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SOLICITATION AMENDMENT
MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address
Raison sociale et adresse du
fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution
Informatics Professional Services - EL Division/Services
professionnels en informatique - division EL
Terrasses de la Chaudière 4th Floor
10 Wellington Street
Gatineau
Québec
K1A 0S5

Title - Sujet VARIOUS INFORMATICS PROFESSIONAL	
Solicitation No. - N° de l'invitation 47060-197627/A	Amendment No. - N° modif. 002
Client Reference No. - N° de référence du client 1000337627	Date 2020-07-31
GETS Reference No. - N° de référence de SEAG PW-\$SEL-641-38288	
File No. - N° de dossier 641el.47060-197627	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2020-08-21	Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Michaud(el div.), Daniel	Buyer Id - Id de l'acheteur 641el
Telephone No. - N° de téléphone (613) 858-8483 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:	

Instructions: See Herein

Instructions: Voir aux présentes

Delivery Required - Livraison exigée	Delivery Offered - Livraison proposée
Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur	
Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur	
Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie)	
Signature	Date

THIS AMENDMENT NUMBER 002 IS RAISED TO :

- 1) Update the solicitation closing date;
- 2) Respond to vendor's questions;
- 3) At Part 1 – General Information, Delete Article 1.2 Summary / Workstream 2 in its entirety and replace with attached document – See attachment 2;
- 4) At Part 4 – Evaluation procedures and basis of selection, Delete Article 4.4 Basis of Selection in its entirety and replace with attached document – See attachment 3;
- 5) At Part 7 – Resulting Contract Clause, Add article 7.26 Dispute Resolution – See Article in attached document – See attachment 4;
- 6) Delete Annex A Statement of Work in its entirety and replace with attached document – See attachment 5;
- 7) Delete Attachment 2 Bid evaluation criteria – Corporate mandatory requirements in its entirety and replace with attached document – See attachment 6;
- 8) Delete Attachment 2.1 bid evaluation criteria – Resource mandatory requirements in its entirety and replace with attached document – See attachment 7;
- 9) Delete Attachment 3 Corporate bid evaluation criteria - rated requirements in its entirety and replace with attached document – See attachment 8;
- 10) Delete Attachment 3.1 bid evaluation criteria – resource rated requirements in its entirety and replace with attached document – See attachment 9;
- 11) Delete Attachment 4 pricing schedule in its entirety and replace with attached document – See attachment 10.

NOTE: All modifications or additions have been identified in RED.

1) UPDATE THE SOLICITATION CLOSING DATE

1) AT PAGE 1, CLOSING DATE OF THE RFP, THE FOLLOWING CHANGE APPLIES:

DELETE:

SOLICITATION CLOSES - L'INVITATION PREND FIN
AT - À 02:00 PM
ON - LE 2020-08-14
EASTERN DAYLIGHT TIME EDT

INSERT:

SOLICITATION CLOSES - L'INVITATION PREND FIN
AT - À 02:00 PM
ON - LE 2020-08-21
EASTERN DAYLIGHT TIME EDT

2) QUESTIONS & ANSWERS - VENDOR QUESTIONS

Q1 : Is there currently (or has there been in the last 12 months) an incumbent completing the same or similar work for any of the required roles? If so, would the Crown please provide the name of the incumbent firm and contract value?

A1: Please refer to Attachment 1 to Q&A - Incumbent

Q2: M1 in both Workstreams requires that "The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category". However, the baseline tasks listed for many of the resource categories in the SOW refer to a specific technical environment (for example: each resource cited under the Business Analyst/Data Analyst/Data Quality Analyst category would need to have experience no NoSQL, which is not a commonly used technology. Given the high volume of billed days Bidders are required to demonstrate, would Canada consider amending M1 in both Workstreams to require the work billed in a given resource category to include, at minimum, 70% of the baseline tasks listed in the SOW?

A2: The tasks with NoSQL are removed from the Baseline tasks in Annex A - Statement of Work. Please see Amendment.

Q3 : For M1, M3, and R1 in both Workstreams, are bidders permitted to reference Billable Days in categories that are similar or equivalent to those listed, if we demonstrate that the resources performed 70% of the baseline SOW tasks?

A3: Canada has considered your request but has concluded that requirements M1, M3, and R1 in both Workstreams will remain unchanged.
For clarity, M3, in both streams, includes the following provision: " In the case a resource category in the referenced contract is not for the identical to the resource category in M3, the Bidder must provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category for the particular resource category in M3."

Q4: For R2-R6 in both Workstreams, where contract references submitted for M1 are awarded points for demonstrating the services of various resource categories in the listed technologies, please confirm which of our interpretations is correct:

i. Full points are awarded if Bidders demonstrate experience in 6 technologies across all of the resources referenced per category; For example, for M1, if a Bidder demonstrated that they had provided the minimum 1000 billed days in the IM Architect category by providing 3 resources in the last 5 years, and the first resource had two of the technologies listed, the second resource had a different two of the technologies listed, and the third resource had yet a different two of the technologies listed, would this be considered compliant? OR

ii. Full points are awarded if Bidders demonstrate that EACH resource cited in M1, for each resource category, has worked with 6 of the listed technologies; For example, in the above scenario, all 3 resources would have to have experience with 6 of the technologies listed.

A4: The number of technologies is the tally of the different applicable technologies, from the set listed in the requirement, used across the contract reference(s) submitted for M1 for delivery of services for the specific resource category and level.
The example provided in interpretations i. would result in achieving max points for this requirement.

Q5: Refer to Corporate Mandatory Requirements, 2.0 Workstream 2 – Business Workstream, M1, item 5). The tables lists resource category #3 as B.5 Business Process Re-engineering (BPR) Consultant; whereas Appendix C of Attachment 2 lists resource category #3 as B.2 Business Architect, Level 3. Would the Crown please confirm that this is a typo in Appendix C, and the table should list B.5 Business Process Re-engineering (BPR) Consultant?

A5: Resource Category “B.2 Business Architect, Level 3” in Appendix C to Attachment 2, is hereby amended to “B.5 Business Process Re-engineering (BPR) Consultant, Level 3”.

Q6: The pool of resources with the technology experience required The pool of resources with the technology experience required and who also hold a Secret clearance is extremely limited. The RFP indicates that CBSA will clear the resources to their own The pool of resources with the technology experience required and who also hold a Secret clearance is extremely limited. The RFP indicates that CBSA will clear the resources to their own Reliability level and not to Secret. With many resources working from home due to Covid-19 with access to only Protected B information through GoC remote access would the crown accept Enhanced Reliability instead of Secret at bid submission?

A6: Canada has considered your request but has concluded that Secret clearance requirement will remain unchanged.

Q7: For many of the resource categories (Database Modeler/IM Modeler (Data Architect), IM Architect, BA, etc) four (4) years of experience with Cognos v11+ within the last eight (8) years is required in support of requirements. Since Cognos 11 was not released until 2015, resources would not have experience in the last eight (8) years with the product; therefore, would the Crown accept previous versions of Cognos in support of these criterion?

A7: Attachments 2.1 and 3.1 are amended. Please see amendment

Q8 : Refer to Resource Mandatory Requirements, M1 (for all resource categories). Bidder's are required to demonstrate XX years of experience in each of the baseline tasks listed under SW3 of Annex A – SOW. It has been our experience, that typically bidder's are required to support min. 50% of tasks in support of these types of requirements. Therefore, would the Crown revise the criterion at M1 to demonstrate 50% of the baseline tasks?

A8: Canada has considered your request but has concluded that requirements M1 for all resource categories, M3, and R1 in both Workstreams will remain unchanged.

Q9: Due to the extent of work required in response to this RFP (Corporate + resources), as well as this being the time of year where many consultants take vacation, making it potentially challenging to obtain information from them, we respectfully request a four (4) week extension to the bid closing date.

A9: Canada has considered your request and has concluded that the bid solicitation closing date will be extended by 2 weeks.

Q10: Corporate requirements M1, M3 and R1, in both Workstreams 1 and 2, ask bidders to demonstrate that billed resources have performed all baseline tasks in their respective category descriptions in the Statement of Work. In our experience, TBIPS solicitations typically allow vendors to demonstrate that billed resources have performed 50% to 60% of tasks to ensure that otherwise highly qualified vendors with similar and applicable, but not identical, corporate client reference projects are able to participate in the bidding process. Given this, would CBSA amend these requirements to allow bidders to present 50% of SOW tasks for full points?

Q10: Canada has considered your request but has concluded that these requirements will remain unchanged.

Q11: For all resource categories in Workstream 1 and for the Business Analyst, Business Analyst (Data Quality) and Business Process Re-Engineering resource categories in Workstream 2: given that many of the technologies in requirements M2, R2 and R3 across all resource grids were released recently (please see the bullets below for examples) and it would not be possible for resources to have four to eight years of experience with these technologies, we respectfully request that CBSA amend these requirements to demonstrating experience with 50% of the listed technologies in each requirement, cumulatively totaling the number of years required to meet or score full points in each of the requirements (M2, R2 and R3 for the subject resource categories).

To keep evaluation criteria clear for bidding purposes, we would also respectfully request that the weighting tables for technologies be removed from the relevant rated requirements in these categories, and only kept for Task Authorizations after contract award.

Technologies with incompatible release dates in these requirements include:

- IBM Cognos v11 – released in 2016
- IBM Data Studio v4+ - released in 2018
- Pytorch – released in 2016
- Anthos – released in 2019
- Tenserflow – released in 2015

A11: Attachments 2.1 and 3.1 are amended. Please see amendment

Q12 : In order to show both adherence and attention to process required in the Contract Management plan we request The Crown include a requirement for ISO 9001:2015 certification as a point rated criteria on this RFP. Due to expected high volumes of resourcing needs and expedited delivery timelines it is clear that the client will benefit from an organization which holds itself to a high delivery standard which is bolstered by this process driven certification. Please advise.

A12 : Canada has considered your request but has concluded not to add this requirement.

Q13: Refer to Attachment 2, Corporate Mandatory Requirements, 2.0 Workstream 2, M1, item 4). Please confirm that bidder's are not required to include the baseline tasks listed in SW3 of Annex A for the same category used in response to this requirement if bidder's are using same TBIPS categories listed within the table. For example, if the bidder is using B.1 Business Analyst's billable days from a TBIPS contract for the 2 BA categories, baseline tasks will be assumed to be the same and it will not be necessary for bidder's to 'map' the tasks.

However, if the bidder is using a category that is not the same category, for example, using a Business Systems Analyst to demonstrate the minimum billable days for Business Analyst, they will be required to demonstrate the same or similar category by 'mapping' the baseline tasks.

A13: Canada has considered your request and has concluded that as stated in:
1. Workstream 2, M1, item "4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category."; and

2. As per Appendix D of Attachment 2, "1) To meet 2.0 M1 of attachment 2, the Bidder must have demonstrated contract experience in supplying all of the resource categories or similar resource categories, for the required Minimum Billable Days per category, within the past five (5) years. All resources provided must have, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the resource category for which they were provided."

All resources provided (in response to Workstream 1, M1 and Workstream 2, M1) must have, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the resource category for which they were provided.

Q14: We would like to request a 3 week extension as there have been several bids due all around the same time and this one is very complex with the grids required per stream.

A14: Canada has considered your request and has concluded that the bid solicitation closing date will be extended by 2 weeks.

Q15: Would the crown please give an extension of 2 weeks to August 14, 2020 given the summer vacation time and the number of resources that are on vacation over the next 2 week period. It is difficult to complete the resource grids effectively when the resources are on scheduled leave? The COVID pandemic is also making it difficult to arrange time to work with the resources during business hours.

A15: Canada has considered your request and has concluded that the bid solicitation closing date will be extended by 2 weeks.

Q16:

Given that there may be 2 contracts issued for this work and one of the contractors is already an incumbent at CBSA and there is only one potential **Aboriginal** successful bidder per stream based on the restrictive corporate qualifications listed in the bid, would the Crown consider the following to be less restrictive in terms of the Corporate mandatory requirements in an effort to increase the likelihood of getting more than one bidder response.

