

### Challenge-Based Solicitation (CBS) For an Event Broker Solution

Bidders' Webinars November 29th 2018



# Objective of this presentation

- The objective of this presentation is to provide complimentary information regarding PW-18-00851200, Challenge-Based Solicitation (CBS) for an Event Broker Solution
- This presentation does not replace or modify any provisions of the CBS mentioned above.
- In case of contradiction between this presentation and the CBS, the terms and conditions of the CBS take precedence.

# Structure of this presentation

- Part 1 Context
- Part 2 Overview of the Initiative
- Part 3 The Selection Process
- Part 4 The Resulting Contract
- Part 5 How to Prepare a Successful Proposal
- Part 6 Questions & Answers

### Part 1 - Context

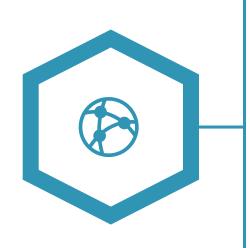


The Government of Canada must be able to get the right data, to the right people, at the right time.



In order to deliver digital services, applications need to communicate with each other.

### **Challenge: Event Broker Solution**



This **Challenge-Based Solicitation** invites suppliers to develop innovative prototype solutions (each a "Solution") for propagating business and data events in real time across the Government of Canada ecosystem and to government, industry, and other stakeholders.

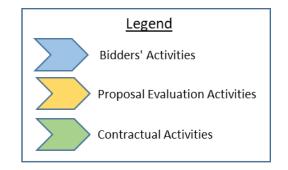
Each proposed Solution must provide **Event Broker capability** that supports ubiquitous **asynchronous messaging across connected systems**.

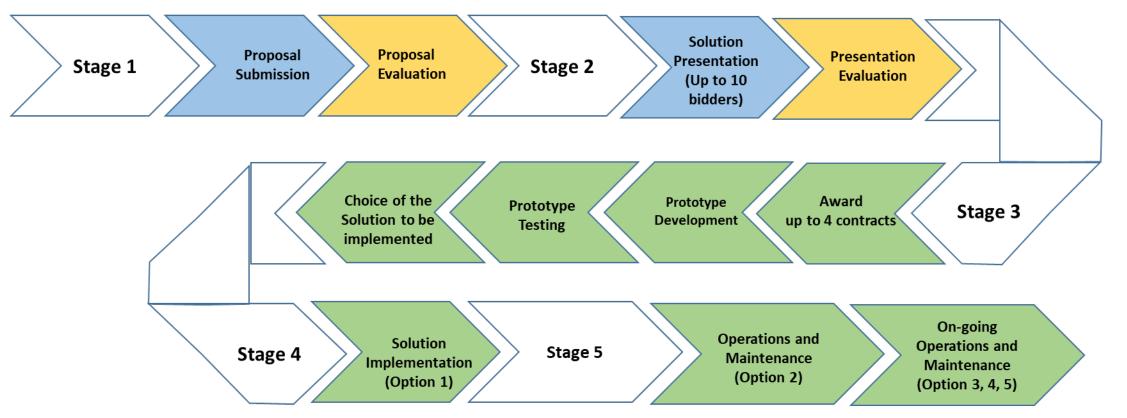
### Key Issues for the Government of Canada



- Lack of a consistent or central platform to publish messages across departmental boundaries.
- Complex network flows, long lead times for implementation, and high latency involved in moving data across a widely distributed and complex network.
- Tendency towards point-to-point integrations rather than more efficient patterns (e.g., broadcast, publish-subscribe).
- Tendency towards data synchronization which tightly couples systems rather than loosely coupled event-driven architectures.
- High developer burden (e.g., learning curve, proprietary tools/libraries, licensing) to publish or consume messages depending on the messaging platforms.
- Lack of support for DevOps approaches and automation tooling (e.g., manual deployment, manual instantiation of queues and topics, complex coordination with testing to configure stubs and data sinks).

