5) calendar days before the CBS closing date (Stage 6). Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the CBS to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature are requested to be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the question(s) or may request that the Bidders do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.3 Contracting Authority

The Contracting Authority for this CBS is:

Department: Shared Services Canada Address: 427 Laurier Ave. W, 3rd floor Phone number: (343) 571-0228

Email: ssc.coeaip-ceaan.spc@canada.ca

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario, Canada.

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by inserting the name of the Canadian province or territory of their choice in the Bid Submission Form. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidders.

2.5 Bidders' Webinars

The Bidders' webinars will be held on *June 30, 2020* as follows:

- The English-language webinar will be held on 13:00 EDT
- The French-language webinar will be held on 14:00 EDT

The scope of the requirement outlined in this CBS solicitation will be reviewed during the webinar and questions will be answered. It is recommended that Bidders who intend to submit a bid participate. Bidders who do not attend will not be precluded from submitting a bid.

Bidders are requested to register by emailing the following information to Contracting Authority at ssc.coeaip-ceaan.spc@canada.ca no later than *June 26, 2020 COB*:

- 1. Bidder's name (Organization)
- 2. Bidder's contact email address

Once all responses are received, the Contracting Authority will email an official invitation to all Registrants.

2.6 Invitation to Refine (ItoR)

The Invitation to Refine sessions will be held on *July 7, 2020* as follows:

- The English-language ItoR will be held from 13:00 EDT
- The French-language ItoR will be held from 14:00 EDT

Bidders will be invited to provide feedback on the problems statements and minimal requirements via videoconference interactions facilitated by Canada.

In presence of all Bidders, Bidders will then be invited to make a 20-minute presentation of their solution to end-users and Canada representatives explaining how their solution could help resolving the problems and how the interface with users is user centric.

The presentation in Stage 4 will help Canada to finalize the solicitation package. Therefore, the interactions and presentations will not be scored and will not be considered in the upcoming selection evaluation process.

Bidders are requested to register by emailing the Intent to Participate form (see Attachment 1) to the Contracting Authority at ssc.coeaip-ceaan.spc@canada.ca no later than July 3, 2020 COB.

Once all responses are received, the Contracting Authority will email an official invitation to all Registrants.

All questions, answers and changes made to the CBS as a result of the Webinars and the ItoR will be published as an amendment to the CBS. All questions and answers will be documented and will form part of the CBS (Stage 5).

At Canada's discretion, additional webinars session of ItoR may be scheduled for the same purpose as outlined above. In this circumstance, logistical details will be published via an amendment to the CBS.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Submission of Written Documents by Bidders

Bidders may be required to submit written documents at 3 different stages:

- Stage 3 Intent to Participate
- Stage 6 Bid Submission Form and Financial Bid Form
- Stage 9 Bidder's Technical Bid

3.2 Intent to Participate (Stage 3)

Bidders are requested to confirm their intention to participate in the Invitation to Refine day by submitting the Intent to Participate as indicated in 2.6.

3.3 Bid Submission (Forms 2 and 3)

3.3.1 Bid Submission and Financial Bid Forms

Bidders are requested to submit their bid using the Bid Submission Form (Attachment 2) and the Financial Bid Form (Attachment 3). All bids must be received by the closing date and time specified on Page 1 of the CBS.

3.3.2 Electronic Submission of Bids by P2P

- Submission through P2P Mandatory: All Bidders must submit their bids through the P2P portal unless they are unable to do so for reasons outside of their control (P2P availability or Contracting Authority availability).
- b) Submissions not permitted after Solicitation Closing: After solicitation closing, the P2P system will not permit a Bidder to submit a bid.
- c) Format of Bid Documents: Bidders may submit bid documents in any of the following approved formats:
 - i) PDF attachments; and
 - ii) documents that can be opened with either Microsoft Word or Microsoft Excel.

Bidders that submit bid documents in other formats do so at their own risk, as Canada may be unable to read them.

- d) File Size: P2P accommodates individual documents of up to 30MB each. Bidders should ensure that they submit their bid in multiple documents, each of which does not exceed 30MB. Bidders may submit as many documents as necessary.
- e) P2P Availability: If the P2P portal is unavailable for any reason during any part of the 4 hours immediately before Solicitation Closing, Bidders are requested to contact the Contracting Authority immediately, both by email and by telephone. If the Contracting Authority confirms that the P2P portal is unavailable for any reason during any part of the 4 hours immediately before Solicitation Closing, the Contracting Authority will extend Solicitation Closing by 24 hours. The Contracting Authority will send notice of any such extension only to those Bidders who have sent an email notification to the Contracting Authority indicating their intention to submit a bid. The Contracting Authority will also issue an amendment in P2P. The Contracting Authority is not required to extend Solicitation

Closing if the reason a Bidder is unable to access the P2P portal is related to that Bidder or its systems, rather than a Canada system problem.

- f) Availability of Contracting Authority: During the 4 hours leading up to Solicitation Closing, an Canada representative will monitor the Email Address for Bid Submission and will be available by telephone at the Contracting Authority's telephone number shown on the cover page of this document (although the Canada representative may not be the Contracting Authority). If the Bidder is experiencing difficulties transmitting the email to the Email Address for Bid Submission, the Bidder should contact Canada immediately at the Contracting Authority's coordinates provided on the cover page of this document.
- g) Responsibility for Technical Problems: By submitting a bid, the Bidder is confirming it agrees that Canada is not responsible for:
 - i) any technical problems experienced by the Bidder in submitting its bid, including attachments rejected or quarantined because they contain malware or other code that is screened out by Canada for security reasons; or
 - ii) any technical problems that prevent Canada from opening the attachments. For example, if an attachment is corrupted or otherwise cannot be opened or cannot be read, it will be evaluated without that portion of the bid. Bidders will not be permitted to submit substitute attachments to replace any that are corrupt or empty or submitted in an unapproved format.

3.4 Bidder's Technical Bid (Attachment 4)

Bidders receiving a Notification of Selection will have to provide their Technical Bid in accordance with the instructions provided using Attachment 4 to the Contracting Authority before the date indicated in the Notification of Selection. Bidder's technical bid is not to be provided at bid closing.

3.5 Certifications

Bidders must submit the certifications and additional information required under Part 5.

3.6 Supply Chain Security Information (SCSI) Submission

At Stage 9, all Bidders invited to submit their technical bid, will be requested to provide the following:

Ownership

- 1) The company names of all Joint Ventures, partners and owners;
- 2) The company names of all shareholders;
- 3) The company names of all the OEMs they will be working with;
- 4) The company names of all the software publishers they will be working with; and
- 5) The company names of all the subcontractors they know ahead of time that they intend to work with.

Product Information

- 1) The names of the products being offered:
 - a. All corresponding Common Vulnerabilities and Exposures (CVE)
- 2) A high-level network diagram of the product and how it will interact with the current infrastructure (i.e. who does it talk to/with)

PART 4 – EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

Bids will be assessed in accordance with the entire requirement of the CBS.

There are several steps in the evaluation process, which are described below. Even though the evaluation and selection will be conducted in steps, the fact that Canada has proceeded to a later step does not mean that Canada has conclusively determined that the Bidder has successfully passed all the previous steps. Canada may conduct steps of the evaluation in parallel.

An evaluation team composed of representatives of Canada will evaluate the bids. Not all members of the evaluation team will necessarily participate in all aspects of the evaluation.

The evaluation criteria are described in Attachment 6. During the presentation, Bidders are requested to demonstrate the merits of their Services in response to each criterion thoroughly, concisely and clearly. Simply repeating statements contained in the CBS is not sufficient.

4.1.1 Financial Evaluation

The financial bid will be assessed to determine compliance with the maximum funding mandatory criteria.

4.1.2 Mandatory Financial Evaluation Criteria

a) The maximum funding amounts available for Work Segment 1 is **25,000.00** (Applicable Taxes are extra) for the challenge-based solicitation as described in Annex A.

Financial bids valued in excess of a) will be considered non-responsive.

The disclosure of the maximum funding amounts does not commit Canada to spend the maximum funding available.

The bid price will be evaluated in Canadian Dollars, excluding Applicable Taxes, but including shipping, travel and living expenses, Canadian customs duties and excise taxes.

4.2 Stage 7: Presentation

Canada is looking for the Integrated Business Glossary (IBG) solutions to problems identified in the SOC.

4.2.1 Evaluation Process for Presentation

Bidders that comply with the mandatory procedural requirements and the Mandatory Financial Evaluation Criteria will be invited to make a presentation consisting of two parts as follows:

Part A – Presentation on Capacity of the proposed solution to meet the minimal Functional and Non-Functional requirements

Part B – Presentation on Capacity of the proposed solution to satisfy the end-users expectations

Each Part will consist of the following:

Part A – Presentation on Capacity of the proposed solution to meet the Minimal Functional and Non-Functional requirements

Bidders will be invited to make a presentation to demonstrate how the solution meets the evaluation criteria that will reflect the Functional and Non-Functional Requirements. The Requirements are defined in the Attachment 6, Evaluation Grid.

The key steps for the presentation are the following:

- 1. Bidder makes its presentation in front of the evaluation team members. (maximum 20 minutes)
- 2. **Evaluation team withdraw**: The evaluation team will withdraw to determine the questions to be asked to a Bidder. During that time, the panel members will identify the areas of interest to get additional details or where the presentation could be improved. (estimated 20 minutes)
- 3. **Q&A:** Question and answer period. (maximum 20 minutes)

The Bidder's presentation as well as answers to the questions by the evaluation team will be scored using the presentation evaluation criteria identified in Annex B.

Part B - Presentation on Capacity of the Proposed solution to satisfy the end-users expectations

The key steps for this part of the presentation are the following:

- 1. Bidder makes its presentation in front of the evaluation team members to demonstrate how the interface of the solution is user-centric. (maximum 20 minutes)
- Evaluation team withdraw: The evaluation team will withdraw to determine the questions
 to be asked to a Bidder. During that time, the panel members will identify the areas of
 interest to get additional details or where the presentation could be improved. (estimated
 20 minutes)
- 3. **Q&A:** Question and answer period. (maximum 20 minutes)

The Bidder's presentation as well as answers to the questions by the evaluation team will be scored using the presentation evaluation criteria based on end-users expectations of the Solution(s) identified in Annex B.

The Bidders will then be ranked based on the Basis of Selection described below.

4.2.2 Presentation Logistics

The presentation may be made via teleconference or videoconference at the Bidder's choice.

Travel and Living expenses related to making the presentation, if any, will not be reimbursed and are at the cost of the Bidder.