Changing the following Corporate Mandatory criteria will allow current resources that are at CBSA now performing these task to be included in a bid response so that all this Corporate knowledge created over the last several years has not been wasted in vain, and the potential CBSA investment in these resources has not been spent in vain.

The questions are related to corporate mandatory requirements only and are as of follows:

WORKSTREAM 1 - TECHNICAL WORKSTREAM

Mandatory requirement	Currently required	Suggest to change to
M1	<p>1) The billable days must have been for the delivery of informatics professional services;</p> <p>2) For each resource category, the billable days must have occurred, in a 36-month period, within the past 5 years prior to the Initial Solicitation Closing Date;</p> <p>3) The billable days must have been provided under a maximum of 5 contracts per resource category; and</p> <p>4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category.</p> <p>5) The Bidder must provide a completed Billable Days Response Template (Appendix A) as well as a Bidder's Response Template for Corporate References (Appendix B) provided in this attachment for each Resource Category.</p>	<p>1) The billable days must have been for the delivery of informatics professional services;</p> <p>2) For each resource category, the billable days must have occurred, in a 60-month period, within the past 5 years prior to the Initial Solicitation Closing Date;</p> <p>3) The billable days must have been provided under a maximum of 10 contracts per resource category; and</p> <p>4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category.</p> <p>5) The Bidder must provide a completed Billable Days Response Template (Appendix A) as well as a Bidder's Response Template for Corporate References (Appendix B) provided in this attachment for</p>

		3 of the 5 categories Resource Category.
M2	<p>The Bidder must have been awarded, within the past 5 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:</p> <p>a. The Bidder provided a minimum of 7 resources simultaneously for a minimum period of 6 months; and</p> <p>b. Each of the 7 resources must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p>	<p>The Bidder must have been awarded, within the past 10 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:</p> <p>a. The Bidder provided a minimum of 5 resources simultaneously for a minimum period of 3 months; and</p> <p>b. Each of the 5 resources must have provided informatics professional services for a minimum of 50 billable days during a 3 consecutive month period.</p>
M3	<p>The Bidder must demonstrate the provision of informatics professional services for the following 4 Resource Categories identified below.</p> <p>To be accepted,</p> <p>1) Each resource must have provided informatics professional services within the past 5 years prior to the Initial Solicitation Closing Date; and</p> <p>2) Each resource must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p>	<p>The Bidder must demonstrate the provision of informatics professional services for 2 of the 4 following 4 Resource Categories identified below.</p> <p>To be accepted,</p> <p>1) Each resource must have provided informatics professional services within the past 10 years prior to the Initial Solicitation Closing Date; and</p> <p>2) Each resource must have provided informatics professional services for a minimum of 50 billable days during a 3 consecutive month period.</p>
M4	<p>The Bidder must demonstrate Corporate contract experience, in the past 5 years prior to the Initial Solicitation Closing Date, involving a transition-in, for one contract.</p> <p>To be accepted the Bidder's contract transition-in experience must demonstrate that it includes:</p> <p>1) The planning, execution and monitoring of resource training or knowledge transfer for at least 5 resources; and</p>	<p>Eliminate this requirement as it is targeting the current incumbent</p> <p>Or</p> <p>Will the crown consider a scenario whereby an existing service requirement was reissued and re-secured by the same company where the company was required to transition in new resources to replace out going resources?</p>

	<p>2) The delivery of transition-in progress reports or the resolution of transition-in issues.</p> <p>The Bidder must provide a Bidder's Response Template for Corporate References (Appendix B) provided in this Attachment for each contract reference submitted to substantiate experience.</p>	
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WORKSTREAM 2 - BUSINESS WORKSTREAM

Mandatory requirement	Currently required	Suggest to change to
M1	<p>The Bidder must demonstrated contract experience in delivering informatics professional services supplying all resource categories listed in the table below for the required minimum billable days per Resource Category.</p> <p>Billable days are defined as days worked and billed to clients, calculated at 7.5 hours per day.</p> <p>To be accepted,</p> <p>1) The billable days must have been for the delivery of informatics professional services;</p> <p>2) For each resource category, the billable days must have occurred, in a 36-month period, within the past 5 years prior to the Initial Solicitation Closing Date;</p> <p>3) The billable days must have been provided under a maximum of 5 contracts per resource category; and</p> <p>4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category.</p>	<p>The Bidder must demonstrated contract experience in delivering informatics professional services supplying all resource categories listed in the table below for the required minimum billable days per Resource Category.</p> <p>Billable days are defined as days worked and billed to clients, calculated at 7.5 hours per day.</p> <p>To be accepted,</p> <p>1) The billable days must have been for the delivery of informatics professional services;</p> <p>2) For each resource category, the billable days must have occurred, in a 60-month period, within the past 10 years prior to the Initial Solicitation Closing Date;</p> <p>3) The billable days must have been provided under a maximum of 10 contracts per resource category; and</p> <p>4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category.</p> <p>5) The Bidder must provide a completed Billable Days Response Template (Appendix C) as well as a</p>

	<p>5) The Bidder must provide a completed Billable Days Response Template (Appendix C) as well as a Bidder's Response Template for Corporate References (Appendix D) provided in this attachment for each Resource Category.</p>	<p>Bidder's Response Template for Corporate References (Appendix D) provided in this attachment for 3 of the 5 Resource Category.</p>
M2	<p>The Bidder must have been awarded, within the past 5 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:</p> <p>a. The Bidder provided a minimum of 7 resources simultaneously for a minimum period of 6 months; and</p> <p>b. Each of the 7 resources must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p>	<p>The Bidder must have been awarded, within the past 10 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:</p> <p>a. The Bidder provided a minimum of 5 resources simultaneously for a minimum period of 3 months; and</p> <p>b. 4 of the 7 resources must have provided informatics professional services for a minimum of 50 billable days during a 3 consecutive month period.</p>
M3	<p>The Bidder must demonstrate the provision of informatics professional services for the following 5 Resource Categories identified below.</p> <p>To be accepted,</p> <p>1) Each resource must have provided informatics professional services within the past 5 years prior to the Initial Solicitation Closing Date; and</p> <p>2) Each resource must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p>	<p>The Bidder must demonstrate the provision of informatics professional services for the following 3 of the 5 Resource Categories identified below.</p> <p>To be accepted,</p> <p>1) Each resource must have provided informatics professional services within the past 10 years prior to the Initial Solicitation Closing Date; and</p> <p>2) Each resource must have provided informatics professional services for a minimum of 50 billable days during a 3 consecutive month period.</p>
M4	<p>The Bidder must demonstrate Corporate contract experience, in the past 5 years prior to the Initial Solicitation Closing Date, involving a transition-in, for one contract.</p> <p>To be accepted the Bidder's contract transition-in experience must demonstrate that it includes:</p> <p>3) The planning, execution and monitoring of resource training or</p>	<p>Eliminate this requirement as it is targeting the current incumbent</p> <p>Or</p> <p>Will the crown consider a scenario whereby an existing service requirement was reissued and re-secured by the same company where the company was</p>

	knowledge transfer for at least 5 resources; and 4) The delivery of transition-in progress reports or the resolution of transition-in issues. The Bidder must provide a Bidder's Response Template for Corporate References (Appendix B) provided in this Attachment for each contract reference submitted to substantiate experience.	required to transition in new resources to replace outgoing resources?
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A16:

The solicitation represents CBSA's requirement. It is open, fair, and transparent. There are several incumbents, please refer to Attachment 1 to Q&A.

Regarding questions on Workstream 1 - Technical Workstream:

1. M1

Articles 2) and 3) have been amended. Please see revision to Attachment "2", M1 of Workstream 1, articles 2) and 3).

2. M2

The number of resources in articles a. and b. have been amended. Please see revision to Attachment "2", M2 of Workstream 1, articles a. and b.

3. M3

Canada has considered your request but has concluded that the requirement will remain unchanged.

4. M4

Canada has considered your request but has concluded that the requirement will remain unchanged. For clarity, the requirement does not exclude the scenario described in the question.

Regarding questions on Workstream 2 - Business Workstream:

5. M1

Articles 2) and 3) have been amended. Please see revision to Attachment "2", M1 of Workstream 2, articles 2) and 3).

6. M2

The number of resources in articles a. and b. have been amended. Please see revision to Attachment "2", M2 of Workstream 2, articles a. and b.

7. M3

Canada has considered your request but has concluded that the requirement will remain unchanged.

8. M4

Canada has considered your request but has concluded that the requirement will remain unchanged. For clarity, the requirement does not exclude the scenario described in the question.

Q17: Can you confirm the security level of the resources to be presented as part of the bid preparation ?

A17: The required security clearance of the resources to be presented as part of the bid preparation is SECRET.

Q18: As this solicitation was published over two weeks ago and there have been no amendments provided addressing any questions submitted by bidders, including questions we submitted on July 12, 2020 and July 15, 2020. Without these answers we are unable to properly and fully qualify resources and references for our response. Additionally, the period to submit questions currently ends today leaving no opportunity to request any necessary clarification in regards to changes or responses once they have been provided. With the solicitation period ending on July 31, 2020, once we have received responses to questions there will be less than one week to address any changes to the RFP. Given all of these factors, we respectfully request a one month extension of the closing date to August 31, 2020. This extension is very much needed in order that vendors have adequate time to prepare a quality, compliant response for this important initiative.

A18: Canada has considered your request and has concluded that the bid solicitation closing date will be extended by 2 weeks.

Q19: Referring to WS1 & WS2 Resource Mandatory & Rated Requirements M2, R2, R3 (for all resource categories), bidder's are required to demonstrate XX years of experience with **each** of the technologies listed in the criterion. There is a very limited pool of resources (who are also GoC security cleared), having experience with a number of these technologies that are not widely used in an enterprise context.

Would the Crown accept that the XX years of experience is met with the cumulative experience of all technologies as opposed to the current requirement of XX years with **each** technology. As an example would the Crown accept: 6 months experience with AWS, 2 years experience with Data Warehousing technologies, 1 year experience with IBM Cognos v11+ and 2 years experience with IBM InfoSphere Suite or some combination thereof.

A19: Canada has considered your request but has concluded that these requirements will remain unchanged.

Q20: Referring to WS1 & WS2, Corporate Mandatory Requirements M1 and M3. In these criterion, Bidders are required to provide contract reference experience for Level 3 TBIPS resource categories. As many resources are contracted at a Level 2, would the Crown please confirm that it would be acceptable to use Level 2 resources in the required categories, as long as bidder's can demonstrate Level 3 experience (ie. 10+ years of experience, as well as mapping a min. of 50% of the TBIPS tasks for said categories). In addition, please confirm that it will be deemed acceptable to use different resource categories than those specified at M1 and M3, as long as the same mapping applies. For example, bidder's can use a Technical Architect (Level 2 or Level 3) in support of a BA category as long as the baseline tasks are justified.

A20: Attachments 2.1 and 3.1 are amended. Please see amendment.

Q21: Referring to WS2, Resource Rated Requirements, 2.4 Project Executive – Level 3, R1. As currently written, resources are required to demonstrate 14+ years of experience within the past 15 years in order to score full points for this criteria. As most consultants experience breaks between their contracts, possessing 14+ years within the past 15 years could prove to be a challenge for otherwise highly qualified individuals. Therefore, we respectfully request that either the 15 year time restriction be removed, or expand the time restriction to within the past 20 years.

Q21: Canada has considered your request but has concluded that the requirement will remain unchanged.