### Part 2 – Overview of the Initiative





## **Stages and Options**

Stage 3 –	Stage 4 –	Stage 5 –			
Prototypes	Implementation	Operations and Maintenance			
Max \$25K [~3 Months]	Option 1 Max \$900K [1 Year]	Option 2 Max \$500K [1 Year]	Option 3 Adjusted [1 Year]	Option 4 Adjusted [1 Year]	Option 5 Adjusted [1 Year]

### Option 6

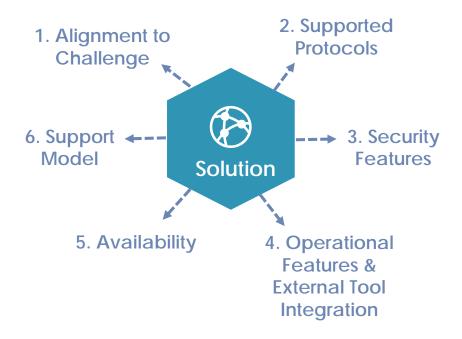
Implementation 2 <sup>nd</sup>	Stage 5 – Operations and Maintenance 2 <sup>nd</sup>					
	Option 2	Option 3	Option 4	Option 5		
	/lax \$500K	Adjusted	Adjusted	Adjusted		
	[1 Year]	[1 Year]	[1 Year]	[1 Year]		

### Part 3 - The Selection Process

Written Proposal (WP) Stage 1	Mandatory financial evaluation criteria	Pass / Fail		Reference 4.2.1		
	Mandatory technical evaluation criteria	Pass / Fail		Reference 4.2.2.1		
	All "must"	Pass / Fail		Reference 4.2.2.1		
	Point rated technical evaluation criteria		Total maximum (WP) = 31 points	Reference 4.2.2.2		
Up to 10 Bidders invited to make a presentation						
Presentation (P)	Point rated technical evaluation criteria		Total maximum (P) = 21 points	Reference 4.3.1		
Stage 2	Technical merit = (WP + P)	adjusted to	yield a score out of 90	Reference 4.3.3		
Financial Proposal (F)	Pricing score		Total Maximum (F) = 10	Reference 4.3.3		
Total Score = Techn	Total Score = Technical merit + Pricing score Award of up to 4 contracts					

### What We're Looking For

Stage 1 (Written)



Stage 2 (Presentation)



### Presentation (Stage 2)



May be made in-person in Ottawa or via teleconference or videoconference



Each presentation will be allocated a 60-minute period of time: 25 minutes to present, 15 minutes for the evaluation team to withdraw prior to the question period, and 20 minutes for questions from the evaluation team.



The bidder's answers to the questions asked by the evaluation team will be used to grade the same presentation evaluation criteria identified in Attachment 4.



In asking their questions, the evaluation team members will <u>not</u> give any indication to the bidder of how they should respond to the question.

# Socio-Economic Measures

- One of the ten presentation spots is being set aside for the highest-scored responsive bidder that is a small or medium enterprise (SME).
- A second of the ten presentation spots is being set aside for the highest-scored responsive bidder that is an SME and also belongs to an Under-represented group.
- One of the four contracts will be set-aside for award to an SME bidder (whether that SME bidder is from an under-represented category or not). For the set-aside contract, the highest-ranked 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.

### **Evaluation of Financial Proposal**

#### **Evaluated**

Firm Price for Stage 3

+

Ceiling Price for Stage 4 (Option 1)

+

Ceiling Price for year one of Stage 5 (Option 2)