4.3 Financial Evaluation

The financial evaluation will be conducted by calculating the Total Bid Price using the Financial Bid Form 3.

4.4 Basis of Selection

4.4.1 SCI Assessment Process

Canada will assess the Supply Chain Security Information submitted by the Bidders in accordance with paragraph 3.6. Canada must approve the SCSI in order for a bid to remain responsive. If any

bid is declared non-responsive at this stage, Canada will consider the SCSI submission of the next-ranked Bidder. The remaining components of the SCSI will be assessed during the contract.

4.4.2 Evaluation of Certifications and Additional Information

Canada will review all submitted certifications and additional information and determine whether any additional information is required, in accordance with Part 5.

4.4.3 Basis of Selection - Highest Combined Rating of Technical Merit (70%) and Price (30%)

The selection will be based on the following:

- 1. To be declared responsive, a bid must comply with all the requirements of the bid solicitation.
- 2. Bids not complying with all requirements of the bid solicitation will be declared non-responsive.
- 3. The Basis of Selection is based on the highest responsive combined rating of technical merit and price per solution.
- 4. The ratio will be 70% for the technical merit and 30% for the price.
 - a) The technical merit score for each responsive bid will be determined as follows: total number of points obtained for the Point-Rated Technical Evaluation Criteria at Stage 7 adjusted to yield a score out of 70.
 - b) To establish the pricing score, the Total Financial Bid will be prorated against the lowest evaluated price to yield a score out of 30.
 - c) For each responsive bid, the technical merit score (maximum 70) and the pricing score (maximum of 30) will be added together to determine the total score out of 100.
- 5. In the event two or more responsive bids have the same highest total score, these bids will be ranked in descending order using:
 - a) The proposed total cost for the Option 1 Deployment will be used to rank the tied bids from the lowest cost to the highest cost.
 - b) If still tied, point-rated technical evaluation criteria R.2.1, Semantic Search functionality will be used to rank the subsequent tied bids from the highest score to the lowest score.
- 6. Up to 2 responsive bids will be recommended for contract award.
 - a) One of the contracts will be set-aside for award to an SME. For the set-aside contract, the highest-ranked responsive SME bidder will be recommended for award.
 - If there is no responsive SME bidder following the presentations, that spot will be available to all the bidders.
 - c) For all other bidders, the highest-ranking bids will be recommended for contract award.

Table 1 below provides an example where three bids are responsive and the selection of the Bidder to be recommended for award is determined by a 70/30 ratio of the technical merit and price, respectively.

Table 1: Sample Basis of Selection - Highest Combined Rating Technical Merit (70%) and Price (30%)

EXAMPLE		Bidder 1	Bidder 2	Bidder 3 (SME)	
Technical Evaluation Total Score Score Max points (100)		90	75	85	
Technical Score (70%)	90/100 x 70 = 63.00	75/100 x 70 = 52.50	85/100 x 70 = 59.50	
Bid Evaluation Price		\$3,100	\$2,600	\$3,450	
Pricing Score (30%)		2,600/3,100 x 30 = 25.161	2,600/2,600 x 30 = 30.000	2,600/3,450 x 30 = 22.609	
Combined Rating		88.16	82.50	82.11	
Overall rating		1 st	2 nd	3 rd	
Bidders 1 and 3 would recommended for cor					

4.5 Notification of Selection Stage (Stage 8)

Canada expects to issue multiple contracts for the prototype phase.

Up to 2 responsive bids will be recommended for contract award.

The highest ranked Bidders will be notified of Canada's intent to award an option-based contract.

4.6 Bidder's Technical Bid (Stage 9)

Bidders notified in Stage 8 will be invited to submit their Technical bid using Attachment 4 describing in writing the elements demonstrated in Stage 7 as well as any additional requirements the Bidders consider are needed in order to resolve the problem(s).

4.7 Recommendation for Award of a Contract

All contract awards are subject to Canada's internal approvals process, which includes a requirement to approve funding in the amount of any proposed contract. Despite the fact that the Bidder may have been recommended for contract award, a contract will only be awarded if internal approval is granted according to Canada's internal policies. If approval is not granted, no contract will be awarded.

The Bidder agrees not to make any media announcements about the award of a contract without coordinating the announcement with the Contracting Authority.

PART 5 - CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

The certifications provided by Bidders to Canada are subject to verification by Canada at all times. Unless specified otherwise, Canada will declare a bid non-responsive, or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, whether in its bid, during the bid evaluation period, or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Precedent to Contract Award and Additional Information

The certifications and additional information should be submitted using ATTACHMENT 2 – BID SUBMISSION FORM. If any of these required certifications or additional information are not completed and submitted as requested, the Contracting Authority will inform the Bidders of a time frame within which to provide the information. Failure to provide the certifications or the additional information listed below within the time frame specified will render the bid non-responsive.

PART 6 - RESULTING CONTRACT CLAUSES

Note to Bidders: These Resulting Contract Clauses are intended to form the basis of any contract(s) resulting from this bid solicitation. Except where specifically set out in these Resulting Contract Clauses, acceptance by Bidders of all the clauses is a mandatory requirement of this bid solicitation.

No modification or other terms and conditions included in the bid will apply to the resulting contract, despite the fact that the bid may become part of the resulting contract.

Any Bidder submitting a bid containing statements implying that the bid is conditional on modification of these Resulting Contract Clauses (including all documents incorporated by reference) or containing terms and conditions that purport to supersede these Resulting Contract Clauses will be considered non-responsive. As a result, Bidders with concerns regarding the provisions of these Resulting Contract Clauses should raise those concerns in accordance with the Enquiries provision of the bid solicitation.

If additional legal issues are raised by a bid, Canada reserves the right to address those issues in any contract awarded as a result of this bid solicitation. If the additional provisions are unacceptable to the Bidder, the Bidder may withdraw its bid.

Articles of Agreement

6.1 Integrated Business Glossary Series of Contracts

The Contractor acknowledges that this Contract is one of a series of 2 [Note to Bidders: this number may be adjusted downward if necessary at the time of award] contracts awarded as a result of the Challenge-Based Solicitation issued by Shared Services Canada on [insert date] under No. [insert number].

The award of this Contract begins Stage 10 of the overall Discoverable and Trusted Data Assets in Support of Decision Making initiative described in the Solicitation.

Under this Contract, providing support for the Solution does not include adding additional features or functionalities after the Solution has received Authority to Operate. If Canada wishes to add or vary existing features or functionalities after granting Authority to Operate, Canada will submit a change request to the Contractor or exercise the option for solution improvement as described below. Any change upon which the Parties agree, including a change to the Basis of Payment, will be documented in a Contract Amendment.

6.1.2 Delivery and Testing the Solution(s) Prototype

The	Con	tractor	mu	ıst de	eliver the p	rototypes	and	perform	all the	Work in ac	cord	lance wi	th t	he te	rms
and	con	ditions	of	this	Contract,	including	the	Stateme	ent of	Challenge	s at	Annex	A,	and	the
Cor	itract	or's te	chn	ical b	oid entitled	l,	date	d	<u></u> .						

The following options may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment. The Contracting Authority may exercise the option by sending a written notice to the Contractor at any time.

If an option is exercised more than 24 months after contract award and at the request of the Contractor, the prices for Option 1 to 4 will be adjusted in accordance with the Price Adjustment Mechanism (paragraph 6.1.7).

The prototype duration is estimated at 3 months.

6.1.3 Option 1: Deployment of the Integrated Business Glossary Solution

[Note to Bidders: This section will be customized prior contract award]

The Contractor grants to Canada the irrevocable option to require the Contractor to deploy the Solution in accordance with the terms and conditions of this Contract and section entitled Deployment in the Statement of Challenge.

This option expires 24 months after the contract is issued, unless the Parties agree to extend this period and document their agreement in a Contract Amendment.

While the decision to exercise Option 1 is entirely within Canada's discretion, if Canada chooses to exercise Option 1, it will do so in accordance with the Article of Annex A entitled "Decision-Making Framework for Choosing Solution to be Deployed".

Canada anticipates selecting only a single Contractor to proceed with the deployment. However, Canada may, in its discretion, exercise Option 1 with another Contractor as well at any time prior to the option expiring.

At the end of the prototype, all Contractors will be informed if Canada is exercising Option 1. If Canada determines not to exercise Option 1 at the completion of prototype,

6.1.4 Option 2: Operational Support and Maintenance Services

The Contractor grants to Canada the irrevocable option to require the Contractor to provide additional years of Operational support as described in Annex A: Statement of Challenge under the section Option 2, at the prices and rates set out in Annex B: Basis of Payment.

If Canada has exercised Option 3- Deployment on Other Departments, Canada may exercise any of Options 2 for all those Clients identified by Canada. Canada may choose to exercise the option for one, some or all of the Clients at the prices set out in Annex B: Basis of Payment.

6.1.5 Option 3: Deployment of the Solution for other Departments (Clients)

The Contractor grants to Canada the irrevocable option, at any time after Option 1 has been exercised, to require the Contractor to deploy the Solution for another Client at the prices set out in Annex B: Basis of Payment. In this Contract, Canada's "Clients" include Canada itself, those government institutions for whom Canada's services are mandatory at any point during the life of any resulting instrument(s), and those other organizations for whom Canada's services are optional at any point during the life of any resulting contract and that choose to use those services from time to time. In addition to the Government of Canada, Canada may also serve a government of a province or municipality in Canada, a Canadian aid agency, a public health organization, an intergovernmental organization or a foreign government.

6.1.6 Option 4 - Solution(s) Improvements

During the course of the contract, in cases where the technological context will render available innovative features that could help Canada to better resolve the problem identified in the SOC,

Section 3, the Contractor grants to Canada the irrevocable option to require the Contractor to provide the additional features or to improve the solution.

In cases of an improvement provided by the Contractor itself, the price will be negotiated and will not exceed the demonstrated market prices. The Contractor will be responsible to demonstrate the value for money to Canada. Applicable principles for price justification could be found in Standard instructions section 14 Price justification.

In cases where the improvement would be provided by a third part (other than the Contractor), the improvement will be reimbursed at cost plus 5% mark-up.

6.1.7 Price Adjustment Mechanism

Upon Contractor's request, for work under the Contract performed after the 24 month period from the contract award, the Price Adjustment Mechanism will apply.

The prices will be adjusted to account for inflation according to <u>Table 18-10-0004-01 Consumer</u> Price Index, monthly, not seasonally adjusted, All-items, Canada

For example:

The initial price for the Milestone X is \$ 1000.