END OF Q&A'S

ATTACHMENT 1 to Q&A INCUMBENT

Vendor	Contract #	Total Value of Contract
CGI	47060-136911/019/EL	\$ 11,761,200.00
Donna Cona	47419-223800/002/EL	\$ 2,245,950.00
Emerion	5500000890	\$ 1,762,520.00
Emerion	5500000893	\$ 1,740,005.70
Emerion	47419-171663/A	\$ 9,835,952.11
Emerion	47419-223800/001/EL	\$ 2,745,050.00
Emerion/COFOMO	5500000882	\$ 2,221,200.00
IBISKA	47060-136911 016 EL	\$ 7,792,269.00
Price Waterhouse Cooper	EN57 8-055605/344/EI	\$ 1,255,200.00
Professional Computer Consultants	47060-136911/020/EL	\$ 9,801,000.00
Randstad Interim Inc.	47060-136911/017/EL	\$ 6,493,558.00
S.i. Systems	47060-187626/001/EL	\$ 3,591,436.20
Taligent Consulting Inc.	5500000982	\$ 1,021,000.00
TBIPS	5500000880	\$ 2,629,510.00
TPG Consulting	47060-136911/007/EL	\$ 12,729,717.00
TPG Consulting	47060-187626/002	\$ 2,938,447.80
Veritaaq	5500000893	\$ 902,000.00
Veritaaq	47060-136911/010/EL	\$ 12,878,687.00
Veritaaq	47060-136911/015/EL	\$ 3,419,912.00
Veritaaq	47060-136911/018/EL	\$ 17,632,950.44
Veritaaq	47060-136911/019/EL	\$ 11,761,200.00

ATTACHMENT 2 AMENDMENT 002

Resource Category	Level of Expertise	Estimated Number of Resources Required Per Year
B.1 - Business Analyst	2	2
B.1 - Business Analyst	3	2
B.1. - Business Analyst (Data Analyst/Data Quality Analyst)	2	2
B.1 - Business Analyst (Data Analyst/Data Quality Analyst)	3	2
B.2. Business Architect	2	2
B.2 - Business Architect	3	2
B.3 - Business Consultant	2	2
B.3 - Business Consultant	3	2
B.5 - Business Process Re-engineering (BPR) Consultant	3	2
B.11 - Instructor, Information Technology	3	2
P.1 - Change Management Consultant	3	2
P.5 - Project Executive	3	2
P.9 - Project Manager	2	2
P.9 - Project Manager	3	2
P.12 - Risk Management Specialist	3	2

ATTACHMENT 3

AMENDMENT 002

7.26 Dispute Resolution

- (a) The parties agree to maintain open and honest communication about the Work throughout and after the performance of the contract.
- (b) The parties agree to consult and co-operate with each other in the furtherance of the contract and promptly notify the other party or parties and attempt to resolve problems or differences that may arise.
- (c) If the parties cannot resolve a dispute through consultation and cooperation, the parties agree to consult a neutral third party offering alternative dispute resolution services to attempt to address the dispute.
- (d) Options of alternative dispute resolution services can be found on Canada's Buy and Sell website under the heading "Dispute Resolution".

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**ATTACHMENT 4
AMENDMENT 002**

4.4 Basis of Selection

(a) Evaluation of Bid – Multiple Contracts Awarded for Multiple Workstreams

Selection Process: The following selection process will be conducted for each Workstream:

- (i) A bid must comply with the requirements of the bid solicitation, meet all mandatory evaluation criteria and obtain the required pass marks for the point rated criteria identified in this bid solicitation to be declared responsive.
- (ii) The responsive bid that obtains the highest Total Bidder Score will be recommended for award of a contract. For any given Bidder, the greatest possible Total Technical Score is 60 while the greatest possible Total Financial Score is 40.

- (A) Calculation of Total Technical Score: For each Workstream the Total Technical Score will be computed for each responsive bid by converting the Technical Score obtained for the point-rated technical criteria using the following formula, rounded to two decimal places:

$$\frac{\text{Technical Score}}{\text{Maximum Technical Points (Bidders, please refer to the maximum technical points for each Workstream at Attachment "3" and Attachment "3.1")}} \times 70 = \text{Total Technical Score}$$

- (B) Calculation of Total Financial Score: For each Workstream the Total Financial Score will be computed for each responsive bid by converting the Financial Score obtained for the financial evaluation using the following formula rounded to two decimal places:

$$\frac{\text{Financial Score}}{\text{Total Maximum Points Assigned (Bidders, please refer to the total maximum points assigned for each Workstream)}} \times 30 = \text{Total Financial Score}$$

- (C) Calculation of the Total Bidder Score: For each Workstream the Total Bidder Score will be computed for each responsive bid in accordance with the following formula:

$$\text{Total Technical Score} + \text{Total Financial Score} = \text{Total Bidder Score}$$

- (iii) In the event of identical Total Bidder Scores occurring within a given Workstream, then the bid with the highest Total Technical Score will become the top-ranked bidder.

- (b) **Contract Funding Allocation:** Where for a Workstream more than one contract is awarded, each contract issued for that particular Workstream will be issued with an amount of funding specified in the article titled "Limitation of Expenditure" calculated based on the following:

- (i) when one contract is awarded, the amount of the Limitation of Expenditure will be determined at Canada's discretion;
- (ii) where two contracts are awarded, the amount of the Limitation of Expenditure of each contract will be determined in accordance with the following:
 - (A) the Bidder with the highest Total Bidder Score will receive 55% of the funding initially allocated to that Workstream; and
 - (B) the Bidder with the next highest Total Bidder Score will receive 45% of the funding initially allocated for that Workstream.

- (c) Bidders should note that 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.

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ATTACHMENT 5
AMENDMENT 002

ANNEX A

STATEMENT OF WORK

SW1 BACKGROUND

The Canada Border Service Agency (CBSA) has a mandate to provide integrated border services that support national security and public safety priorities, while facilitating the free flow of legitimate trade and travel. The Agency is committed to protecting the safety and security of Canadian communities, as well as the stability and prosperity of our economy.

In support of its mandate, the CBSA has embarked on Agency-wide modernization efforts to strengthen its management foundation and enhance its capabilities to respond effectively to the evolving border continuum. With the exponential growth of data produced by the CBSA and its partners, the CBSA is seeking opportunities to increase its Analytics footprint by fostering people, process, data and technology in order to guide strategic, operational and tactical decision-making along its business lines.

In order to support the advancements of the CBSA's Analytics investment, the Agency needs to secure an agile, connected and high-performing workforce skilled on the use of modern techniques and tools.

CBSA Information, Science and Technology Branch (ISTB) will require resources to supplement and support the staff currently in place and work on high performance, high availability, and mission critical national systems, built on the IT Environment identified in Section 4 below.

SW2 SCOPE OF WORK

The IT Professional Services are segmented into 2 Streams. Each stream has its applicable resource categories as listed below:

2.1 Technical Stream

TBIPS Category	TBIPS Level
A.1. Application/Software Architect (Analytics)	3
A.6 Programmer/Software Developer	2 and 3
A.7 Programmer/Analyst	3
I.2 Database Administrator	3
I.3 Database Analyst / IM Administrator	3
I.3 Database Analyst / IM Administrator (Data Engineer)	3
I.4 Database Modeller / IM Modeller	3
I.4 Database Modeller/IM Modeller (Data Architect)	3
I.5. IM Architect	3
I.5 IM Architect (Data Scientist)	3
I.5 IM Architect (Privacy Architect)	3
I.11. Technology Architect	3

2.2 Business Stream

TBIPS Category	TBIPS Level
B.1. Business Analyst	2 and 3
B.1 Business Analyst (Data Analyst/Data Quality Analyst)	2 and 3
B.2. Business Architect	2 and 3
B.3. Business Consultant	2 and 3
B.5. Business Process Re-engineering (BPR) Consultant	3
B.11 Instructor, Information Technology	3
P.1. Change Management Consultant	3
P.5 Project Executive	3
P.9. Project Manager	2 and 3
P.12 Risk Management Specialist	3

SW3 TASKS AND DELIVERABLES

3.1 Technical Stream

3.1.1 A.1. Application/Software Architect (Analytics) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop technical architectures, frameworks and strategies for analytics systems, either for an organization or for a major application area to meet the business and application requirements.
2. Identify the policies and requirements that drive out a particular analytics solution.
3. Analyze and evaluate alternative technology solutions to meet business problems.
4. Engage with business clients and data scientists to drive out a particular analytics solution.
5. Analyze functional requirements to identify information, procedures and decision flows.
6. Evaluate existing procedures and methods, identify and document data content, structure, application sub-systems and develop data dictionary.
7. Identify and document system, such as, specific standards relating to programming, documentation and testing, covering program libraries, data dictionaries, and naming conventions.
8. Ensures the integration of all aspects of technology solutions.

Additional Tasks could include but are not limited to:

9. Monitor industry trends to ensure that solutions fit with government and industry directions for technology.
10. Define and document interfaces of manual to automated operations within application sub-systems to external systems and between new and existing systems.
11. Define input/output sources, including detailed plan for technical design phase and obtain approval of the system proposal.

3.1.2 A.6 Programmer/Software Developer (Level 2):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Develop and prepare diagrammatic plans for solution of business, analytics, scientific and technical problems by means of computer systems of significant size and complexity.
2. Analyze the problems outlined by the systems analysts/designers in terms of such factors as style and extent of information to be transferred to and from storage units, variety of items to be processed, extent of sorting and format of final printed results.
3. Design detailed programs, flow charts, and diagrams indicating mathematical computation and sequence of machine operations necessary to copy and process data and print the results.
4. Test instructions, and assemble specifications, flow charts, diagrams, layouts, programming and operating instructions to document applications for later modification or reference.

Additional Tasks could include but are not limited to:

5. Select and incorporate available software programs.
6. Translate detailed flow charts into coded machine instructions and confer with technical personnel in planning programs.
7. Verify accuracy and completeness of programs by preparing sample data, and testing them by means of system acceptance test runs made by operating personnel.
8. Correct program errors by revising instructions or altering the sequence of operations.

3.1.3 A.6 Programmer/Software Developer (Level 3):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Develop and prepare diagrammatic plans for solution of business, analytics, scientific and technical problems by means of computer systems of significant size and complexity.
2. Analyze the problems outlined by the systems analysts/designers in terms of such factors as style and extent of information to be transferred to and from storage units, variety of items to be processed, extent of sorting, and format of final printed results.
3. Design detailed programs, flow charts, and diagrams indicating mathematical computation and sequence of machine operations necessary to copy and process data and print the results.
4. Test instructions, and assemble specifications, flow charts, diagrams, layouts, programming and operating instructions to document applications for later modification or reference.
5. Translate detailed flow charts into coded machine instructions and confer with technical personnel in planning programs.
6. Verify accuracy and completeness of programs by preparing sample data, and testing them by means of system acceptance test runs made by operating personnel.

Additional Tasks could include but are not limited to:

7. Select and incorporate available software programs.
8. Correct program errors by revising instructions or altering the sequence of operations.
9. Provide development activities level of effort and duration estimates for schedule planning.
10. Review and analyze the effectiveness and efficiency of existing systems and develop strategies for improving or further leveraging current systems.
11. Assist in the prioritization and planning for resolution of all known defects and enhancements in support of business.

12. Develop and maintain effective collaborative relationships with the stakeholders to discuss and resolve issues.
13. Work with stakeholders to proactively maintain all IT systems documentations aligned with business documentation.
14. Provide updates on work in progress, work completed, work planned, and issues potentially impacting the timely completion or quality level of work.
15. Provide leadership, guidance, and support to less senior resources.

3.1.4 A.7 Programmer/Analyst (Level 3):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Create and modify code and software.
2. Create and modify screens and reports.
3. Gather and analyze data for the conduct of studies to establish the technical and economic feasibility of proposed computer systems and for the development of functional and system design specifications.
4. Design methods and procedures for small computer systems, and sub-system of larger systems.
5. Produce forms, manuals, programs, data files and procedures for systems and/or applications.

Additional Tasks could include but are not limited to:

6. Develop, test and implement small computer systems, and sub-systems of larger systems.

3.1.5 I.2 Database Administrator (Level 3):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Generate new database with the client.
2. Maintain configuration control of the database.
3. Control and coordinate changes to the database, including the deletion of records, changes to the existing records, and additions to the database.
4. Develop and implement procedures that will ensure the accuracy, completeness, and timeliness of data stored in the database.
5. Develop and implement security procedures for the database, including access and user account management.