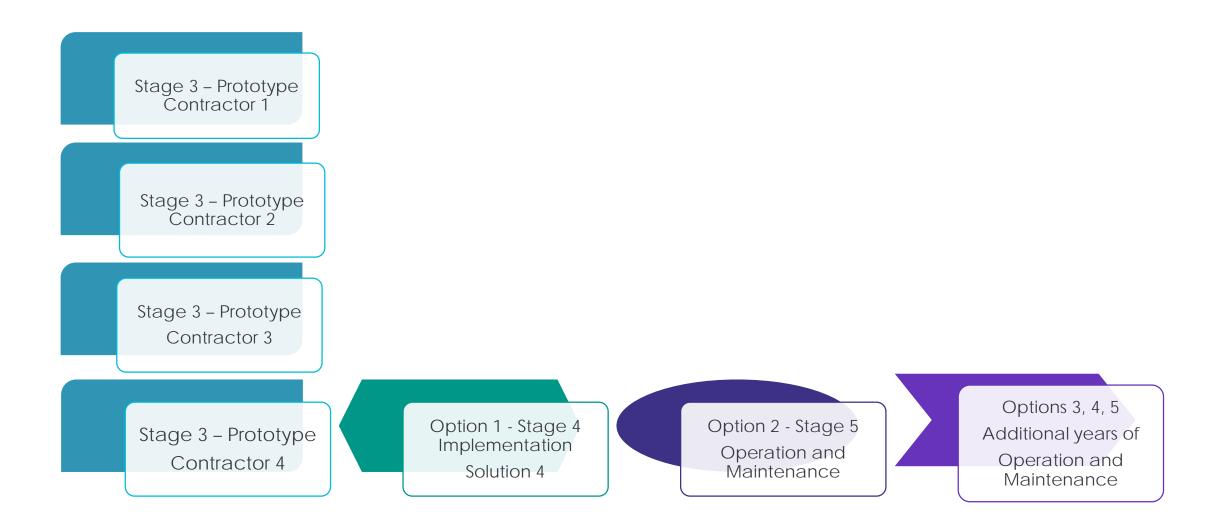
**MANDATORY Evaluation Criteria** 

#### **Not Evaluated**

Ceiling Price for years two, three, and four of Stage 5 (Options 3, 4, 5)

Adjusted in accordance with CPI index (6.1.7 & 6.8.3)

### Part 4 - The Resulting Contract



### Decision-Making Framework for Choosing Solution to be Implemented

#### Installation and setup procedure:

How simple is the solution to install and set up?

#### Message publisher deployment:

How can a message publisher be configured to the solution?

#### Message subscriber deployment:

How can a message subscriber be configured to the solution?

#### Monitoring and operations:

How simple is the solution to monitor and operate?

#### High availability:

How does the solution recover from failures?

#### Troubleshooting:

How does the solution support end-to-end troubleshooting of failed integrations?

#### Interface discovery:

How does the solution support discovery of data interfaces?

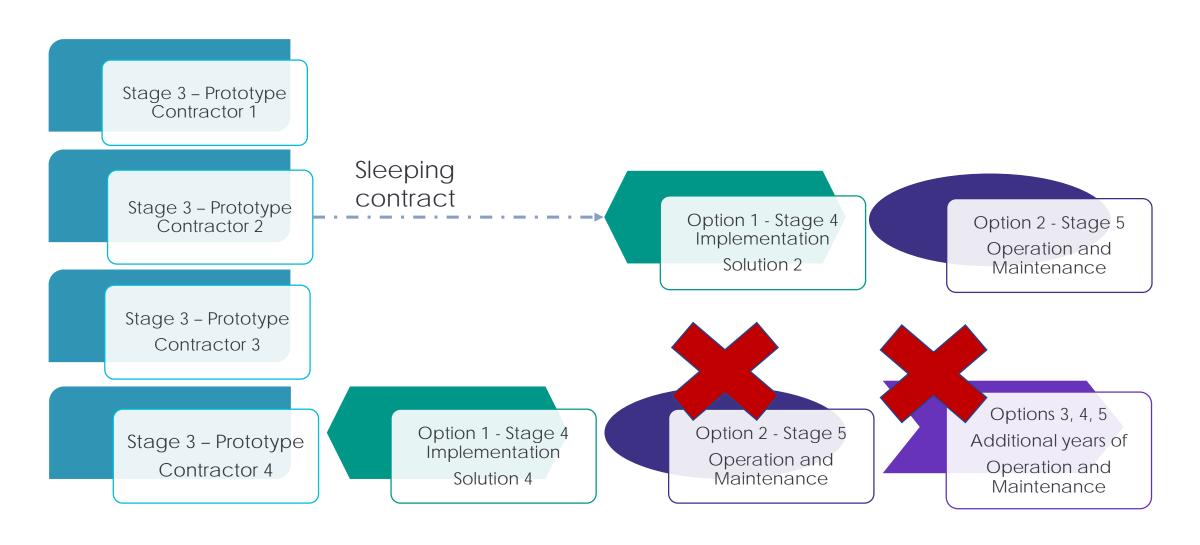
#### Overall user experience:

What is the overall user (developer and operator) experience during the execution of the various prototype use cases?

Other factors or benefits that would become available or known at Stage 3.