Contract award March 31, 2019.

Option 3 for an additional deployment of the solution is exercised on June 2, 2021.

CPI for March 2019 = 134 (hypothetical value)

CPI for May 2021 = 136

The new price = 1000 * (1+ (136-134) / 134) = \$1,014.93

6.2 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

6.2.1 General Conditions

<2030 General Conditions - Higher Complexity - Goods> (2018-06-21) apply to and form part of the Contract.

6.2.2 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract:

4003 (2010-08-16), Licensed Software

4004 (2013-04-25), Maintenance and Support Services for Licensed Software

4006 (2010-08-16), Contractor to Own Intellectual Property Rights in Foreground Information, if applicable

6.2.3 Licensed Software <adjust as required>

(a) With respect to the provisions of Supplemental General Conditions 4003:

Licensed Software	The Licensed Software, which is defined in 4003, includes all the products offered by the Contractor in its bid, and any other software required for those products to function in accordance with the Software Documentation and the Specifications, including without limitation all of the following products: (this information will be completed at contract award using information in the Contractor's bid)
Type of License being Granted	Entity License, as described in Section 06.
Language of Licensed Software	The Licensed Software must be delivered in English.
Delivery Location	As specified in Annex A
Media on which Licensed Software must be Delivered	DVD, USB, or Internet link for download
Source Code Escrow Required	No

6.2.4 Licensed Software Maintenance and Support <adjust as required>

(a) The provisions of Supplemental General Conditions 4004 are modified, as applicable, in accordance with the following:

Option to Extend Software Maintenance and Support Period	As per Article 6.1 of the Contract.
Hours for Providing Hot Line Support Services	As described in Annex A
Contractor must keep track of software releases for the purpose of configuration control	
Contact Information for Accessing the Contractor's Support Services	In accordance with Section 5 of 4004, the Contractor will make its Support Services available through the following:
	Toll-free Telephone Access:
	Toll-free Fax Access:
	Email Access:
	[Note to Bidders: This information will be completed at the time of exercise of Option 1 with information supplied by the Contractor.]

Website	In accordance with Section 5 of 4004, the Contractor must make Support Services available over the Internet. To do so, the Contractor must include, as a minimum, frequently asked questions and on-line software diagnostic routines and support tools. Despite the Hours for Providing Support Services, the Contractor's website must be available to Canada's users 24 hours a day, 365 days a year, and must be available 99% of the time. The Contractor's website address for web support is [Note to Bidders: The website address will be completed]			
	at the time of exercise of Option 1 with information supplied by the Contractor.]			
Language of Support Services	The Support Services must be provided in both French and English, based on the choice of the User requesting support.			
Article 07 – Canada's Responsibilities' – Para 1	Canada will not maintain, for the software Support Period, a telephone line and Internet access for use in connection with the software support services.			

6.3 Security Requirement

6.3.1 Security Requirements for the Contract

- The Contractor/Bidder must, at all times during the performance of the Contract/Standing Offer/Supply Arrangement, hold a valid Designated Organization Screening (DOS), issued by the Canadian Industrial Security Directorate (CISD), Public Services and Procurement Canada (PSPC)
- The Contractor/Bidder personnel requiring access to protected information, assets or sensitive work site(s) must EACH hold a valid <*reliability status>*, granted or approved by CISD/PSPC
- The Contractor/Bidder must not remove any protected information or assets from the identified work site(s), and the Contractor/Bidder must ensure that its personnel are made aware of and comply with this restriction
- 4. Subcontracts which contain security requirements are not to be awarded without the prior written permission of CISD/PSPC
- 5. The Contractor/Bidder must comply with the provisions of the:
 - (a) Security Requirements Check List and security guide, attached at Annex C
 - (b) Industrial Security Manual (Latest Edition)

6.4 Data Ownership and Sovereignty

The Parties agree that neither the operation of the Solution nor the provision of maintenance or support relating to the Solution requires the Contractor at any time to access the content transmitted by Canada using the Solution. The Contractor acknowledges that:

- (a) it, its employees, representatives and agents are prohibited from accessing the content transmitted by the Solution at any time without the written consent of the Contracting Authority; and
- (b) it is prohibited from permitting any third party to access the content transmitted by the Solution at any time without the written consent of the Contracting Authority.

The Contractor agrees that, although it may access the Solution remotely, it must do so only from locations within Canada and the Contractor agrees to segregate its network or access to its network in all ways required in order to ensure that no person outside the geographic boundaries of Canada is capable of accessing the Solution remotely using the Contractor's infrastructure. The Contractor acknowledges that Canada may audit compliance with this Article and agrees to provide access to its premises and systems during normal business hours in order to allow Canada or its representatives to conduct any such audit.

6.5 Contract Period

Contract Period: The "**Contract Period**" is the entire period of time during which the Contractor is obliged to perform the Work, which includes:

- a) the "**Initial Contract Period**", which begins on the day this Contract is awarded and ends 24 months later or once Option 1 is exercised, whichever comes first; and
- b) the period during which the Contract is extended, if Canada chooses to exercise any options described above.

6.6 Authorities

6.6.1 Contracting Authority

The Contracting Authority for the Contract is:

TBD at contract award.

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

6.6.2 Technical Authority

The Technical Authority for the Contract is:

TBD at contract award.

The Technical Authority is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes

to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

6.6.3 Contractor's Representative

TBD at contract award

6.7 Payment

6.7.1 Basis of Payment Prototype - Firm Price

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price as specified in Annex B for a cost of \$ ______ insert the amount at contract award). Customs duties are included and Applicable Taxes are extra.

6.7.2 Basis of Payment Option 1 to 3 Ceiling Prices

If Canada exercises options 1, 2, or 3 and in consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid in accordance with the Basis of Payment in Annex B up to the ceiling prices set out there. Customs duties are included and Applicable Taxes are extra.

The Contractor must complete all the Work associated with options 1 to 3 for no more than the ceiling price for each option period indicated in Annex B. That is, once the ceiling price has been paid, the Contractor must continue performing the Work, but no further payments will be made.

6.7.3 Basis of Payment Option 4- Solution Improvement

The pricing basis of the option will be negotiated as per the 6.1.6 prior Option 4 issuance and the basis could be modified to reflect the negotiated pricing basis.

6.7.4 Method of Payment

Canada will pay the Contractor the milestone firm all-inclusive prices, as applicable, in accordance with the Annex B Basis of Payment.

6.7.5 SACC Manual Clauses

A9117C (2007-11-30), T1204 - Direct Request by Customer Department

C2000C (2007-11-30), Taxes - Foreign-based Contractor

6.8 Invoicing Instructions

- (a) The Contractor must submit invoices in accordance with the information required in the General Conditions. The Contractor's invoice must include a separate line item for each element in the Basis of Payment provision.
- (b) By submitting invoices (other than for any items subject to an advance payment), the Contractor is certifying that the goods and services have been delivered and that all charges are in accordance with the Basis of Payment provision of the Contract, including any charges for work performed by subcontractors.

- (c) Canada will only be required to make payment following receipt of an invoice that satisfies the requirements of this Article.
- (d) The Contractor must submit invoices on its own form, which must include:
 - 1. the date:
 - 2. the Contractor name and address:
 - 3. the Destination
 - 4. Contract serial number:
 - 5. Financial codes, including GST or HST (as applicable) registration number;
 - 6. Description of the Work
 - Category(ies) of Personnel and number of days worked;
 - 8. Firm Per Hourly Rate on which the total dollar amount of the invoice is based;
 - 9. the amount invoiced (exclusive of the Goods and Services Tax (GST) or Harmonized Sales Tax (HST) as appropriate) and the amount of GST or HST, as appropriate, shown separately;
 - 10. Client Reference Number (CRN);
 - 11. Business Number (BN); and
 - 12. Total value billed to date and the dollar amount remaining in the Contract to date.
- (e) The Contractor must send the original and one copy of the invoice to the Technical Authority's paying office (<insert applicable Accounts Payable department>) and one to the Contracting Authority as follows:

The original and one copy of the invoice must be sent to the following location on a monthly basis:

Canada – Accounts Payable Non-Telecommunication

PO Box 9808 STN T CSC

Ottawa, Ontario

K1G 4A8

Email: Canada.accountspayable-comptespayables.SPC@canada.ca

A digital copy of the invoices must be sent to the Contracting Authority at the following location on a quarterly basis:

To be added at contract award

(f) The Technical Authority's paying office (<insert applicable Accounts Payable department>) will send the invoices to the Technical Authority for approval and certification; the invoices will be returned to the paying office for all remaining certifications and payment action.

- (g) Any invoices where items or group of items cannot be easily identified will be sent back to the Contractor for clarification with no interest or late payment charges applicable to Canada.
- (h) If Canada disputes an invoice for any reason, Canada agrees to pay the Contractor the portion of the invoice that is not disputed provided that items not in dispute form separate line items of the invoice and are otherwise due and payable under the Contract. Notwithstanding the foregoing, the provisions of "Interest on Overdue Accounts", Section 17 of 2030 General Conditions will not apply to any such invoices until such time that the dispute is resolved at which time the invoice will be deemed as "received" for the purpose of the "Method of Payment" clause of the Contract.

6.9 Certifications

6.9.1 Compliance

Compliance with the certifications and related documentation provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the entire contract period. If the Contractor does not comply with any certification, provide the related documentation or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

6.10 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in ______ (to be inserted at contract award).

6.11 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list.

- a) the Articles of Agreement;
- b) 4003 (2010-08-16), Licensed Software
- c) 4004 (2013-04-25), Maintenance and Support Services for Licensed Software
- d) 4006 (2010-08-16), Contractor to Own Intellectual Property Rights in Foreground Information, if applicable
- e) the general conditions 2030 (xxxxx)
- f) Annex A, Statement of Challenge;
- g) Annex B, Basis of Payment;
- h) the Contractor's bid dated ______ not including any software publisher license terms and conditions that may be included in the bid, not including any provisions in the bid with respect to limitations on liability, and not including any terms and conditions incorporated by reference (including by way of a web link) in the bid;
- i) SRCL

6.12 Foreign Nationals

SACC Manual clause A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)

SACC Manual clause A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

6.13 Insurance – No Specific Requirement

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

6.14 Limitation of Liability - Information Management/Information Technology

(a) This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees. This section applies regardless of whether the claim is based in contract, tort, or another cause of action. The Contractor is not liable to Canada with respect to the performance of or failure to perform the Contract, except as described in this section and in any section of the Contract pre-establishing any liquidated damages. The Contractor is only liable for indirect, special or consequential damages to the extent described in this Article, even if it has been made aware of the potential for those damages.