Additional Tasks could include but are not limited to:

6. Customize database conversion routines.
7. Finalize Conversion Strategy.
8. Maintain data dictionaries.
9. Advise programmers, analysts, and users about the efficient use of data.
10. Perform and/or coordinate updates to the database design.
11. Develop and coordinate back-up, disaster recovery and virus protection procedures.

3.1.6 I.3 Database Analyst / IM Administrator (Level 3):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Develop Complex SQL queries incorporating inner joins, outer joins, aggregates, unions, subqueries, group by, where clause, having clause, triggers, cursors, views, XML query function and other advanced SQL fundamentals and utilize SQL expertise to support and assist Data Modelers, Data Warehouse Analysts, Testers and End Users.
2. Provide support to develop an Enterprise Data Warehouse model; including logical model integration of data from multiple subject areas and use Kimball Methodology (dimensional models integrated via conformed dimensions).
3. Identify requirements for improvements to existing databases by determining users' information requirements and system performance and functional requirements.
4. Develop and implement procedures that will ensure the accuracy, completeness, and timeliness of data stored in the database.

Additional Tasks could include but are not limited to:

5. Develop a comprehensive understanding of CBSA Data Warehouse processes and content (data).
6. Provide support, develop and present Enterprise Data Warehouse (EDW)/ Business Intelligence (BI) strategies, roadmaps and project plans.
7. Assist Data Base Administrator(s) (DBA) with BI/DW database performance and design related issues.
8. Mediates and resolves conflicts among users' needs for data.
9. Advise programmers, analysts, and users about the efficient use of data.
10. Provide input into Data Warehouse Design decisions.
11. Examine data available in existing data source and collect statistics about that data.
12. Write source to target mappings.
13. Work within the Service Lifecycle Management Framework.

3.1.7 I.3 Database Analyst / IM Administrator (Data Engineer) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop, analyze, design, and implement Highly Scalable data management systems (data storage and data movement solutions) to ensure high levels of data quality and availability.
2. Develop capacity planning, backup and restore procedures for the highly scalable data management systems.
3. Build analytics tools and solutions using "Big Data" and ~~NoSQL~~ technologies which utilize the data pipelines to provide users with the said tools and solutions for data modeling, mining and analysis.
4. Collaborate with stakeholders to ensure systems meet business requirements and industry best practices.to
5. Build the infrastructure required for optimal extraction, transformation, and loading of data from a wide variety of data sources using various on-premise and cloud-based technologies.
6. Develop processes supporting data transformation, data structures, metadata, dependency and workload management.
7. Develop and maintain data pipelines and data science solutions on cloud-based platforms.

Additional Tasks could include but are not limited to:

8. Develop or assist in development of disaster recovery plans and procedures;
9. Collaborate with stakeholders to assist with data-related technical issues and support their data infrastructure needs.
10. Collaborate with stakeholders to build and implement high-performance algorithms, prototypes, and proof of concepts for use in statistical analysis, prediction models and machine learning.
11. Integrate new data management technologies and software engineering tools into existing structures.
12. Deploy tools using various programming languages to marry systems together.
13. Research opportunities for data acquisition and new uses for existing data
14. Recommend ways to improve data reliability, efficiency and quality
15. Develop and maintain comprehensive end user documentation and reference materials/guides in the data repository and ensure it is current and accurate.
16. Coach, mentor, train and knowledge transfer to internal resources to facilitate organizational onboarding.

3.1.8 I.4 Database Modeller / IM Modeller (Level 3):

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks:

Baseline Tasks:

1. Develop and maintain the Architecture and Data Models for project initiative
2. Design, develop and maintain Logical Data Models.
3. Participate in data analysis as a result of new/updated requirements.
4. Analyze and evaluate alternative data architecture solutions to meet business problems/requirements to be incorporated into the corporate data architecture

Additional Tasks could include but are not limited to:

5. Analyze proposed changes to databases from the context of the Logical Data Model.
6. Provide technical expertise in the use and optimization of data modeling techniques to team members.
7. Provide technical assistance, guidance and direction in terms of data analysis and modeling to team members.
8. Provide assistance to project team and business users relating to data issues and data analysis concepts.
9. Participate in the development of data modeling and metadata policies and procedures.
10. Apply approved changes to Logical Data Models.
11. Comply with corporate data architectures, strategies and frameworks, including enterprise data warehouse activities. .
12. Review corporate architecture strategies and directions, data requirements, and business information needs and devise data structures to support them.
13. Improve modeling efficiency through recommendations on how to better utilize current metadata repositories.
14. Participate in data architecture refinement.
15. Define access strategies.

3.1.9 I.4 Data Modeler/IM Modeler (Data Architect) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop and maintain the Architecture and Data Models for corporate and project specific initiatives, including the identification of data most valuable to the department, the integration of this data, and the development of core relating data models. The resulting data models will be based on data architecture and modeling design principles and tenets.
2. Develop and maintain Architecture and Data Models for non-traditional data structures and technologies (~~NoSQL~~) for corporate and project specific initiatives, including the identification of data most valuable to the department, the integration of this data, and the development of core relating data models.
3. Monitor and support the development of the system's data to ensure it is compliant with the data architecture, and provide recommendations in refinement of data architecture as required.
4. Develop data model, metadata policies and procedures in support of the enterprise, the data warehouse and ~~NoSQL~~ repositories.
5. Analyze and develop data models in a hybrid cloud computing context.

Additional Tasks could include but are not limited to:

6. Analyze and evaluate alternative data architecture solutions to meet business requirements to be incorporated into the corporate data architecture.
7. Set Data Policy and the technical solution for the management, storage, access, navigation, movement, and transformation of data.
8. Design, develop, maintain and apply approved changes to data models.
9. Analyze proposed changes to databases and other data repositories from the context of the Data Model.
10. Provide technical assistance and expertise, guidance and direction in terms of data analysis and data modeling to team members.
11. Provide assistance to project team and business users relating to data issues and data analysis concepts.
12. Conform to corporate data architectures, World Customs Organization data standards, strategies and frameworks, including enterprise data warehouse activities and enterprise data analytics activities.
13. Review corporate architecture strategies and directions, data requirements, and business information needs and devise data structures to support them.
14. Conform and improve modeling efficiency through recommendations on how to better utilize current metadata repositories.
15. Examine and enforcing opportunities to provide data reuse, balancing the issues of centralization and replication.
16. Define access strategies.
17. Construct, monitor and report on work plans and schedules, while participating in projects, forums and working groups varying in scope and complexity.
18. Work within the confines of data governance, ensuring the compliance within privacy and security policies of the organization.

3.1.10 I.5. IM Architect (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze existing capabilities and requirements, develop redesigned frameworks and recommend areas for improved capability and integration. Develop and document detailed statements of requirements.
2. Evaluate existing procedures and methods, identify and document database content, structure, and application subsystems, and develop data dictionary.
3. Develop data management standards and processes.

4. Provide support in the development of data governance artefacts.
5. Design, implement meta-data standards and processes.

Additional Tasks could include but are not limited to:

6. Define and document interfaces of manual to automated operations within application subsystems, to external systems, and between new and existing systems.
7. Prototype potential solutions, provide tradeoff information and suggest recommended courses of action.
8. Perform information modelling in support of Business Process Reengineering (BPR) implementation.
9. Perform cost/benefit analysis of implementing new processes and solutions.
10. Provide advice in developing and integrating process and information models between business processes to eliminate information and process redundancies.
11. Provide advice in defining new requirements and opportunities for applying efficient and effective solutions; identify and provide preliminary costs of potential options.

3.1.11 I.5 IM Architect (Data Scientist) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Perform data exploitation on data to provide tactical and strategic insights directly to analysts, business owners, and decision makers.
2. Design experiments, test hypotheses, and build models.
3. Conduct advanced data analysis and highly complex design algorithms.
4. Apply advanced statistical, mining and modeling techniques to build, maintain, and improve on the advance analytics program.
5. Perform prototyping and developing data exploitation capabilities using advanced data analytics technologies and techniques.
6. Perform prototyping and developing data exploitation capabilities using cloud computing platforms.
7. Develop innovative and effective approaches utilizing advanced algorithms and statistical techniques to resolve client's analytics problems and communicate results and methodologies.
8. Interpret data and present material using visualizations, writing reports, producing functional notebooks, designing and delivering presentations.

Additional Tasks could include but are not limited to:

9. Identify what data is available and relevant, including internal and external data sources (structured and unstructured), leveraging data collection processes.
10. Collaborate with stakeholders and business analysts gathering requirements to identify opportunities to apply data science towards business objectives and program improvements.
11. Model and frame business scenarios that are meaningful and which impact business processes, decisions and program integrity.
12. Advise on best practises and approaches using available toolsets, while recommending and aiding to implement new tools based on researched recommendations.
13. Provide strategic recommendations on data collection, integration and retention requirements incorporating business requirements and knowledge of best practices.
14. Collaborate with stakeholders to define the validity of the information, the length of time the information is meaningful, and makes relationships to other information.
15. Work within the confines of data governance, ensuring the compliance within privacy and security policies of the organization. This includes validating where data can be stored, the retention period and sharing of data.

16. Provide leadership, guidance, and support to stakeholders and the data community.

3.1.12 I.5 IM Architect (Privacy Architect) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop and maintain a corporate privacy program architecture roadmap that aligns with the direction set by the data privacy and information security officers to guide and inform initiatives (i.e., design principles, source systems, business rules/logic, technology and business alignment, etc.).
2. Develop and apply an end-to-end vision for software and information architecture and guides the selection, implementation, and management of enterprise and domain level solutions through partnerships with domain, solution, and enterprise architects, as well as the data privacy and information security officers.
3. Drive strategies, governance, and design for the identified solutions to meet the strategic goals of the corporate privacy program.
4. Integrate privacy and information lifecycle requirements into processes, controls and assessments and create direct mapping to requirements, solutions and patterns. Eliminate redundancies, close current gaps and enable agility and automation.
5. Design blueprints that protect corporate data assets and ensures those assets are effectively managed to meet the strategic goals of the corporate privacy program.

Additional Tasks could include but are not limited to:

6. Develop systematic, automated data deletion for structured and unstructured data including automated description and processing of legal, regulatory and other policies.
7. Collaborate with domain architects to identify business critical gaps and discrepancies; propose and implement remediation plans and tactics to meet corporate privacy program goals.
8. Work collaboratively with architecture and development teams fostering re-use, design for scale, stability, and operational efficiency principles.
9. Develop and drive strategies, governance, and design for the identified solutions to meet the strategic goals of the corporate privacy program.
10. Promote the merits, values, and efficiencies of privacy by design principles and effectively communicate benefits for privacy and information security-related initiatives.
11. Collaborate with other domain architects from the data, information security, and enterprise operations areas to define best practices and development methodologies to meet privacy standards.
12. Identify privacy architecture standards and tools to be mandated for functions including Cloud First, data warehouse, analytics, and data archival.
13. Develop end-to-end vision for software, information architecture and guides the selection, implementation, and management of enterprise and domain level solutions through partnerships with domain, solution, and enterprise architects, as well as the data privacy and information security officers.
14. Develop estimates for privacy, data security and data related components of a solution.
15. Work within the confines of data governance, ensuring the compliance within privacy and security policies of the organization.

3.1.13 I.11. Technology Architect (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop technical architectures, frameworks and strategies, either for an organization or for a major application area, to meet the business and application requirements.
2. Identify the policies and requirements that drive out a particular solution.
3. Advise Senior Management on trends and emerging technologies and their impact on the organization's architectures and business strategies.
4. Analyze and evaluate alternative technology solutions to meet business problems.
5. Monitor industry trends to ensure that solutions fit with government and industry directions for technology.
6. Perform impact analysis of technology changes.

Additional Tasks could include but are not limited to:

7. Ensures the integration of all aspects of technology solutions.
8. Provide information, direction and support for emerging technologies.
9. Provide support to applications and/or technical support teams in the proper application of existing infrastructure.
10. Review application and program design or technical infrastructure design to ensure adherence to standards and to recommend performance improvements.