### If Another Solution Needs to Be Implemented

Ref. 6.1.3



### Price Adjustment Mechanism Example

	Bid Price	Date of adj.	Ref	Adjusted Price
Stage 4 (Option 1)	\$750,000			
Stage 5 (Option 2)	\$450,000			
Stage 5 (Option 3)		Apr 15 <sup>th</sup> , 2021	6.8.3	\$456,617.65

#### Option 3 [Ref 6.8.3]

CPI for Apr 2020= 136 CPI for Apr 2021 = 138

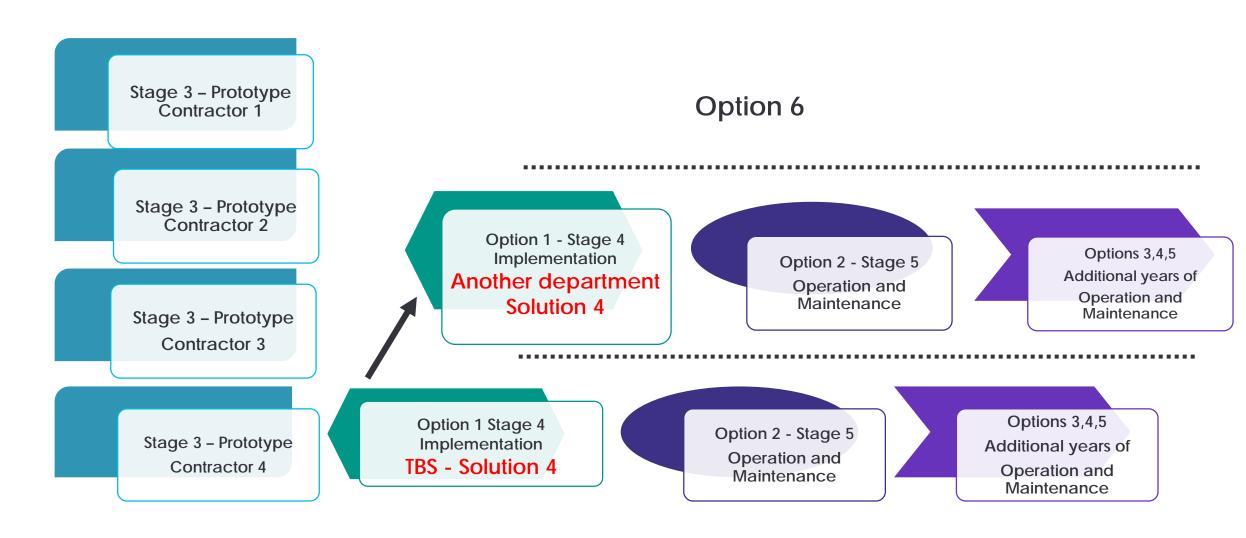
Adj. Option 3 = \$450,000 \* (1+ (138-136) / 136)



### **Licensing Terms**

Canada welcomes software solutions comprised of commercial-off-the-shelf software components, noncommercial (proprietary) software components, open source software components, or any combination thereof. The evaluation methodology does not distinguish between solutions that have components which may be subject to different licensing regimes. Canada will require that COTS and other proprietary software components be licensed to Canada under SACC 4003 and will require that any open source software components be licensed to Canada under the MIT licence. Suppliers must identify during the solicitation period whether they require alternate licensing terms for components in the supplier's potential solution. Suppliers must propose any alternate software licensing terms during the solicitation period so that Canada can consider whether it can accept the alternate license terms.

### Option 6: Implement the Solution for Other Clients



### **Option 6: Negotiation Process**

- Under 6.1.6: The Contractor acknowledges that, if the Contracting Authority exercises the option 6 to add Clients for further testing, there are potential economies of scale that may be realized that will reduce the costs to the Contractor of performing the Work. The Contractor acknowledges that Canada, prior to exercising the option to add another Client, may request a price reduction if the minimum level of transactions (10,000 transactions per second and 500 unique end points) varies by 10% or more, or if another economy of scale is identified by the Canada. In that case, the Contractor will provide a price breakdown of the milestones and other firm lot price elements showing the cost of direct labour, direct materials, purchased items, engineering, general and administrative overhead, transportation, profit; or any other supporting documentation as requested by Canada.
- We would appreciate input or suggestions in relation of the proposed negotiation process.

### Part 5 - How to Prepare a Successful Proposal

#### 4.2.2.1 Mandatory Technical Evaluation Criteria

- Proposals must meet all mandatory criteria identified in Attachment 4. Proposals that fail to meet all mandatory criteria will be declared non-responsive.
- Any element of the solicitation identified with the words "must" or "mandatory" is a mandatory requirement.