(b) First Party Liability:

- (i) The Contractor is fully liable for all damages to Canada, including indirect, special or consequential damages, caused by the Contractor's performance or failure to perform the Contract that relate to:
 - (A) any infringement of intellectual property rights to the extent the Contractor breaches the section of the General Conditions entitled "Intellectual Property Infringement and Royalties";
 - (B) physical injury, including death.
- (ii) The Contractor is liable for all direct damages caused by the Contractor's performance or failure to perform the Contract affecting real or tangible personal property owned, possessed, or occupied by Canada.
- (iii) Each of the Parties is liable for all direct damages resulting from any breach of confidentiality under the Contract. Each of the Parties is also liable for all indirect, special or consequential damages in respect of any unauthorized disclosure of the other Party's trade secrets (or trade secrets of a third party provided by one Party to another under the Contract) relating to information technology.
- (iv) The Contractor is liable for all direct damages relating to any encumbrance or claim relating to any portion of the Work for which Canada has made any payment. This does not apply to encumbrances or claims relating to intellectual property rights, which are addressed under (i)(A) above.
- (v) The Contractor is also liable for any other direct damages to Canada caused by the Contractor's performance or failure to perform the Contract that relate to:

- (A) any breach of the warranty obligations under the Contract, up to the total amount paid by Canada (including any applicable taxes) for the goods and services affected by the breach of warranty; and
- (B) Any other direct damages, including all identifiable direct costs to Canada associated with re-procuring the Work from another party if the Contract is terminated either in whole or in part for default, up to an aggregate maximum for this subparagraph (B) of the greater of .25 times the total estimated cost (meaning the dollar amount shown on the first page of the Contract in the cell titled "Total Estimated Cost" or shown on each call-up, purchase order or other document used to order goods or services under this instrument), or \$1,000,000.00.

In any case, the total liability of the Contractor under subparagraph (v) will not exceed the total estimated cost (as defined above) for the Contract or \$1,000,000.00, whichever is more.

(vi) If Canada's records or data are harmed as a result of the Contractor's negligence or willful act, the Contractor's only liability is, at the Contractor's own expense, to restore Canada's records and data using the most recent back-up kept by Canada. Canada is responsible for maintaining an adequate back-up of its records and data.

(c) Third Party Claims:

- (i) Regardless of whether a third party makes its claim against Canada or the Contractor, each Party agrees that it is liable for any damages that it causes to any third party in connection with the Contract as set out in a settlement agreement or as finally determined by a court of competent jurisdiction, where the court determines that the Parties are jointly and severally liable or that one Party is solely and directly liable to the third party. The amount of the liability will be the amount set out in the settlement agreement or determined by the court to have been the Party's portion of the damages to the third party. No settlement agreement is binding on a Party unless its authorized representative has approved the agreement in writing.
- (ii) If Canada is required, as a result of joint and several liability or joint and solidarily liable, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada by the amount finally determined by a court of competent jurisdiction to be the Contractor's portion of the damages to the third party. However, despite Sub-article (i), with respect to special, indirect, and consequential damages of third parties covered by this Section, the Contractor is only liable for reimbursing Canada for the Contractor's portion of those damages that Canada is required by a court to pay to a third party as a result of joint and several liability that relate to the infringement of a third party's intellectual property rights; physical injury of a third party, including death; damages affecting a third party's real or tangible personal property; liens or encumbrances on any portion of the Work; or breach of confidentiality.
- (iii) The Parties are only liable to one another for damages to third parties to the extent described in this Sub-article (c).

6.15 Joint Venture

- a. The Contractor confirms that the name of the joint venture is _____ and that it is comprised of the following members: [list all the joint venture members named in the Contractor's original bid].
- b. With respect to the relationship among the members of the joint venture Contractor, each member agrees, represents and warrants (as applicable) that:
 - i. _____ has been appointed as the "representative member" of the joint venture Contractor and has fully authority to act as agent for each member regarding all matters relating to the Contract;
 - ii. by giving notice to the representative member, Canada will be considered to have given notice to all the members of the joint venture Contractor; and
 - iii. all payments made by Canada to the representative member will act as a release by all the members.
- c. All the members agree that Canada may terminate the Contract in its discretion if there is a dispute among the members that, in Canada's opinion, affects the performance of the Work in any way.
- d. All the members are jointly and severally or solidarily liable for the performance of the entire Contract.
- e. The Contractor acknowledges that any change in the membership of the joint venture (i.e., a change in the number of members or the substitution of another legal entity for an existing member) constitutes an assignment and is subject to the assignment provisions of the General Conditions.
- f. The Contractor acknowledges that all security and controlled goods requirements in the Contract, if any, apply to each member of the joint venture Contractor.

Note to Bidders: This Article will be deleted if the Bidder awarded the Contract is not a joint venture. If the Contractor is a joint venture, this clause will be completed with information provided in its bid.

6.16 Safeguarding Electronic Media

- a. Before using them on Canada's equipment or sending them to Canada, the Contractor must use a regularly updated product to scan electronically all electronic media used to perform the Work for computer viruses and other coding intended to cause malfunctions. The Contractor must notify Canada if any electronic media used for the Work are found to contain computer viruses or other coding intended to cause malfunctions.
- b. If magnetically recorded information or documentation is damaged or lost while in the Contractor's care or at any time before it is delivered to Canada in accordance with the Contract, including accidental erasure, the Contractor must immediately replace it at its own expense.

Attachment 1 Intent to Participate

I confirm my intent to participate to the Invitation to Refine day.

The names of representatives are the following:

Name and address of the Bidder:

To be sent back by email to the Contracting Authority which name appears on the first page of this document.

ATTACHMENT 2 BID SUBMISSION FORM

Provided under a separate document

Attachment 3 Financial Bid Form

Provided under a separate document

Attachment 4

Technical Bid Form

The Technical Bid Form is NOT to be completed at bid closing. Bidders that will be selected as results of the procurement process will be invited to provide their Selected Bidders at a later date as requested by the Contracting Authority.

Attachment 5 Software Publisher Certification/ Authorization Form

Provided under a separate document

ATTACHMENT 6 EVALUATION GRID

Part A

- Evaluation of Capacity of the Proposed Solution to meet the Functional and Non-Functional requirements
- Evaluated using Part A of the evaluation grid below

Part B

- Evaluation of Capacity of the Proposed Solution to satisfy the end-users expectation by scoring the extent to which the interface of the Solution with the end-users is meeting their expectations
- Evaluated using Part B of the evaluation grid below

The following scale will be used to score the level of achievement of expectation.



Ratings and summary scores range from 1.0 to 5.0:

- 1 = Poor or Absent: the Bidder did not demonstrate that the criterion is met
- 2 = Fair: some aspects of the criterion are not demonstrated
- 3 = Good: meets criterion
- 4 = Excellent: exceeds criterion
- 5 = Outstanding: significantly exceeds criterion

Example of scoring:

For the criteria FR1- Storing and publishing capacity: Definitions, business metadata and taxonomy for key business terms and entities.

At minimum, the Bidder demonstrates that the Solution contains the following items and ability to save below content to the IBG:

- a text box to enter who the Data Steward
- a text box or control that shows how the business metadata can be used.
- a text box or control that demonstrates how the business metadata is related to technical metadata
- a control (tree or drill) that demonstrates taxonomy relationship with other business metadata

The points will be allocated as follow:

- All 4 elements demonstrated is equivalent to 3 meets criterion
- More relevant elements = 4 points or 5 points depending of the level of demonstration

Part A	rt A – Presentation on Capacity of the Proposed Solution to meet the Functional and Non-Functional requiremer					
ID	Criteria	Assessment	Presentation (0 to 5 points)			
FR1	Storing and publishing capacity	Definitions, business metadata and taxonomy for key business terms and entities. At a minimum, the Bidder demonstrates that the Solution contains the following items and ability to save below content to the IBG: - a text box to enter who the Data Steward - a text box or control that shows how the business metadata can be used - a text box or control that demonstrates how the business metadata is related to technical metadata - a control (tree or drill) that demonstrates taxonomy relationship with other business metadata				

ID	Criteria	Assessment	Presentation (0 to 5 points)
		Operational and Technical Metadata At a minimum, the Bidder demonstrates that the Solution contains the following Technical Metadata items and ability to save below content to the IBG: - a control that is pre-populated with data base table name - a control that is pre-populated with database column name and it's data type - a control that shows content about application runs, frequency, record counts	
		Information about Data governance stakeholder including Data Owner and data stewards At a minimum, the Bidder demonstrates that the Solution contains the following items and ability to save below content to the IBG: - A control or text box to enter a Data Steward - A control or text box to enter a Data Owner	
		Information about authoritative data, reference data and master data At a minimum, the Bidder demonstrates that the Solution contains the following items and ability to save below content to the IBG: - A control or text box to enter a Data Steward - A control or text box to enter a Data Owner - A control or text box that allows a user to enter a description about the Reference Data/Master Data - A control or text box that allows a user to enter how Reference Data/Master Data should be used	
FR2	Ability to connect	The Bidder should demonstrate how the proposed Solution has the ability to connect to data sources that are classified as Operational Database Management Systems (OPDMBS) and cloud technology.	

ID	Criteria	Assessment	Presentation (0 to 5 points)
		At a minimum, the Bidder demonstrates that the Solution has the ability to connect the following data sources types:	
		Cloud Platforms (at minimum must support) 1. AWS 2. Azure	
		OPDMBS (at minimum must support) 1. Oracle 2. MS SQL Server 3. DB2 4. Netezza 5. SAP (Hana) 6. MySQL 7. MariaDB 8. MongoDB	
		Additional points will be given for a Solution that support hybrid connection, meaning that could connect both data sources types without additional third party connector.	
FR3	Work Flow	The Bidder should demonstrate how the proposed Solution enables the following workflow functionality to execute the following actions on an information asset.	
		At a minimum, the Bidder demonstrates the workflow functionality to execute the following actions	
		Maker – a user makes content, a definition, a relationship	
		Approver – an Approver user will either approve or reject the content	

ID	Criteria	Assessment	Presentation (0 to 5 points)
		Additional points will be given for Bidder that demonstrates that workflow functionality to execute the following actions on an information asset includes the following action. • Checker – a checker user reviews the Maker content to verify the content is correct.	
FR4	Collaboration	The Bidder should demonstrate how the proposed Solution allows for collaboration between multiple users. At a minimum, the Solution should allow users to:	
		 share collaborate have a messaging type of process associated with the collaboration functionality 	
NFR1	Role Based Access	 The Bidder should demonstrate how the Solution possess role-based security. At a minimum, the Solution should include the following roles: Administrator Role: has all permissions within the Solution and able to grant/revoke permissions to other roles Steward Role: allows the user to create, edit and remove informational asset content and their relationships within the Solution. Subject Matter Expert: the user has limited permissions to only create, edit and remove attributes and relationships within the Solution. Stakeholder: has no edit permissions, but can view all information asset content that they are assigned too. If the Bidder decides to use alternate name roles, the Bidder should provide a matrix for reference to link with the above mentioned role. 	