3.2 Business Stream

3.2.1 B.1. Business Analyst (Level 2)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze functional requirements to identify information, procedures and decision flows.
2. Evaluate existing procedures and methods, identify and document items such as database content, structure, application subsystems.
3. Define and document various user support artifacts.
4. Develop, document and provide support of data governance artefacts.
5. Elicit Business Requirements.

Additional Tasks could include but are not limited to:

6. Recommend industry trends to ensure that solutions fit with government and industry directions for technology.
7. Support in defining input / output sources, including detailed plan for technical design phase, and obtain approval of the system proposal.
8. Develop and document statements of requirements for considered alternatives.
9. Define and document interfaces of manual to automated operations within application subsystems, to external systems, and between new and existing systems.
10. Establish acceptance test criteria with client.
11. Support and use the selected departmental methodologies.
12. Interpret commercial and traveler government policy legislation and regulation.
13. Interpret immigration and enforcement government policy legislation and regulation.
14. Interpret financial government policy legislation and regulation.
15. Consult and collaborate with various stakeholders.

3.2.2 B.1. Business Analyst (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze functional requirements to identify information, procedures and decision flows.
2. Evaluate existing procedures and methods, identify and document items such as database content, structure, application subsystems.
3. Define and document various user support artifacts.
4. Develop and document statements of requirements for considered alternatives.
5. Elicit Business Requirements.
6. Coach and mentor teams members and users on best practices and provide knowledge transfer.
7. Support in defining input / output sources, including detailed plan for technical design phase, and obtain approval of the system proposal.

Additional Tasks could include but are not limited to:

8. Recommend industry trends to ensure that solutions fit with government and industry directions for technology.
9. Define and document interfaces of manual to automated operations within application subsystems, to external systems, and between new and existing systems.
10. Establish acceptance test criteria with client.
11. Support and use the selected departmental methodologies.
12. Interpret commercial and traveler government policy legislation and regulation.
13. Interpret immigration and enforcement government policy legislation and regulation.
14. Interpret financial government policy legislation and regulation.
15. Consult and collaborate with various stakeholders.
16. Develop, document and provide support of data governance artefacts.

3.2.3 B.1. Business Analyst (Data Analyst/Data Quality Analyst) (Level 2)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Consult and collaborate with the business to define/develop and document statements of data requirements.
2. Develop, build and maintain queries and/or write programs/scripts to extract and compile data from SQL and ~~NoSQL~~ repositories to merge and analyze data from various sources in order to conduct an analysis.
3. Develop, build and maintain queries and/or write programs/scripts to extract and compile data in a hybrid cloud computing environment.
4. Perform data quality analysis and testing by matching or comparing data to appropriate data sources, validating accuracy, identifying, analyzing and investigating root causes to data issues or problems.
5. Interpret, analyze data results using statistical techniques and develop data visualization presentations to present findings.

Additional Tasks could include but are not limited to:

6. Research opportunities for data acquisition and new uses for exiting data by interpreting data for validity to the business and its appropriateness to meet the needs and requirements of the client.
7. Develop and create data reports to provide management with supporting material to aid in fact based decision making.
8. Define uses of data and translate into data diagrams, requirements documents, technical design and actionable project plans.

9. Develop, create and produce comprehensive ad hoc and regular reports in response to data requests from clients.
10. Define and document metadata for business values; defining, developing and documenting business rules and definitions of data attributes/elements, including and not limited to the development and updating of data dictionary.
11. Perform data profiling of existing data and source-to-target mapping in order to ensure data integrity and quality.
12. Establish and generate data quality metrics to support reporting, monitoring and dashboard requirements.
13. Develop and maintain comprehensive end user documentation and reference materials/guides in the data repository and ensure it is current and accurate including initiating appropriate updates of definitions.
14. Develop and maintain effective working relationships with the business to discuss and resolve issues, understand current state and business processes, identify future needs and opportunities to fully support business data needs.
15. Participate in projects, forums and working groups varying in scope and complexity including the development of work plans and completing progress reports.

3.2.4 B.1. Business Analyst (Data Analyst/Data Quality Analyst) (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Consult and collaborate with the business to define/develop and document statements of data requirements.
2. Develop, build and maintain queries and/or write programs/scripts to extract and compile data from SQL and ~~NoSQL~~ repositories to merge and analyze data from various sources in order to conduct an analysis.
3. Develop, build and maintain queries and/or write programs/scripts to extract and compile data in a hybrid cloud computing environment.
4. Perform data quality analysis and testing by matching or comparing data to appropriate data sources, validating accuracy, identifying, analyzing and investigating root causes to data issues or problems.
5. Interpret, analyze data results using statistical techniques and develop data visualization presentations to present findings.
6. Analyze and mine data to identify patterns, trends, anomalies and correlations among the various data points.
7. Define and document metadata for business values; defining, developing and documenting business rules and definitions of data attributes/elements, including and not limited to the development and updating of data dictionary.

Additional Tasks could include but are not limited to:

8. Research opportunities for data acquisition and new uses for exiting data by interpreting data for validity to the business and its appropriateness to meet the needs and requirements of the client.
9. Develop and create data reports to provide management with supporting material to aid in fact based decision making.
10. Define uses of data and translate into data diagrams, requirements documents, technical design and actionable project plans.
11. Develop, create and produce comprehensive ad hoc and regular reports in response to data requests from clients.
12. Perform data profiling of existing data and source-to-target mapping in order to ensure data integrity and quality.

13. Establish and generate data quality metrics to support reporting, monitoring and dashboard requirements.
14. Provide client education and end user support by identifying training needs, participating in developing and delivering training/information sessions to increase client awareness and understanding of data and data extraction mining tools.
15. Develop and maintain comprehensive end user documentation and reference materials/guides in the data repository and ensure it is current and accurate including initiating appropriate updates of definitions.
16. Develop and maintain effective working relationships with the business to discuss and resolve issues, understand current state and business processes, identify future needs and opportunities to fully support business data needs.
17. Participate in projects, forums and working groups varying in scope and complexity including the development of work plans and completing progress reports.

3.2.5 B.2. Business Architect (Level 2)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop policies and rules that allow an organization to carry out its mandate and functional responsibilities, and that govern the organization's actual and planned capabilities in terms of computers, data, information, human resources, communication facilities, software and management responsibilities.
2. Develop the specifications for where, how and why the various organizational components fit together as they do, and how they support the organization's mandate.
3. Conduct an assessment of the organizations current project's business architecture, process and performances.

Additional Tasks could include but are not limited to:

4. Recommend changes to improve operational performance.
5. Ensure consistency and integration with the organization's and government architectures and business strategies.
6. Evaluate the feasibility of the architecture and technologies related to a business change;
7. Identify risks associated with the architecture and technologies and recommending risk mitigation.
8. Advise Senior Management on trends and emerging technologies and their impact on the organization's architectures and business strategies.
9. Manage the development and implementation of an architectural improvement plan
10. Define standard common business vocabulary.
11. Develop high level integrated designs to meet requirements to align with enterprise strategy.

3.2.6 B.2. Business Architect (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop policies and rules that allow an organization to carry out its mandate and functional responsibilities, and that govern the organization's actual and planned capabilities in terms of computers, data, information, human resources, communication facilities, software and management responsibilities.
2. Develop the specifications for where, how and why the various organizational components fit together as they do, and how they support the organization's mandate.

3. Conduct an assessment of the organizations current project's business architecture, process and performances.
4. Advise Senior Management on trends and emerging technologies and their impact on the organization's architectures and business strategies.

Additional Tasks could include but are not limited to:

5. Recommend changes to improve operational performance.
6. Ensure consistency and integration with the organization's and government architectures and business strategies.
7. Evaluate the feasibility of the architecture and technologies related to a business change;
8. Identify risks associated with the architecture and technologies and recommending risk mitigation.
9. Manage the development and implementation of an architectural improvement plan
10. Define standard common business vocabulary.
11. Develop high level integrated designs to meet requirements to align with enterprise strategy.

3.2.7 B.3. Business Consultant (Level 2)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze, evaluate, develop business processes (financial, operational, systems, etc.).
2. Identify organizational and/or project business opportunities for improvement and streamlining of business processes.
3. Perform business analyses of functional requirements to identify information, procedures, and decision flows.

Additional Tasks could include but are not limited to:

4. Identify and evaluate critical success parameters, factors and performance measurements.
5. Assist stakeholders in development and implementation of business improvement processes and programs.
6. Develop and document statements of requirements for considered alternatives.
7. Prepare briefings, position papers, presentations and other documentation upon request and maintain accurate and complete records of decisions for all stages of the Project.
8. Organize and oversee weekly project team meetings, as well as facilitating status review meetings among project teams' members.

3.2.8 B.3. Business Consultant (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze, evaluate, develop business processes (financial, operational, systems, etc.).
2. Identify organizational and/or project business opportunities for improvement and streamlining of business processes.
3. Perform business analyses of functional requirements to identify information, procedures, and decision flows.
4. Identify and evaluate critical success parameters, factors and performance measurements.
5. Assist stakeholders in development and implementation of business improvement processes and programs.

6. Prepare briefings, position papers, presentations and other documentation upon request and maintain accurate and complete records of decisions for all stages of the Project.
7. Organize and oversee weekly project team meetings, as well as facilitating status review meetings among project teams' members.

Additional Tasks could include but are not limited to:

8. Develop and document statements of requirements for considered alternatives.

3.2.9 B.5. Business Process Re-engineering (BPR) Consultant (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Analyze business functional requirements to identify information, procedures and decision flows.
2. Identify candidate processes for re-design; prototype potential solutions, provide trade-off information and suggest a recommended course of action. Identify the modifications to the automated processes.
3. Provide expert advice in defining new requirements and opportunities for applying efficient and effective solutions; identify and provide preliminary costs of potential options.
4. Prepare a detailed statements of requirements on data analytics and business intelligence.
5. Provide expert advice on and/or assist in implementing new processes and organizational changes.

Additional Tasks could include but are not limited to:

6. Review existing work processes and organizational structure.
7. Provide expert advice in developing and integrating process and information models between processes to eliminate information and process redundancies.
8. Document workflows.
9. Use business, workflow and organizational modeling software tools.
10. Develop, document and provide support of data governance artefacts.
11. Document and describe existing organizational practices and procedures related to the business intelligence and data analytics.
12. Analyze and develop GC Information Management Policies.

3.2.10 B.11 Instructor, Information Technology (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop a training strategy that can be applied to the Business Intelligence environment.
2. Create a training program roadmap for the Business Intelligence program delivery, including and not limited to a catalogue of required training materials.

Additional Tasks could include but are not limited to:

3. Assess the relevant characteristics of a target audience.
4. Provide recommendations on different roles of a target audience.
5. Assess the relevant training program material required to define the transition of the training program from current Cognos software version to the next software version.

6. Develop a transition plan to transition the training program from the current Cognos software version to the next software version.
7. Develop a catalogue of training materials required to be developed.
8. Develop the training program course material.
9. Prepare end-users for implementation of courseware materials in a Business Intelligence environment.
10. Conduct knowledge sharing sessions to employees.
11. Conduct training courses.
12. Communicate effectively by visual, oral, and written form with individuals, small groups, and in front of large audiences.
13. Prepare work plan updates and status reports.

3.2.11 P.1. Change Management Consultant (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Evaluate the enterprise's business/Information and Communications Technology (ICT) architecture, determine its consistency and integration with the organization's business/ICT strategies, assess the degree of its alignment with Treasury Board CIO Business Transformation Enablement Program (BTEP) and Federated Architecture Program (FAP) and recommend changes to the business/ICT architecture to improve its alignment with these external factors.
2. Identify future business/ICT requirements against the current enterprise architecture, perform gaps analyses, develop Requirements for Technology Architectures (RTA), and prepare migration strategies.
3. Assess the feasibility of migrating from the current state to the target business architecture and enabling technologies and identify the risks associated with migrating to the target business architecture and technologies and make recommendations for risk mitigation.
4. Provide advice and guidance on implementing the CBSA IM/IT Strategic Plan and Implementation Roadmap that includes the multi-year transformation journey to realize the vision and describes the key phases of transformation and major initiatives on the journey path aligned with Program Branch priorities.