## All components of each mandatory criterion **must** be demonstrated.

E.g. M4.1 – Reliable messaging capabilities

The bidder **must** demonstrate that the proposed solution provides reliable messaging capabilities, specifically:

- Persistent and durable topics and queues;
- Message retries;
- Dead letter queues;
- Notification of delivery failures; and
- Delivery receipts.

**Pass:** The proposal demonstrates that the proposed solution implements **all 5** of the above stated functionality.

### **Use the Provided Forms**

#### Attachment 2- Financial Proposal Form



Bidders must complete this Financial Proposal Form. The total amount of Applicable Taxes must be shown separately.

This initiative is comprised of 5 stages. The first 2 stages relate to the CfP process. The contract first stage is Stage 3. That explains why bidders have to submit prices for stages 3, 4, and 5.

Bidder name:	Bidder 1

#### A- Stage 3 Prototypes Development, Evaluation of Prototypes and Selection of the Solution

#### Table 1 - Milestone Payments

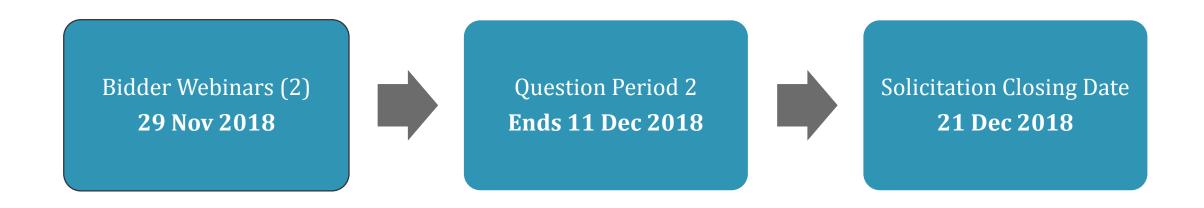
Description		Firm, all-inclusive Price	
		Frice	
Milestone 1: Solution Prototype Delivery	\$	14,000.00	
Milestone 2: Installation Guide	\$	1,000.00	
Milestone 3: Support Memo	\$	12,000.00	
Total Firm Price for Stage 3 milestones (Max \$25,000)	\$	27,000.00	

Ref. Attachment 3

## **Substantiate Requirements**

ID	Criteria	Assessment
ection 1: A	Alignment to Challenge	
		The Bidder must demonstrate how its proposed Solution addresses the challenge as defined in section 1.2 of Part 1 of this solicitation.  This must include:  a) A description of the Event Broker capability and demonstrate how it will support ubiquitous asynchronous messaging across
M1.1 Alig	Alignment to Challenge	connected systems;
		<ul> <li>b) How the proposed concept addresses at least one of the example issues defined in section 1.2.</li> </ul>
		Pass: The proposal clearly describes the proposed Solution's event broker capability and how the proposed concept addresses at least
		one of the example issues defined in challenge section 1.2.
Met	○ Not Met	
Provide sub	ostantiation here	
707,000		

### Reminder: Timelines & Events



### Part 6 - Questions & Answers



The following key principles govern the preparation of responses to questions received in the context of a CBS:

- Often the answers are in the solicitation document. Whenever possible, the answer will refer to a provision of the CBS.
- We do not provide interpretation of the clauses. That being said, if an ambiguity remains, we note it and we clarify by way of formal amendment.
- We avoid giving answers to hypothetical situations or special cases. Evaluators will be responsible for making determinations based on the information put forward in the proposals.

### This is a different approach!

Your input about this type of procurement process will be sought at various stages of the initiative!



# Appendix Price Adjustment Mechanism - Complex Example

	Bid Price	Date of adj.	Ref	Adjusted Price
Stage 4 (Option 1)	\$750,000	June 2 <sup>nd</sup> 2020	6.1.7	\$761,194.03
Stage 5 (Option 2)	\$450,000	June 2 <sup>nd</sup> 2020	6.1.7	\$456,716.42
Stage 5 (Option 3)		June 2 <sup>nd</sup> 2022	6.8.3	\$460,025.96

#### Options 1 & 2 [Ref 6.1.7]

CPI for March 2019 = 134

CPI for June 2020 = 136

Adj. Stage 4 = 750K \* (1 + (136-134) / 134)

Adj. Stage 5 = 450K \* (1 + (136-134) / 134)

#### Option 3 [Ref 6.8.3]

CPI for June 2021 = 138

CPI for June 2022 = 139

Adj. Stage 5Y2 = 456,716.42 \* (1+ (139-138) / 138)