ID	Criteria	Assessment	Presentation (0 to 5 points)
NRF2	Solution interface adaptability	The Bidder should demonstrate how the Solution interface will adapt to the role and the group that the user has been assigned to. At a minimum, the interface of the Solution should: • The interfaces are adapted for a given role in accordance with permissions and others attributes associated with that given role.	
NFR3	Machine Learning	Cross-referencing metadata can bring even more insight to the user. Cross-referencing should also reduce the amount of time users spend searching. The Bidder should demonstrate how the proposed Solution, with the use of machine learning (ML) algorithm, cross references information assets to bring greater insight to the user. Information Assets refers to elements that touches, contains or describes data. Points will be given for a Solution that can provide at a minimum the following: - the ML engine has the ability to cross-reference metadata information assets - the ML algorithm will search the Metadata Repository to discover, inventor, profile, tag and create relationships between catalog Metadata asset items - allow users to perform 'search-end-like' semantic search over the metadata content in the catalog repository - the ML engine would return the most relevant items to the user. The user can browse and filter these returned search result sets - the ML engine would perform a full scan of existing data assets in the Catalog repository to derive end to end lineage	

ID	Criteria	Assessment	Presentation (0 to 5 points)
NFR4	Capacity of the Bidder to evolve	Canada would like to select a Bidder that has the capacity to keep its Solution at the cutting edge of technology.	
	the Solution	The Bidder has the flexibility to determine the elements of the innovation roadmap. To guide its preparation, the elements are examples of what could be included in an innovation roadmap.	
		The Bidder should present its innovativeness road map, in the form of a visual representation of otherwise, that contains the following elements:	
 Process stages: Identify your steps KPI stream: Show what you are going to be measuring through Themes streams: This shows the high level subjects that the ir explore. Threat streams: These are the items that need to be managed 		 Process stages: Identify your steps KPI stream: Show what you are going to be measuring through the project. Themes streams: This shows the high level subjects that the innovation project will 	
NFR5	Capacity of the Bidder to scale up the Solution	The Bidder should demonstrate how the proposed Solution is scalable. Points will be awarded for a Solution that can, with minimal effort: Increase transaction throughput capacity Onboard new users Be deployed on another department environment	
		In this requirement: "minimal effort" means without changes to architecture or existing deployed integrations.	

ID	Criteria	Assessment	Presentation (0 to 5 points
2.1	Semantic Search functionality	The Bidder should demonstrate how the proposed Solution includes user friendly and robust semantic search functionality where knowledge of a query language is not required.	
		At minimum, the Bidder should demonstrate the following. Additional points will be given for a Bidder that provide additional evidences that the minimum listed:	
		The search functionality is easy to use: Evidence of this expectation could be that the solution :	
		 Provides a control or textbox for users to enter their own searchable tags to a Catalog Entry to enrich the catalog asset. For example, a Google-like search field. 	
		 2. The time for the search is short. Evidence of this expectation could be that the solution : After a click provides the initial results in less than 30 seconds 	
		 3. The results of the search are easy to read. Evidence of this expectation could be that the solution: Provides a graphical (and/or visual) representation of relationships between metadata items. For example, maintains accurate data structure, repositories and rules that shows linkages between different tables and visualize the data and linkages 	
		 Provides semantic search ability and natural relationships with other data assets. For example, clicking on an entry then takes you to the details, which describe the item and identify where it appears with hyperlinks to the actual source data items to which it may be connected. 	

ID	Criteria	Assessment	Presentation (0 to 5 points)
		4. The results of the search are easy to sort/filter. Evidence of this expectation could be that the solution:	
		 Provides a method to perform a graphical search and filtering of catalog entries. 	
		Displaying results in a natural ranking order, with the most desired catalog asset displayed on the top of the list.	
		 Provides the ability to sort results by one or more than one criteria (aka able to sort by one or multiple criteria). For example sort alphabetically and by other fields like partner 	
		5. The results of the search are easy to follow and track/trace. Evidence of this expectation could be that the solution:	
		 Enables the use of Machine Learning technology to automate the process of discovering, inventorying, profiling, tagging and creating semantic relationships between distributed and siloed data assets 	
		Discloses the results of the search in an organized way that is easy to navigate, and explore information assets in an organized structure of information. A taxonomy structure that can be either naturally defined (Table Owner-Table-Column) or devised using the business vocabulary.	

ID	Criteria	Assessment	Presentation (0 to 5 points)
₹2.2	Easy to Use (Intuitiveness)	The Bidder should demonstrate how the proposed Solution includes user friendly and robust ease of use/intuitiveness where lengthy training/instruction is not required.	,
		At minimum, the Bidder should demonstrate how the proposed Solution:	
		Is easy to access. Evidence of this expectation could be that the solution provides a single sign-on. For example, an ability to sign on with a network password and email address.	
		2. Enables creating reports of different linked data sets.	
		3. Provides information about data quality. Evidence of this expectation could be that the solution identifies data errors to be able to consistently clean data and identifies error free data sets.	
		4. Enables viewing data sets in various non-prescriptive data formats.	
		5. Provides information about basic characteristics of the data. Evidence of this expectation is that the solution states: What is the data used for? Where can I find the data? Who owns the data, so I can inquire about permission to use the data? How do I use said data?	

Annex A

Statement of Challenge

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Note to Bidders:

SSC and Canada and used throughout the document as general terms referring to the Government of Canada.

A. BACKGROUND

1.0 Title: Discoverable and Trusted Data Assets in Support of Decision Making

2.0 Background

Shared Services Canada (SSC) stands to be a key enabler of the Government of Canada (GC) digital agenda with a unique dual role; offering IT services and infrastructure across the GC to support the Data Strategy and digital transformation, while offering those same services internally to the department.

Coincidentally, the digital agenda is also producing increased service delivery pressure for SSC as partner departments all embark on digital modernization at once: federal departments are not only procuring but they are also innovating with technology at a rapid rate. This modernization is creating infrastructural demands within individual departments resulting in downstream response pressure for SSC. The realities of a digital environment produce high needs/high demands coming from all 43 partner departments where the expectation will be for SSC to reply with speed and agility.

Delivering services in this environment puts an increased amount of weight on operational efficiency. SSC's decision-makers at all levels need to make the right call in a quick manner based on timely and accurate information stemming from quality data. SSC needs to prioritize data in its key departmental initiatives and build strategies to foster a data-driven environment for key decision making.

Reliance on institutional knowledge is no longer an option. Each decision must be informed and driven by data in order for SSC to effectively support the GC digital agenda.

It is in this context that SSC faces a fundamental challenge. Due to reasons including fragmented business processes, siloed data management practices and widely distributed systems, its decision makers face significant impediments in fully leveraging data in decision-making, thereby fuelling continued reliance on tribal knowledge.

In fact, nine critical issues have been defined as impediments to SSC becoming fully data-driven. The problem statement offered below addresses four of the nine issues. That is to say, the problem statement offered below is a partial answer to the bigger challenge stated above.

B. CHALLENGE

3.0 Problem Statement

Business problem: While SSC is actively working on all components of the above-mentioned challenge, the following business problem is foundational to its data-driven agenda: SSC data consumers do not know what data is available, where it resides, what it means, who

governs it, and whether it can be trusted (i.e. complete, accurate, consistent, valid, with known source of origin and clear definition.)

As long as the full offering of SSC data remain little known assets, SSC cannot position itself to leverage data in its service improvement agenda.

As mentioned four critical issues have been defined with a mandate to resolve:

- 1. Business vocabulary within SSC is varied resulting in inconsistent representation of data in reporting products
- 2. An inability to identify where authoritative data lie within the department and who governs this data
- 3. Data quality levels are unknown and/or low and not being remediated in authoritative systems thereby resulting in other sources of data, i.e. black books
- 4. Data gaps exist for key business processes and are not being incorporated into authoritative systems resulting in the creation of non-authoritative sources (i.e. black books)

These issues call for metadata management capability. Please note, SSC's metadata management initiative is called Integrated Business Glossary (IBG) and will be referred to as such from this point on.

The Contractor(s) is responsible to contribute to resolving these challenges. That is to say, it is understood that there are other dimensions of the problem definition such as data literacy, clarity of the data management process, and timely data capture that are under the responsibility of SSC but out of scope for the resulting contract(s).

Challenges specific to Solution(s) procured under the contract

Below is a description of the specific challenges that the solution(s) procured under this contract is expected to resolve. While it is understood that the contractor alone will not be in position to resolve all the challenges below, the following description will be used to:

- 1- Guide the contractor in the development of any improvements during the prototypes or during the implementation phase; and
- 2- Used as reference at the implementation.

SSC may request the Contractor to leverage innovations to be added to the solution(s) procured under this contract. Any technological additions will be deemed in scope if it helps further resolve the challenges identified below.

3.1 Specific challenges pertaining to integrated business glossary (IBG)

- Inability to find and inventory distributed and siloed data assets and authoritative sources; current process to identify and inventory data assets, in a way that delivers value, is manual;
- Lack of a centralized and validated business glossary that:
 - o Contains definitions and taxonomy for key business terms and entities; and
 - o Provides opportunity to eliminate tribal knowledge;
- Data standards and policies are either not defined, or if defined are inconsistent across various groups;

- Reference Data is not defined to allow for centralized vocabularies;
- Inability to accurately identify data's journey through their lifecycle; and
- Inability to easily integrate and cross-reference business and technical information for SSC data.

Please note: In SSC's context, "black books" are defined as an alternative data source/store (typically in MS Excel format) created when authoritative sources do not provide the reliability or functionality required, or when an authoritative source is not available.