Additional Tasks could include but are not limited to:

5. Identify business and technology trends that create opportunities for business improvement, advise business and Senior Executives on trends and emerging technologies and the impact on the organization's and government Information and Communications Technology (ICT) architectures and business strategies, model "What if" scenarios and recommend appropriate changes to the existing architecture and infrastructure, and recommend alternative solutions, methodologies and strategies.
6. Produce an architectural evolution plan, recommend prioritization of architecture evolution initiatives, and develop and/or implement an architecture evolution plan.
7. Manage the development and implementation of an architectural improvement plan.
8. Coach, mentor and train the organization to perform any of the above.
9. Modernize and develop new agency systems and capabilities to meet current and future business needs via strong management practices including financial and human resources.

3.2.12 P.5 Project Executive (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Define and confirm the objectives for the project, determine budgetary requirements, the composition, roles and responsibilities and terms of reference for the project team.
2. Develop and/or review Project Charters, Business Cases, detailed project plans, Memorandums to Cabinet, and/or Treasury Board submissions.
3. Lead the development of briefings, solutions and status reports for presentation to executive management.
4. Develop and deliver presentations to senior management and stakeholder groups as required, including the preparation of plans, charts, tables and diagrams to assist in analyzing or displaying problems.
5. Provide leadership and oversight for the design activities, including usage of deliverables necessary to satisfy the methodology, including, but not limited to:
 - Strategic Business Objectives and Critical Success factors.
 - Definition of business competencies, capabilities, value drivers, outcomes and measures.
 - Definition of target business model, operating model, and target service model.
 - Definition and development of strategy and value components such as strategy maps, competency maps, value maps, value clusters, goal chains and value chain diagrams.
 - Identification and analysis of pain points, pain clusters and pain chains.
6. Provide advice to ensure business strategies are developed and implemented; project schedules are developed, maintained and respected; risks and issues are managed; and change request procedures are followed.
7. Manage scope, context and business requirements, working with departmental leads and key clients.

Additional Tasks could include but are not limited to:

8. Formulate statements of problems; establishes procedures for the development and implementation of significant, new or modified project elements to solve these problems, and obtains approval thereof.
9. Oversee and provide guidance to several Project Managers, each responsible for an element of the project and its associated project team.
10. Provide Requirements Management and Project Control throughout the project.
11. Provide guidance and recommendations for the design, development, test, and implementation.
12. Meet with other organizational executives to ensure all internal and external stakeholders are committed and moving forward on project and organizational goals.
13. Manage internal and external stakeholder relations.
14. Lead working groups and consultations and obtain consensus and reach decisions with respect to recommendations and strategic options pertaining to the project.
15. Provide expert solution and business transformation leadership for the project with all stakeholders.
16. Ensure compliance with portfolio-wide standards for architecture, engineering and business transformation.
17. Support release planning from an architecture perspective, including requirements, and associated planning and execution of work to support identified requirements.
18. Provide solution and transformation alignment leadership from a project planning perspective.
19. Support the development of the transformation roadmap and transition plan.
20. Report progress of the project on an ongoing basis and at scheduled points in the life cycle.
21. Review and comment on all project deliverables from Initiation to project completion.
22. Provide project oversight during the development, implementation and operations start-up to ensure that resources are made available and that the project is developed and is fully operational within previously agreed time, cost and performance parameters.

23. Ability to deliver projects in an AGILE approach.

3.2.13 P.9. Project Manager (Level 2)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Manage the project during the development, implementation and operations startup by ensuring that resources are made available and that the project is developed and is fully operational within previously agreed time, cost and performance parameters.
2. Prepare plans, charts, tables and diagrams to assist in analyzing or displaying problems; work with a variety of project management tools.
3. Maintain process improvement, communication and change management throughout the full lifecycle of the project delivery.

Additional Tasks could include but are not limited to:

4. Formulate statements of problems; establishes procedures for the development and implementation of significant, new or modified project elements to solve these problems, and obtains approval thereof.
5. Define and document the objectives for the project.
6. Report progress of the project on an ongoing basis and at scheduled points in the life cycle.
7. Meets in conference with stakeholders and other project managers and states problems in a form capable of being solved.
8. Develop presentations and reports to communicate progress of projects within the assigned portfolio.

3.2.14 P.9. Project Manager (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Manage the project during the development, implementation and operations startup by ensuring that resources are made available and that the project is developed and is fully operational within previously agreed time, cost and performance parameters.
2. Prepare plans, charts, tables and diagrams to assist in analyzing or displaying problems; work with a variety of project management tools.
3. Maintain process improvement, communication and change management throughout the full lifecycle of the project delivery.
4. Manage risk and issue logs in support of project communications management.
5. Formulate statements of problems; establishes procedures for the development and implementation of significant, new or modified project elements to solve these problems, and obtains approval thereof.
6. Report progress of the project on an ongoing basis and at scheduled points in the life cycle.
7. Develop presentations and reports to communicate progress of projects within the assigned portfolio.

Additional Tasks could include but are not limited to:

8. Define and document the objectives for the project.

9. Meets in conference with stakeholders and other project managers and states problems in a form capable of being solved.
10. Coach, and mentor teams' members and users on best practices and provide knowledge transfer.

3.2.15 P.12 Risk Management Specialist (Level 3)

Responsibilities include all of the following Baseline Tasks along with any combination of the following Additional Tasks, without limitation:

Baseline Tasks:

1. Develop and manage the implementation of Risk Management Plans to identify, analyze, plan, track, evaluate and control project risks on a continuous basis throughout the project life cycle.
2. Conduct risk assessments and evaluate potential risk and losses.
3. Identify project and procurement risks.
4. Recommend alternative solutions, methodologies and strategies for risk mitigation and management.
5. Assist in the development and/or implementation of Risk Management Plans.
6. Assist in prioritization and assignment of risks.
7. Identify, confirm and document the risk tolerance for the process, project, program, or strategic risk and using this tolerance to guide all analysis, assessment and recommendations undertaken or produced.
8. Identify relevant risks and opportunities (including, but not limited to, economic, political, operational, legal, reputation, technical, organizational, accounting, banking and social risks) that threaten the objectives and priorities.

Additional Tasks could include but are not limited to:

9. Coach, mentor and train project teams in risk mitigation techniques.
10. Develop and implement business continuity plans.
11. Provide leadership and support to the design, implementation and evaluation of clients products/services performance measures, risk management and risk mitigation strategies.
12. Liaise with and interview stakeholders, as required, to obtain, clarify and exchange information, in-order to co-ordinate and manage the Risk Assessment Process.
13. Assist with the on-going monitoring of risk and assist with the implementation of risk response and mitigation strategies.
14. Recommend and document suggested Risk Responses necessary to manage the likelihood and/or impact of the identified risks.
15. Prepare draft and finalized risk assessments, briefing notes, presentations and papers related to risk management, and develop and update risk management plans.

SW4 OVERALL CBSA TECHNICAL ENVIRONMENT

1. IBM DB2 on UNIX
2. IBM PureData
3. IBM InfoSphere Information Governance Catalog
4. IBM Information Server for Data Integration
5. IBM InfoSphere Information Server for Data Quality
6. IBM InfoSphere DataStage
7. IBM InfoSphere Change Data Capture
8. IBM InfoSphere QualityStage
9. IBM InfoSphere FastTrack
10. InfoSphere Business Glossary Anywhere
11. IBM InfoSphere Information Analyzer
12. IBM InfoSphere Metadata Workbench
13. IBM InfoSphere Data Architect
14. IBM InfoSphere Information Services Director
15. IBM InfoSphere DataStage and QualityStage Designer
16. IBM SPSS
17. IBM SPSS Modeler Server
18. IBM Cognos Framework Manager
19. IBM Cognos Business Intelligence Transformer
20. IBM Cognos Administration
21. IBM Cognos PowerPlay Studio
22. IBM Cognos Software Development Kit
23. SQL
24. Sybase
25. XML
26. R
27. Python
28. ArcGIS
29. Tableau
30. PowerBI
31. Hadoop
32. Spark
33. Stream processing (Kafka, AWS Kinesis, Azure Event Hub)
34. MS Office
35. Cognos v10
36. Cognos v11+
37. Microsoft Azure cloud
38. Amazon Web Services cloud

SW5 GOVERNMENT FURNISHED EQUIPMENT/INFORMATION

- 5.1 The CBSA Data Management team will provide an appropriate workspace with access to the appropriate tools for the resources to carry out the expectations set out in this SOW.
- 5.2 The Contractor will be provided with a CBSA user ID, password, workstation or laptop, email address, and other materials (supporting documentation) as required in order to process, store, and/or transmit CBSA data on the CBSA network during the contract. The use of contractor IT systems is not permitted.

SW6 ACCEPTANCE CRITERIA

All work and services are to be provided to the entire satisfaction and approval of the Project Authority.

SW7 DELIVERABLES

The Contractor will provide various reports, plans, analysis and other related documents as specified in the applicable Task Authorization.

SW8 CONSTRAINTS

At no time and in no way is CBSA data to be removed from CBSA sites, nor will access to or from the contractor's IT systems through the use of a session (e.g VPN) be permitted.

The contractor must comply with CBSA internal security policies, directives, standards, and guidelines at all times during the contract.

SW9 REPORTING REQUIREMENTS

Timesheets are to be provided on a monthly depicting hours worked on a daily basis.

SW10 WORK LOCATION

All work will be performed in the National Capital Region on-site at CBSA offices.

The current Primary Office location is 333 North River Rd Ottawa, Ontario.

Appendix A – Glossary

Acronym or Term	Definition
Architecture and Data Model	An abstract model that organizes elements of data and standardizes how they relate to one another and to properties of the real world entities.
Business Cases	A presentation or a proposal to an authority by an organization seeking funding, approval, or both for an activity, initiative, or project. A business case puts a proposed investment decision into a strategic context and provides the information necessary to make an informed decision about whether to proceed with the investment and in what form.
Business Intelligence	The strategies and technologies used by enterprises for the data analysis of business information. BI technologies provide historical, current and predictive views of business operations.
Business Process Reengineering	A business management strategy focusing on the analysis and design of workflows and business processes within an organization.
Business Transformation Enablement Program	A set of tools which have been developed to provide an integrated approach for strategic management and alignment, and business transformation.
Cloud First	Adoption strategy in which cloud is the preferred option for delivering IT services and public cloud is the preferred option for cloud deployment.
Complex SQL	Is the use of SQL queries which go beyond the standard SQL of using the SELECT and WHERE commands. Complex SQL often involves using complex joins and sub-queries, where queries are nested in WHERE clauses. Complex queries frequently involve heavy use of AND and OR clauses.
Critical Success Factors	A management term for an element that is necessary for an organization or project to achieve its mission.
Data Analytics	The process of examining data sets in order to draw conclusions about the information they contain.
Data Policy	A set of measurable rules for a set of data elements, in the context of an organizational scope, for the benefit of a business process, irrespective of where the data is stored and the party that provides the data.
Data Base Management System	A software package designed to define, manipulate, retrieve and manage data in a database.
Enterprise Data Warehouse	An Enterprise Data Warehouse (EDW) is a collection of corporate information and data derived from operational systems and external data sources. An EDW is designed to support business decisions by allowing data consolidation, analysis and reporting at different aggregate levels
Federated Architecture Program	A pattern in enterprise architecture that allows interoperability and information sharing between semi-autonomous de-centrally organized lines of business (LOBs), information technology systems and applications.
GC Information Management Policies	Government of Canada's policy to achieve efficient and effective information management to support program and service delivery; foster informed decision making, facilitate accountability transparency and collaboration; and preserve and ensure access to information and records for the benefit of present and future generations.
Highly Scalable	is the capability to add more capacity when required to handle the increased workload
Information and Communications Technology	A term for information technology (IT) which stresses the role of unified communications[1] and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information.