4.0 Objective

With the mandate to resolve these challenges, SSC seeks **an interoperable solution** enabling users to:

- ✓ Find, understand and explore the SSC data assets via metadata management capability;
 and
- ✓ Profile, assess, and improve data assets in accordance with SSC's data quality standards and requirements

As such, the objective of this procurement process is to secure solution(s) that enable resolution of the challenge identified under the section **Challenges specific to Solution(s) procured under the contract.**

C. PROCESS

Solutions that solve the above mentioned problem statement are solutions that connect to SSC data sources. Prior to explaining the procurement process along with its stages, it is important to understand:

- a) Details regarding SSC's environment; and
- b) Details regarding how this connection will occur.

5.0 SSC's Environment

Shared Service Canada (SSC) has a Disturbed Computing Environment (DCE) comprised of a blended server environment that are hosting applications in either an centralized or distributed environments. SSC employees can interact with the environment in a blended way as well based upon the type of devices available

- 1. Roughly 5000 Laptops/notebooks/Tablets computers
- 2. Roughly 5000 iPhones/android cell phone devices.

5.1 Server Environments

The DCE is a client/server based infrastructure consisting of blended server environment, consistent of Windows and/or Red Hat Linux. Authentications and authorization of SSC environment is provided by Microsoft Active Directory as the directory services. Application can be hosted centrally on a single server or on a distributed servers for load balance. In regards to this procurement process the available servers to host the applications are as following:

Red Hat Linux 7.x 64 bit

Windows Server 2016

6.0 Access to Data Sources and Conceptual Architecture

The IBG tools must be able to connect to identified data sources, including:

- Operational Database Management systems (OPDBMS)
- ETL tools
- Flat files (Excel, CSV, other delimited files)
- Data modelling tools (optional for DQ)
- Business Intelligence systems/tools (optional for DQ)

For IBG, the tool is expected to support a number of functions, including but not limited to:

- Perform metadata scanning to automatically collect from the above mentioned data sources;
- Store the collected metadata in a centralized location and index to demonstrate natural connections;
- Allow for semantic search ability on the collected metadata;
- Ability to tag and annotate metadata, to enrich and improve its trust worthiness;
- Enable data lineage to reveal the data journey during the data lifecycle;
- Ability to enforce both internal and external data standards.

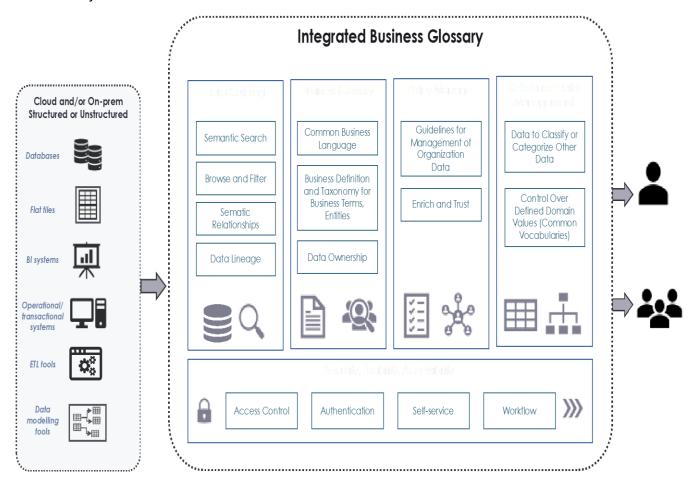
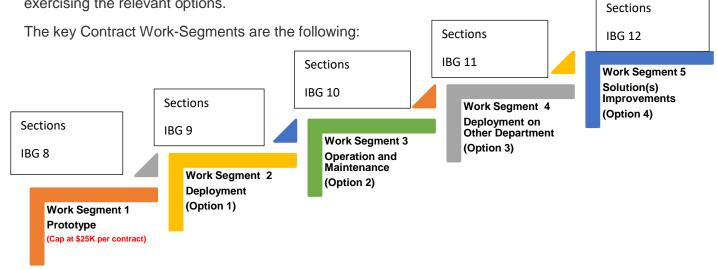


Figure 1: IBG Conceptual Architecture

7.0 Scope and Work Segments of the Resulting Contracts

This contract is one of multiple contracts performed concurrently by various contractors. At the end of the Prototype stage, SSC will determine what solution(s) will be deployed on SSC environment in accordance with the Decision Making Framework (section 8.5). As described in the Article of Agreement of the contract, the stages following the prototype will be actioned by exercising the relevant options.



D. WORK SEGMENTS FOR IBG

8.0 Work Segment 1 - Solution Prototype

This section outlines Contractor's obligation under Solution Prototype (Work Segment 1) and explains the mechanism used by Canada to determine which solution is to be deployed under the Work Segment 2 – Deployment.

8.1 Location of Work

The Work for the prototype will be conducted by SSC resources at one of SSC's facilities in the National Capital Region (NCR). The tasks related to providing support, as per Attachment 3 of Annex A may also be carried out remotely via a secure connection to Government of Canada networks using a Government of Canada accepted authentication solution.

8.2 Requirements

The Contractor must provide a prototype of the solution in Work Segment 1 that meets the minimum mandatory requirements defined in Attachment 1 of Annex A, along with the required support as per Attachment 3 of Annex A.

8.3 Canada's Roles and Responsibilities

Stage 1

• Develop solution and/or end user test plans and use cases

Develop KPI test script scoring guide

Stage 2

Populate prototype solution with sample SSC database(s) prior to end user testing

Stage 3

Provide the Contractor with list of end user testing participants, use cases and scoring guide

Overview of the Work Segment 1 - Prototype

Stage 1 - Configure and test

The Contractor must:

- Support SSC with installation of Contractor's solution (software and repository)
- Configure the solution to support SSC's requirements per Attachment 1 to Annex A
- Perform testing to ensure solution is meeting minimum mandatory requirements (high level checklist)
- Support/ assist SSC in final install and configuration activities
- Support/ provide advice to SSC in securing the solution
- · Create and assign production roles

Stage 2 – Provide technical support

The Contractor must support Canada's effort to prototype the Solution, including conducting usability testing. Usability testing will begin once the Solution prototype has been delivered (Milestone 1: Solution Prototype Delivery). It will include the requirements listed in the Attachments 1 and 2 of Annex A.

As part of support, the Contractor must:

- Provide support as and when required to the SSC system administrator during upload of applicable data sources
- Provide support during the prototype stage including support for system integration and testing
- Support testing and adjust solution configuration as and when requested
- Attend workshops scheduled by the Canada to walk through the operation of the Solution prototype. These workshops can be attended by either remote teleconference and videoconference or in person at an office in the NCR. Attending in-person or remotely will be at the Contractor's discretion.
- Provide written support documentation for executing the functionality described in the Requirements.
- Assist in troubleshooting any issues with the use of the Solution prototype.

Stage 3 - Training

The Contractor must provide baseline level training to trainers

8.4 Prototype Milestones

The roles and responsibilities specified in the clause 8.3 above translate into the following milestones.

Milestone	Delivery Date
	This date relates to the final document after review by Canada, if any
Milestone 1: Solution Prototype Delivery	60 business days from the date of Contract Award
Milestone 2: Prototype Installation Guide	60 business days from the date of Contract Award
Milestone 3: Prototype Support Documentation	10 business days from the date of Contract Award
Milestone 4: Support Memo	45 days from the date of Contract Award

In the case of a deliverable such as a document, the Delivery Date refers to the date at which this document is submitted. It does not account for the time for Canada for review and provide feedback or for the Contractor to make the required updates. Additional information is found within the Section Milestone Details.

8.4.1 Milestone Details

a) Milestone 1: Solution Prototype Delivery

The Contractor must deliver (assist in install and configure) the Solution prototype within SSC's environment. The delivered Solution prototype, at a minimum, must provide all functionality defined in the Attachments 1 of Annex A. In the case of new functionality needs identified during the prototype, the Contractor would deliver/enable these during the initial deployment, post prototype.

b) Milestone 2: Prototype Installation Guide

The Contractor must deliver an installation guide to the Technical Authority that contains the steps to be taken to install the prototype solution on SSC's environment along with the parameters used by the Contractor for the installation. This Installation guide is to be delivered at the same time as the Solution prototype.

The Technical Authority will provide comments and feedback within 10 business days of receipt of the Installation Guide. The Contractor must update its Installation Guide to reflect the Technical Authority's comments and resubmit for approval within five business days. The Technical Authority will approve the final document within five business days, if applicable.

c) Milestone 3: Prototype Support and Support Documentation

The Contractor must support Canada's effort to prototype the Solution, including conducting usability testing. Usability testing will begin once the Solution prototype has been delivered (Milestone 1: Solution Prototype Delivery). It will include the requirements listed in the Attachments 1 and 2 of Annex A.

As part of support, the Contractor must:

- Attend workshops scheduled by the Crown to walk through the operation of the Solution prototype. These workshops can be attended by either remote teleconference and videoconference or in person at an office in the NCR. Attending in-person or remotely will be at the Contractor's discretion.
- Provide written support documentation for executing the functionality described in the Requirements.
- Assist in troubleshooting any issues with the use of the Solution prototype.

d) Milestone 4: Support Memo

The Contractor must provide a Support Memo that contains:

- A list of all workshops and support sessions attended;
- A list and description of all guidance or documentation provided in support for the testing;
- A list of any defects/issues resolved during prototype testing; and
- Results of the solution in regards of the resolution of the challenges

The Technical Authority will provide comments and feedback within 5 business days of receipt of the Support Memo. The Contractor must update its Support Memo to reflect the Technical Authority's comments and resubmit for approval within five business days. The Technical Authority will approve the final document within 5 business days.

8.5 Decision-Making Framework for Choosing Solution(s) to be Implemented in Work Segment 2 Deployment

If Canada chooses to exercise Option 1 to proceed to Work Segment 2, Canada will use the following decision-making framework for selecting which Contractor's solution will be implemented for Work Segment 2.

Canada will be seeking to test the mandatory functional and non-functional requirements, as well as the optional prototype capabilities, each of the Contractors committed to provide as part of the solution. The below framework outlines the types of capabilities Canada will be seeking to be demonstrated by the Solution prototype.

The choice of the solution to be implemented will be made on the basis of best fit and may be considered against other options for implementation (i.e. options other than the prototypes developed under this series of contracts). If Canada chooses to exercise Option 1, Canada will select the Contractor that has delivered a Solution prototype that, in Canada's opinion, demonstrates the most benefits for the Government of Canada. The following factors will inform Canada's opinion regarding which solution demonstrates the most benefits for the Government of Canada:

Installation and setup procedure: how simple is the solution to install and set up?

The following aspects of the installation and setup process will be considered:

- Time required to install a baseline environment;
- Supported environments that the solution can be installed on (Windows, Linux, etc.);
- Out-of-box installation and configuration automation capabilities (e.g. scripts, profiles, templates); and
- Quality and availability of documentation.