Logical Data Model	Is the description of the data in as much detail as possible, without regard to how they will be physical implemented in the database.
Memorandum to Cabinet	A minister's vehicle for proposing and explaining a proposed measure to the Cabinet and for obtaining its approval.
Project Charters	A statement of the scope, objectives, and participants in a project. It provides a preliminary delineation of roles and responsibilities, outlines the project objectives, identifies the main stakeholders, and defines the authority of the project manager.
Project Controls	The data gathering, data management and analytical processes used to predict, understand and constructively influence the time and cost outcomes of a project or program; through the communication of information in formats that assist effective management and decision making.
Requirements Management	The process of documenting, analyzing, tracing, prioritizing and agreeing on requirements and then controlling change and communicating to relevant stakeholders.
Risk Assessment Process	The process of assessing risks and their inherent risk associated with a particular project scope and its expected benefits.
Risk Management Plans	The document which is prepared to foresee risks, estimate impacts, and define responses.
Risk Responses	The process of documenting for each risk, a risk response in the risk register. Aiming to eliminating the risk, lowering the probability of risk occurrence and lowering the impact of the risk on the project objectives.
Strategic Business Objectives	Goals deemed most important to the current and future health of an organization.
Technology Architecture	The process of development of methodical information technology specifications, models and guidelines, using a variety of Information Technology notations, for example UML, within a coherent Information Technology architecture framework, following formal and informal Information Technology solution, enterprise, and infrastructure architecture processes.
World Customs Organization	The World Customs Organization (WCO), established in 1952 as the Customs Co-operation Council (CCC) is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations. http://www.wcoomd.org/

**ATTACHMENT 6
AMENDMENT 002**

ID	Corporate Mandatory Criteria				Bidder's response													
					Met Y/N	Demonstrated Experience to (Cross reference to proposal)												
	5	I.11. Technology Architect	3	600														
	<p>In the case a resource category in the referenced contract is not identical to the resource category in M1, the Bidder must provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category for the particular resource category in M1.</p> <p>In the case a resource category level in the referenced contract is not identical to the resource category level 3 in M1, the Bidder must provide evidence that the resource meets the TBIPS resource category level 3 in having 10+ years of experience.</p>																	
M2	The Bidder must have been awarded, within the past 5 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:																	
	<div>a. The Bidder provided a minimum of 5 resources simultaneously for a minimum period of 6 months; and</div> <div>b. Each of the 5 resources must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</div>																	
M3	The Bidder must demonstrate the provision of informatics professional services for the following 4 Resource Categories identified below.																	
	To be accepted, <div>1) Each resource must have provided informatics professional services within the past 5 years prior to the Initial Solicitation Closing Date; and</div> <div>2) Each resource must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</div>																	
	<table><tr><th>#</th><th>TBIPS Category</th><th>TBIPS Level</th></tr><tr><td>1</td><td>A.1. Application/Software Architect</td><td>3</td></tr><tr><td>2</td><td>A.6 Programmer/Software Developer</td><td>2</td></tr><tr><td>3</td><td>A.7 Programmer/Analyst</td><td>3</td></tr></table>				#	TBIPS Category	TBIPS Level	1	A.1. Application/Software Architect	3	2	A.6 Programmer/Software Developer	2	3	A.7 Programmer/Analyst	3		
#	TBIPS Category	TBIPS Level																
1	A.1. Application/Software Architect	3																
2	A.6 Programmer/Software Developer	2																
3	A.7 Programmer/Analyst	3																

ID	Corporate Mandatory Criteria			Bidder's response	
				Met Y/N	Demonstrated Experience (Cross reference to proposal)
	4	I.2 Database Administrator	3		
	<p>The Bidder must provide a Bidder's Response Template for Corporate References (Appendix B) provided in this Attachment for each contract reference submitted to substantiate experience.</p> <p>In the case a resource category in the referenced contract is not identical to the resource category in M3, the Bidder must provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category for the particular resource category in M3.</p> <p>In the case a resource category in the referenced contract is not identical to the resource category AND/OR level mentioned in M1, the Bidder must provide evidence that the resource meets the TBIPS resource category level 3 by having 10+ years of experience AND provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work</p>				
M4	<p>The Bidder must demonstrate Corporate contract experience, in the past 5 years prior to the Initial Solicitation Closing Date, involving a transition-in, for one contract.</p> <p>To be accepted the Bidder's contract transition-in experience must demonstrate that it includes:</p> <ol style="list-style-type: none">1) The planning, execution and monitoring of resource training or knowledge transfer for at least 5 resources; and2) The delivery of transition-in progress reports or the resolution of transition-in issues. <p>The Bidder must provide a Bidder's Response Template for Corporate References (Appendix B) provided in this Attachment for each contract reference submitted to substantiate experience.</p>				

2.0 WORKSTREAM 2 - BUSINESS WORKSTREAM

ID	Corporate Mandatory Criteria	Bidder's response																									
		Met Y/N	Demonstrated Experience (Cross reference to proposal)																								
M1	<p>The Bidder must demonstrated contract experience in delivering informatics professional services supplying all resource categories listed in the table below for the required minimum billable days per Resource Category. Billable days are defined as days worked and billed to clients, calculated at 7.5 hours per day.</p> <p>To be accepted,</p> <ol style="list-style-type: none"> 1) The billable days must have been for the delivery of informatics professional services; 2) For each resource category, the billable days must have occurred in a 36-month period, within the past 5 years prior to the Initial Solicitation Closing Date; 3) The billable days must have been provided under a maximum of 10 contracts per resource category; and 4) The work billed for a given resource category must include, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category. 5) The Bidder must provide a completed Billable Days Response Template (Appendix C) as well as a Bidder's Response Template for Corporate References (Appendix D) provided in this attachment for each Resource Category. <table border="1"> <thead> <tr> <th></th><th>TBIPS Category</th><th>TBIPS Level</th><th>Minimum Billable Days per Category (1 Billable day = 7.5 hours)</th></tr> </thead> <tbody> <tr> <td>1</td><td>B.1. Business Analyst</td><td>3</td><td>1200</td></tr> <tr> <td>2</td><td>B.1 Business Analyst (Data Analyst/Data Quality Analyst)</td><td>3</td><td>500</td></tr> <tr> <td>3</td><td>B.5. Business Process Re-engineering (BPR) Consultant</td><td>3</td><td>600</td></tr> <tr> <td>4</td><td>P.5 Project Executive</td><td>3</td><td>1200</td></tr> <tr> <td>5</td><td>P.9. Project Manager</td><td>3</td><td>1200</td></tr> </tbody> </table>		TBIPS Category	TBIPS Level	Minimum Billable Days per Category (1 Billable day = 7.5 hours)	1	B.1. Business Analyst	3	1200	2	B.1 Business Analyst (Data Analyst/Data Quality Analyst)	3	500	3	B.5. Business Process Re-engineering (BPR) Consultant	3	600	4	P.5 Project Executive	3	1200	5	P.9. Project Manager	3	1200		
	TBIPS Category	TBIPS Level	Minimum Billable Days per Category (1 Billable day = 7.5 hours)																								
1	B.1. Business Analyst	3	1200																								
2	B.1 Business Analyst (Data Analyst/Data Quality Analyst)	3	500																								
3	B.5. Business Process Re-engineering (BPR) Consultant	3	600																								
4	P.5 Project Executive	3	1200																								
5	P.9. Project Manager	3	1200																								

ID	Corporate Mandatory Criteria	Bidder's response													
		Met Y/N	Demonstrated Experience (Cross reference to proposal)												
	<p>In the case a <u>resource category</u> in the referenced contract is not identical to the resource category in M1, the Bidder must provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category for the particular resource category in M1.</p> <p>In the case a <u>resource category level</u> in the referenced contract is not identical to the resource category level 3 in M1, the Bidder must provide evidence that the resource meets the TBIPS resource category level 3 in having 10+ years of experience.</p>														
M2	<p>The Bidder must have been awarded, within the past 5 years prior to the Initial Solicitation Closing Date, 1 contract to deliver informatics professional services where:</p> <p>a. The Bidder provided a minimum of 5 resources simultaneously for a minimum period of 6 months; and</p> <p>b. Each of the 5 resources must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p>														
M3	<p>The Bidder must demonstrate the provision of informatics professional services for the following 5 Resource Categories identified below.</p> <p>To be accepted,</p> <p>1) Each resource must have provided informatics professional services within the past 5 years prior to the Initial Solicitation Closing Date; and</p> <p>2) Each resource must have provided informatics professional services for a minimum of 100 billable days during a 6 consecutive month period.</p> <table><tr><th>#</th><th>TBIPS Category</th><th>TBIPS Level</th></tr><tr><td>1</td><td>B.2. Business Architect</td><td>3</td></tr><tr><td>2</td><td>B.3. Business Consultant</td><td>3</td></tr><tr><td>3</td><td>B.11 Instructor, Information Technology</td><td>3</td></tr></table>	#	TBIPS Category	TBIPS Level	1	B.2. Business Architect	3	2	B.3. Business Consultant	3	3	B.11 Instructor, Information Technology	3		
#	TBIPS Category	TBIPS Level													
1	B.2. Business Architect	3													
2	B.3. Business Consultant	3													
3	B.11 Instructor, Information Technology	3													

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ID	Corporate Mandatory Criteria				Bidder's response	
					Met Y/N	Demonstrated Experience to (Cross reference to proposal)
	4	P.1. Change Management Consultant	3			
	5	P.12 Risk Management Specialist	3			
	<p>The Bidder must provide a Bidder's Response Template for Corporate References (Appendix D) provided in this Attachment for each contract reference submitted to substantiate experience.</p> <p>In the case a resource category in the referenced contract is not for the identical to the resource category in M3, the Bidder must provide evidence that the work performed includes, at a minimum, the baseline tasks listed in SW3 of Annex A - Statement of Work for the same resource category for the particular resource category in M3.</p> <p>In the case a resource category level in the referenced contract is not identical to the resource category level 3 in M3, the Bidder must provide evidence that the resource meets the TBIPS resource category level 3 in having 10+ years of experience.</p>					
M4	<p>The Bidder must demonstrate Corporate contract experience, in the past 5 years prior to the Initial Solicitation Closing Date, involving a transition-in, for one contract.</p> <p>To be accepted the Bidder's contract transition-in experience must demonstrate that it includes:</p> <ul style="list-style-type: none">3) The planning, execution and monitoring of resource training or knowledge transfer for at least 5 resources; and4) The delivery of transition-in progress reports or the resolution of transition-in issues. <p>The Bidder must provide a Bidder's Response Template for Corporate References (Appendix B) provided in this Attachment for each contract reference submitted to substantiate experience.</p>					

APPENDIX A OF ATTACHMENT 2 - WORKSTREAM 1 - TECHNICAL WORKSTREAM

RFP BILLABLE DAYS RESPONSE TABLE

Bidder Name: _____

By providing a response, the bidder certifies that billable days provided occurred during the billing period indicated below for ALL of the resource categories listed.

If required, the table below can be modified to accommodate more Contract References.