Monitoring and operations: how simple is the solution to monitor and operate?

The following aspects of the operational processes will be considered:

- Out-of-box (built-in) audit and log management capabilities;
- Ability to sandbox, test, deploy, and roll-back configuration changes;
- Ability to set active alerts on user interface level and system (admin) level failures; and
- Out-of-box (built in) operational reports.

Overall user experience: what is the overall user experience during the execution of the various prototype use cases?

The following aspects will be considered:

- The ability to execute tasks and actions as per functional use cases and usability test scripts;
- The time to achieve proficiency on solution based on the training provided by the contractor represents efficiency gained;
- Flexibility of making changes throughout the prototype development processes;

Note: Proficiency is defined as the user can achieve all the test scripts without a screen by screen walk through or referring to the support documentation. The scoring to be based on average of all user times throughout testing.

9.0 Work Segment 2 - Deployment on SSC

9.1 Initial Deployment – Work Segment 2 (Option 1)

If Canada chooses to exercise Option 1, the following will apply.

The scope of this work segment outlines how Canada will roll out the initial deployment of the chosen solution(s) with the Contractor(s) of choice, develop training material, and training the trainers.

9.2 Location of Work

The Work will be conducted by SSC resources at one of SSC's facilities in the National Capital Region (NCR). The tasks related to providing support, as per Attachment 3 of Annex A may also be carried out remotely via a secure connection to Government of Canada networks using a Government of Canada accepted authentication solution.

9.3 Requirements

The Contractor must provide a fully operational solution that meets the requirements indicated in Attachment 1 of Annex A as well as user requirements defined during the prototype stage. The solution must also retain all features and functionality of the Solution Prototype provided during the prototype stage.

9.4 Canada Roles and Responsibilities

- Provide the technical resource required by the Contractor to deploy
- Coordinate the internal resources
- · Change management activities

Overview of Deployment Stages:

Stage 1- Task Force for deployment

The Contractor must identify the key members of its team to be part of the deployment task force. Key members will include SSC representatives and the Contractor.

Stage 2 – Strategy to distribute

The Contractor must identify the components that are ready to be distributed and develop a strategy to distribute that will lead the deployment of the solution. Under this stage, the Contractor must also provide mechanism to receive and address end users feedback.

Stage 3 - Installation of the Solution on different servers

The Contractor must coordinate with the Deployment task force to install the solution. The Contractor must also resolve issues related to the solution in order for it to meet the requirements of the contract.

Stage 4 - Testing of the solution

The Contractor must test the solution in accordance with the test planned approved under Work segment 1.

Stage 5 - Training and operation and maintenance for the rest of the year

The Contractor must train SSC's identified trainers and provide the training material describe below. Once the deployment of the solution is completed, the Contractor must also provide support services identified under Attachment 3.

*Regarding support for the security assessment: The solution must receive Authority to Operate (ATO) from Canada in order to be deployed in a production environment. The initial SA&A must be completed prior to the solution implementation (see Milestone 5 Solution Deployment below), but the Contractor must support follow-up for additional users onboarding and final Authority to Operate.

9.5 Milestone Summary

Milestone	Delivery Date*
Milestone 5: Training Plan and Materials	15 days from start of contract
Milestone 6: Solution Deployment	End of Month 5 from the date of SA&A approval
Milestone 7: Training and Transition Completed	Mid-Month 6 from the date the Option 1 was exercised

^{*} In the case of a Milestone being a document, the Delivery Date refers to the date at which this document is submitted. It does not account for the time for Canada for review and provide feedback or for the Contractor to make the required updates. Additional information is found within the Milestone Details.

Milestone Details

a) Milestone 5: Training Plan and Materials

Training plan: The Contractor must deliver a training plan targeting trainers (up to 3), system administrators (up to 2) and support staff (up to 4) that includes:

- The Train-the-Trainer strategy and approach, including delivery method;
- The approaches to verify proficiency of participants (i.e. to-be trainers) Once you've trained them, how will be know they have the level of proficiency required to train others;
- Defining the training resources, including the materials to be developed, environments, as well as other support and knowledge bases to be provided;
- A training schedule to train trainers.

The Technical Authority will provide comments and feedback within five (5) business days of receipt of the Training Plan. The Contractor must update its Training Plan to reflect the Technical Authority's comments and resubmit for approval within five (5) business days. The Technical Authority will approve the final document within five (5) five business days.

Training material

The Contractor must also provide all training materials required to deliver train the trainer sessions in accordance with the approved Training Plan. This includes any documentation such as course content and reference manuals as well as any technical components such as applications for testing and training environment configurations.

In addition to training the trainers, the Contractor would deliver virtually training to the system administrators (up to 2) and support staff (up to 4). Length of training to not exceed 3 hours in length.

Course content and reference manuals must be provided in English. Canada will be responsible for any required translation.

b) Milestone 6: Solution Deployment

The Solution will be installed and configured by SCC. The Contractor will support the deployment of the Solution by undertaking the following activities to deliver this milestone:

- Provide all of the required access to the solution and supporting operational tools to the new Operations team members.
- Provide access to any supporting knowledge bases and communities.
- Demonstrate reporting capabilities used to generate metrics and reports.

The Contractor must also complete the transition to a Government of Canada team to operate the solution prior to acceptance of this milestone.

The Contractor must receive written approval from the Government of Canada's Technical Authority to deploy the Solution into a production environment. The Contractor must complete all testing and receive acceptance by the technical authority before beginning the production deployment.

The Solution must be available with all required user account access provisioned to allow for operations. It is expected that the Contractor will work with users in an iterative manner to make changes (e.g. configuration changes) as necessary.

The Solution must be in production for at least 10 business days without a critical severity defect for this milestone to be considered complete. For the purpose of this milestone, a critical severity defect is a failure that prevents the solution from being usable with no available workaround. This also includes any defect that would make the solution unfit for production usage, e.g. a security feature not functioning as expected.

The solution will be considered deployed when the testing foreseen by the Technical Authority confirms that all the functional and non-functional requirements are satisfied.

c) Milestone 7: Training Delivery and Transition Complete

The Contractor must provide training in accordance with the approved Training Plan. Training to be delivered virtually in either Official Languages. Training is expected for no more than 9 participants. The number will be confirmed based on the types and nature of roles required for ongoing maintenance and support.

The Contractor must close out deployment and provide a memo to indicate that all require closure activities have been performed.

10.0 Work Segment 3 - Operation and maintenance

If Canada chooses to exercise option 2, the following will apply.

This section outlines how Canada will roll out additional years of service.

10.1 Location of Work

The work for the prototype will be conducted by SSC resources at one of SSC's facilities the National Capital Region (NCR). The tasks related to providing support, as per Attachment 3 of Annex A may also be carried out remotely via a secure connection to Government of Canada networks using a Government of Canada accepted authentication solution.

10.2 Requirements

The Scope of Work Segment 3 is maintaining ongoing operations and maintenance.

Maintaining the Solution:

The Contractor must continue to provide a solution that meets the mandatory requirements of Attachment 1 and retain all of its functionality and features from Work Segment 2 throughout Work Segment 3.

Support Services:

The Contractor must also provide the support services as defined under Attachment 3.

Identification of Improvements:

Canada encourage the Contractor to identify and propose improvements to the Solution that are not covered under the current contract and could improve the problem and challenges resolution as identified in this SoC. If agreed by Canada, those improvements may be implemented under the current contract by the exercise of the option 4.

10.3 Canada Roles and Responsibilities

Canada	 Responsible for the applications that send data to the Solution(s) Administer the solution as per the Contractor(s)' support and guidance.
Contractor(s)	 Provide support as per support requirements outlined in Attachment 3 to Annex A Adjust the solution to leverage technological innovations with the view of remaining efficient and compliant Identify potential improvements to the solution

11.0 Work Segment 4 - Deployment on Other Government Department Environments

If Canada chooses to exercise option 3, the following will apply.

The Scope of Work Segment 4 is to deploy the solution on the environment of OGD.

11.1 Roles and Responsibilities

Canada	Identify the Other government department primary point of contact
	Provide access to other government department environment

Contractor(s)

- Identify the components they are ready to be distributed. (included in the test plan)
- Propose a distribution strategy to distribute
- Stage 1 identify Canadian experts required for deployment
- Stage 3 coordinate with the Deployment task force SSC representatives (TA, CA, OGD and Contractor)
- Resolve issues related to the solution in order for it to meet the requirements of the contract
- Training package (Train-the-Trainer)
- Configure the solution to the other government department taking into consideration the lessons learned during initial solution prototyping and implementation
- Provide mechanism to receive and address end users feedback

Overview of Stages for the deployment of the Solution on OGD:

At the outset of the exercise of this option, the Technical Authority will identify the point of contact of the OGD. The Contractor will then be responsible for the following:

a) Deployment strategy

The Contractor must first assess the configuration needs and determine if preliminary testing is required prior to deploying the solution on the OGD environments.

b) Deployment of the Solution on OGD environment

The obligations of the Contractor for the deployment will be the same as those described in the work segment 4. Any required adjustment will be reflected at the time of the exercise of the option 3.

c) Milestone - Deployment strategy

The Contractor must produce a deployment strategy that includes at least the following components:

- 1. Identification of configurations needed;
- 2. Timelines and key steps;
- 3. Adjustment to the Test plan, if any.

12.0 Work Segment 5 – Solution Improvements

Canada encourage the Contractor to identify and propose improvements to the Solution to leverage technological innovations that are not covered under the current contract and could improve the problem and challenges resolution as identified under the section B.

If Canada chooses to exercise Option 4, the following will apply.

Overview of the Work Segment 5 Stages

Stage 1 - Identification of improvement and definition of proposed contracting requirements

The Contractor must:

- Describe the proposed improvements and additional requirements.
- Demonstrate the benefits of the proposed improvements and explain how it would contribute to resolve the challenges identified in this SoC under the section B.
- Substantiate the value for money in accordance with the terms of this contract.
- Provide modification to the testing plan to measure the results of the addition.

Stage 2 – Contract amendment to include the accepted improvements

If the value for many and benefit to the problem resolution is demonstrated, Canada may exercise the Option 4 and modify the contract accordingly.

Attachment 1 to Annex "A"

Mandatory Minimum Requirements

1- Functional Requirements (FR)

The IBG Solution must meet the following mandatory functional requirements

FR1: Storing and publishing capacity

The solution must stores and publishes the following as it pertains to SSC data:

- o Definitions, business metadata and taxonomy for key business terms and entities.
- Operational and Technical metadata
- o Ability to link a catalog entry to a business term
- o Must be able to identify if the technical metadata is a system of record
- o Publishes a process to request access to a data asset
- Has the ability to identify if a data asset is either retained or disposed of
- Data Standards and Policies
- Supports industry metadata standards.
- Information about data governance stakeholders including data owners and data stewards
- o Information about authoritative data, reference data, and master data

FR2: Ability to connect

The solution must have the ability to connect to the following metadata sources to automatically import metadata content (Metadata is classified as; business, operational and technical)

- data sources that are classified as Operational Database Management Systems (OPDMBS) (Cloud, On-Premise, hybrid)
- common tools used to manage data at the very least Business Intelligence, Data Modeling, Extract Transform & Load, and Enterprise Service Bus tools

FR3: Collaborative functionality

The solution must collaboration between multiple users within the tool allowing users to share and collaborate. The solution must allow Maker-Checker-Approver workflow to be implemented, monitored and measured.

FR4: Machine Learning

The solution, with the use of machine learning algorithm, cross references information assets to bring greater insight to the user.

Cross-referencing metadata can bring even more insight to the user. Cross-referencing should also reduce the amount of time users spend searching.

**Information Assets are elements that touches, contains or describes data

FR5: Reporting

The solution must provide reporting on the number and type of changes made to catalogue entries (at the very least self-service or real time reports).

The solution must report on the import and export of metadata in a graphical form.

The solution must report on the status of any process defined in the product. At the very least the process defined are; Approval Process, Access Request Process for data, Rejection Process, Status Process in a graphical form

FR6 Reporting Workflow

The Catalogue Solution must at the very least report each activity in a defined workflow, the target completion date for the activity, the State of the associated Catalogue Entry, the name and identify of the Catalogue Entry, and an obvious visual differentiator for those entries where the target date is imminent and past due.

FR6: Audit Functionality

The solution includes audit functionality (i.e. the ability to report how often it is accessed, what is being accessed and identify what users access it.)

FR7 Semantic Search functionality

The solution must include user friendly and robust semantic search functionality where knowledge of a query language is not required.

- The Solution must enable users to add their own searchable tags to a catalog entry to enrich metadata assets
- The solution must provide a graphical search and filtering of catalog entries
- The solution must provide a graphical (and/or visual) representation of natural relationships between metadata items
- The solution must enable the use of visualization to display multiple types of relationships between data assets.
- The solution must enable the use of Machine Learning technology to automate the process of discovering, inventorying, profiling, tagging and creating semantic relationships between distributed and siloed data assets

FR8: Data Lineage

The solution captures and publishes data lineage through multiple steps in a data's lifecycle: Acquired, Shared, Archived and Purged.

Support of tier one ETL tools and provide native connectors and REST-based APIs to scan for and extract data lineage content.

FR9: Interoperability

The solution interfaces and interoperates with data quality management tool.

2- Non-Functional requirements

The IBG Solution must meet the following mandatory Non-functional requirements

NF 1 Performance Requirement

The solutions performs in accordance with the following:

Must at a minimum support 6,000 users; 500 concurrent users who have basic read rights and 100 concurrent users who have data stewards roles (author/contributor role). ; should support 1000 data sources with up to 100 000 metadata

NF2 On-Prem Deployment

The proposed solution must be capable of being deployed to and operated from within an SSC-managed data centre.

NF3 Cloud Deployment

The solution must be capable of connecting to and operate in a cloud-based infrastructure.

NF4 Cloud PaaS

The Solution must provide a platform as a service (PaaS) such that the vendor shall be responsible for providing:

- Cloud platform capacity to operate all software solution components
- All necessary platform professional services to manage the platform as a solution component, at the very least application of security, patches, backup & recovery, platform configuration
- Provision of necessary platform storage capacity to manage all requisite solution functions identified in this statement of Challenge, 100gb of capacity for staging of metadata file input and output of the IBG solution

NF5 LDAP Security

The Solution must support the use of Lightweight Directory Access Protocol for user authentication and authorization.

The Solution must support single-sign-on on defining named user accounts and credentials for the purpose of authenticating users.

Ability to control user access through definitions of roles, user communities and access privileges that are assignable to either user roles or user groups

NF6 Role Based Access

The Solution must possess role-based security to enable workflow functionality on metadata content stored. The solution will adapt to the role and group that the user has been assigned too.

Roles include but not necessarily limited to:

- Administer Role (Accountable): has all permissions within the Solution and grant permissions
- Steward Role (Responsible): has partial permissions within the Solution that allows this role to create, edit, remove all information assets within the Solution
- Subject Matter Expert Role(Consulted): has limited permissions to only create, edit, remove attributes and relationships
- Stake Holder Role (Informed): has no edit permissions, but can view all information assets that are assigned to this role

NF7 Role Based Workflow

The solution includes role based functionality: <u>maker-checker-approver workflow</u>. This includes provide ability for an access control administrator to add, remove, or change user roles and associated access privileges, including ability to change, delete, or retire a user account.

NF8 Security

The proposed solution must ensure secure and confidential transmission of information with adequate protection from malicious attacks and accidental exposure (e.g., cross-contamination) by using the security infrastructure within SSC.

NF9 API for operational functionality

The solution must provide native connectors, and REST-based Application Programming Interfaces (APIs) for operational functionality, at a minimum including connecting to information assets. When Native Connectors are not available, identify if a third party connectors are required.

NF10 Metadata Ingestion Tool.

The solution must have the Ability to acquire metadata from Information Assets, that falls outside the typical repositories structure.

Classification of Information assets are:

- data sources that are classified as Operational Database Management Systems (OPDMBS) (Cloud, On-Premise, hybrid)
- Data Model Systems
- Business Intelligence Systems
- Extract Transform Load Systems
- Flat file data sources, at the very least would contain text, csv, xls,

NF11 Scalability

The solution must be scalable meaning it can, with minimal effort:

- Increase capacity in connectivity to onboard new information assets (i.e. new databases, BI tools, ETL tools)
- Increase capacity for additionally author/contributor roles

In this requirement:

• "minimal effort" means without changes to architecture or existing deployed integrations.

NF12 Encryption

Provide support for encrypted authentication (SSL/TLS 1.2 and above).

NF13 Official Language

The Solution must provide user interface, output, and documentation in both official languages (English and French).

The platform must provide users option to select their preferred language (English or French).

NF14 Supported Environments and Software Compatibility

Provide documentation stating what the supported environments are for the software. As well, provide any software compatibility that demonstrates that the software components or systems can operate satisfactory together on the same computer or on a different computers that are linked by a computer network.

Attachment 2 to Annex "A"

Mandatory Support Requirements

The Contractor must provide ongoing support for the operations of the solution in accordance with the below support requirements.

Reference ID	Support Requirement
S1	The Contractor must provide availability for live troubleshooting of issues during core business hours (7am to 6pm).
S2	The Contractor must provide a telephone number for the provision of technical support.
S3	The Contractor must provide an email account allowing users to seek technical support in writing.
S4	The Contractor must support troubleshooting interfaces.
S5	The Contractor must assure the availability of the solution as 99% of the time over any calendar-month period
S6	The Contractor must provide support services in both English and French, based on the choice of the User requesting support.
S7	The Contractor must meet the contractual requirement for a 1-hour Recovery Time Objective (RTO).
S8	The Contractor provide all system support activities above the operating system level layer (e.g., installation, patching, monitoring, restarts, system testing);
S9	The Contractor must support user onboarding, by, as a minimum, provisioning of queues, topics, credentials, and assistance with troubleshooting as outlined above.

Annex B – Basis of Payment

Note to Bidders:

As results of the procurement process, the Contractor may be qualified to deliver one or two solutions. Consequently, the basis of payment will be customized prior contract signature.

Work Segment 1, Prototype

During the period of the Contract, for Work relating to prototype performed in accordance with the Contract, the Contractor will be paid as specified below.

1.0 Milestone Payments

Canada will make milestone payments in accordance with the following:

Description	Firm, all-inclusive Milestone Prices
Milestone 1: Solution Prototype Delivery	\$
Milestone 2: Prototype Installation Guide	\$
Milestone 3: Prototype Support Documentation	\$
Milestone 4: Support Memo	\$
Total – Firm Price for Stage 3	\$25,000.00 maximum

Work Segment 2 - Deployment

This section applies only if Option 1 to extend the Contract is exercised by Canada.

During the extended period of the Contract specified below, the Contractor will be paid as specified below to perform all the Work in relation to the Contract extension.

2.1 Licensed Software and maintenance support – Work Segment 2

Description	Description	Firm Price
Licensed Software Entity	License is for perpetual for	\$
	unlimited number of users	
	Maintenance support for 1	
	year	

2.2 Milestones - Work Segment 2

Description	Firm, all-inclusive Milestone Prices
Milestone 5: Training Plan and Materials	\$
Milestone 6: Solution Deployment	\$
Milestone 7: Training and Transition Completed	\$
Sub-Total Deployment Milestones Firm Price	\$

Option 1 - Total Ceiling Price for the Option 1: \$ (2.1 + 2.2)

Work Segment 3 - Operation and Maintenance

This section applies only if Option 2 to extend the Contract is exercised by Canada.

During the extended period of the Contract specified below, the Contractor will be paid as specified below to perform all the Work related to Operation and Maintenance.

3.2 Maintenance Support Fees - Work Segment 3

The Contractor will be paid firm all-inclusive monthly fees, up to a ceiling amount, as follows:

		Firm, all-inclusive monthly fees	
Maintenance support	;	\$	\$

Option 2 - Total Ceiling Price for Option 2: \$ (3.1+ 3.2)

Work Segment 4 - Deployment on other departments

If the solution was to be deployed to other departments, the basis of payment will be updated to include a section replicating option 1, 2 and 4 as applicable.

Work Segment 5 - Solution Improvement

This section applies only if Option 4 to extend the Contract is exercised by Canada.

During the extended period of the Contract specified below, the Contractor will be paid as specified below to perform all the Work related to Operation and Maintenance.

The pricing basis of the option will be negotiated as per the 6.1.6 prior Option 4 issuance and the basis could be modified to reflect the negotiated pricing basis.

Examples below

Description	Firm, all-Inclusive Prices
Solution improvement	\$

Description	Actual cost
Solution improvement	\$
Maximum mark-up	5% of the actual cost of solution improvement
Limitation of expenditures	

Annex C – Security Requirements Checklist (SRCL)