RESOURCE CATEGORY	NUMBER OF BILLABLE DAYS			
	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)
I.3 Database Analyst/IM Administrator (Data Engineer)				
I.4 Database Modeler/IM Modeler (Data Architect), Level 3				
I.5. IM Architect, Level 3				
I.5 IM Architect (Data Scientist) , Level 3				
I.11. Technology Architect, Level 3				

APPENDIX B OF ATTACHMENT 2 – WORKSTREAM 1 - TECHNICAL WORKSTREAM

BIDDER'S RESPONSE TEMPLATE FOR CORPORATE REFERENCES	
1) To meet 1.0 M1 of attachment 2, the Bidder must have demonstrated contract experience in supplying all of the resource categories or similar resource categories, for the required Minimum Billable Days per category, within the past five (5) years. All resources provided must have, at a minimum, the baseline tasks listed in SW3 of Annex A—Statement of Work for the resource category for which they were provided,	
The substantiation must not simply be a repetition of the tasks, but must explain responsibilities and demonstrate how the Bidder carried out the work while performing the tasks.	
Bidder Name: _____ Bidder Contract Reference #: _____	
SECTION 1: CLIENT INFORMATION	
Government client (Yes/No)	
Client Organization Name	
Client Contact Name	
Address	
Telephone	
Fax	
E-mail	

SECTION 2: CONTRACT INFORMATION	
Contract Value	
Award Date	
Expiry Date	
Description of requirement:	

SECTION 3: RESOURCE DETAILS			
Category of Personnel and Level	Task of the SOW of the RFP	Task performed under the contract, including substantiation	Technology Environment (if applicable)

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APPENDIX C OF ATTACHMENT 2 – WORKSTREAM 2 - BUSINESS WORKSTREAM

RFP BILLABLE DAYS RESPONSE TABLE

Bidder Name: _____

By providing a response, the bidder certifies that billable days provided occurred during the billing period indicated below for ALL of the resource categories listed.

If required, the table below can be modified to accommodate more Contract References.

RESOURCE CATEGORY	NUMBER OF BILLABLE DAYS			
	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)	Cross Reference to Contract Reference # _____ Billing Period: ____/____/____ (dd/mm/yy) To ____/____/____ (dd/mm/yy)
B.1. Business Analyst, Level 3				
B.1 Business Analyst (Data Analyst/Data Quality Analyst) , Level 3				
B.5 Business Process Re-engineering (BPR) Consultant , Level 3				
P.5 Project Executive, Level 3				
P.9. Project Manager, Level 3				

APPENDIX D OF ATTACHMENT 2 – WORKSTREAM 2 - BUSINESS WORKSTREAM

BIDDER'S RESPONSE TEMPLATE FOR CORPORATE REFERENCES	
<p>1) To meet 2.0 M1 of attachment 2, the Bidder must have demonstrated contract experience in supplying all of the resource categories or similar resource categories, for the required Minimum Billable Days per category, within the past five (5) years. All resources provided must have, at a minimum, the baseline tasks listed in SW3 of Annex A—Statement of Work for the resource category for which they were provided.</p> <p>The substantiation must not simply be a repetition of the tasks, but must explain responsibilities and demonstrate how the Bidder carried out the work while performing the tasks.</p>	
Bidder Name: _____ Bidder Contract Reference #: _____	
SECTION 1: CLIENT INFORMATION	
Government client (Yes/No)	
Client Organization Name	
Client Contact Name	
Address	
Telephone	
Fax	
E-mail	

SECTION 2: CONTRACT INFORMATION			
Contract Value			
Award Date			
Expiry Date			
Description of requirement:			

SECTION 3: RESOURCE DETAILS			
Category of Personnel and Level	Task of the SOW of the RFP	Task performed under the contract, including substantiation	Technology Environment (if applicable)

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ATTACHMENT 2.1
BID EVALUATION CRITERIA – RESOURCE MANDATORY REQUIREMENTS

1.0 WORKSTREAM 1 - TECHNICAL WORKSTREAM

1.1 I.3 Database Analyst/IM Administrator (Data Engineer) – Level 3

ID	Mandatory Criteria I.3 Database Analyst/IM Administrator (Data Engineer) – Level 3	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) AWS**; 2) Extract Transform Load Frameworks; 3) IBM InfoSphere Data Architect; 4) IBM SPSS V14+; 5) JSON; 6) Kafka; 7) Python; 8) R; 9) SQL; and 10) Stream analytics architecture.		

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*The experience must have been acquired prior to the Initial Solicitation Closing Date

** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

1.2 I.4 Database Modeler/IM Modeler (Data Architect) – Level 3

ID	Mandatory Criteria <u>I.4 Database Modeler/IM Modeler (Data Architect) – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) Aginity Workbench; 2) AWS**; 3) Data Warehouse Technologies; 4) Extract Transform Load Frameworks; 5) IBM Cognos v10+; 6) IBM Data Studio ; 7) IBM InfoSphere DataStage and Quality Stage Designer; 8) IBM InfoSphere DataStage ®; and 9) SQL.		

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*The experience must have been acquired prior to the Initial Solicitation Closing Date

** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

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1.3 I.5 IM Architect – Level 3

ID	Mandatory Criteria <u>I.5 IM Architect – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) AWS**; 2) Data Warehouse Technologies; 3) IBM Cognos v10+ ; 4) IBM InfoSphere Data Architect; 5) IBM InfoSphere Suite; 6) Kimball Dimensional Methodology; 7) MS Office Suite (Word, Excel, PowerPoint); and 8) MS Visio.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

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1.4 I.5 IM Architect (Data Scientist) – Level 3

ID	Mandatory Criteria <u>I.5 IM Architect – Data Scientist – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) Artificial Intelligence Technologies; 2) AWS**; 3) Data Warehouse Technologies; 4) OpenSource Analytics; 5) IBM InfoSphere Data Architect; 6) IBM SPSS Modeler v14+; 7) Machine Learning; 8) Python; 9) PyTorch ; 10) R; 11) SQL; and 12) Tableau.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

1.5 I.11 Technology Architect – Level 3

ID	Mandatory Criteria <u>I.11 Technology Architect – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) Alteryx; 2) AWS**; 3) Data Warehouse Technologies; 4) Hadoop ***; 5) IBM Cognos; 6) IBM Data Studio v4+; 7) IBM DB2; 8) IBM InfoSphere Change Data Capture; and 9) SQL.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker
*** Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig

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2.0 WORKSTREAM 2 - BUSINESS WORKSTREAM

2.1 B.1 Business Analyst – Level 3

ID	Mandatory Criteria <u>B.1 Business Analyst – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) AWS**; 2) Data Warehouse Technologies; 3) IBM Cognos v10+ ; and 4) IBM InfoSphere Suite.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

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2.2 B.1 Business Analyst (Data Analyst / Data Quality Analyst) – Level 3

ID	Mandatory Criteria <u>B.1 Business Analyst (Data Analyst / Data Quality Analyst) – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) AWS**; 2) IBM InfoSphere Information Analyzer; 3) InfoSphere Business Glossary Anywhere; 4) IBM InfoSphere Information Governance Catalog; and 5) SQL.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

** RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue, QuickSight, or Sagemaker

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2.3 B.5 Business Process Re-engineering (BPR) Consultant – Level 3

ID	Mandatory Criteria <u>B.5 Business Process Re-engineering (BPR) Consultant – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW 3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) IBM Cognos v10+ ; 2) MS Office Suite (Word, Excel, PowerPoint); and 3) MS Visio.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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2.4 P.5 Project Executive – Level 3

ID	Mandatory Criteria <u>P.5 Project Executive – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW 3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) MS Project; 2) MS Office Suite (Word, Excel, PowerPoint); and 3) MS Visio.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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2.5 P.9 Project Manager – Level 3

ID	Mandatory Criteria <u>P.5 Project Manager – Level 3</u>	Bidder's response	
		Met (Yes/No)	Demonstrated Experience (Bidders to insert cross reference to assigned resource project reference number(s))
M1	The Bidder must demonstrate that the proposed resource has a minimum of 10 years of experience*, acquired within the past 15 years, in each of the baseline tasks listed under SW3 of Annex A - Statement of Work for the same resource category.		
M2	The Bidder must demonstrate that the proposed resource has a minimum of 4 years of experience*, acquired within the past 8 years, in each of the following technologies: 1) MS Project; 2) MS Office Suite (Word, Excel, PowerPoint); and 3) MS Visio.		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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ATTACHMENT 3
CORPORATE BID EVALUATION CRITERIA - RATED REQUIREMENTS

1.0 WORKSTREAM 1 - TECHNICAL WORKSTREAM

	Point Rated Criteria	Max Points	Bidder's Response					
			Evaluation Guideline	Cross Reference to Contract Reference(s)				
R1	The Bidder will be awarded points for demonstrated billable days experience in excess of the minimum Billable Days per Resource Category under M1.	100	The Bidder's demonstrated "Total Billable Days" provided in response to M1 will be used to evaluate this criterion. The Bidder will be awarded points as demonstrated in the example evaluation scenario on the left side. In this example, the Bidder would score 81.00 points out of a possible 100 points.					
	EXAMPLE EVALUATION SCENARIO							
	BILLABLE DAYS							
	(A)				(B)	(C)	(D)	
	RESOURCE CATEGORY				BIDDER'S TOTAL	MINIMUM BILLABLE DAYS IDENTIFIED UNDER M1	BILLABLE DAYS IN EXCESS OF M1	BIDDER % INCREASE TO A MAXIMUM OF 100 (Rounded to two decimal places)
					Appendix A of Attachment 2		(C)=(A)-(B)	(D)=(C)/(B)* 100

Point Rated Criteria						Max Points		Bidder's Response		Cross Reference to Contract Reference(s)											
								Evaluation Guideline													
	I.3 Database Analyst/IM Administrator (Data Engineer)	1650	1000	650	65.00																
	I.4 Database Modeller/IM Modeller (Data Architect)	950	500	450	90.00																
	I.5. IM Architect	1700	1000	700	70.00																
	I.5 IM Architect (Data Scientist)	900	500	400	80.00																
	I.11. Technology Architect	1300	600	700	100.00																
	BIDDER SCORE = SUM OF (D) FOR ALL 5 CATEGORIES/ 5		81.00																		
R2	The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a I.3 Database Analyst/IM Administrator (Data Engineer)(s), Level 3 in the following technologies:					30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points														
<table><tr><th colspan="2">Technology</th></tr><tr><td>IBM DB2</td><td></td></tr><tr><td>Microsoft SQL Server</td><td></td></tr><tr><td>MongoDB</td><td></td></tr><tr><td>AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker</td><td></td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB</td><td></td></tr></table>										Technology		IBM DB2		Microsoft SQL Server		MongoDB		AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker		Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB	
Technology																					
IBM DB2																					
Microsoft SQL Server																					
MongoDB																					
AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker																					
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB																					

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Point Rated Criteria	Max Points	Bidder's Response	
		Evaluation Guideline	Cross Reference to Contract Reference(s)
IBM PureData			
IBM Infosphere Suite			
Extract Transform Load			
SQL			
Python			
R			
Spark			
Kafka			

Point Rated Criteria		Max Points	Bidder's Response																	
			Evaluation Guideline	Cross Reference to Contract Reference(s)																
R3	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of I.4 Database Modeller/IM Modeller (Data Architect) (s), Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM Infosphere suite</td></tr><tr><td>IBM Infosphere Data Architect</td></tr><tr><td>IBM PureData</td></tr><tr><td>IBM Data Studio V44+</td></tr><tr><td>IBM InfoSphere Information Governance Catalog</td></tr><tr><td>IBM InfoSphere Information Server for Data Integration</td></tr><tr><td>IBM InfoSphere Information Server for Data Quality</td></tr><tr><td>IBM Cognos</td></tr><tr><td>AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight or Sagemaker</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics or CosmosDB</td></tr><tr><td>Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig</td></tr><tr><td>Qualiware</td></tr><tr><td>CA Erwin Data Modeler V9+</td></tr><tr><td>SQL</td></tr><tr><td>XML</td></tr></tbody></table>	Technology	IBM Infosphere suite	IBM Infosphere Data Architect	IBM PureData	IBM Data Studio V44+	IBM InfoSphere Information Governance Catalog	IBM InfoSphere Information Server for Data Integration	IBM InfoSphere Information Server for Data Quality	IBM Cognos	AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight or Sagemaker	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics or CosmosDB	Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig	Qualiware	CA Erwin Data Modeler V9+	SQL	XML	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																				
IBM Infosphere suite																				
IBM Infosphere Data Architect																				
IBM PureData																				
IBM Data Studio V44+																				
IBM InfoSphere Information Governance Catalog																				
IBM InfoSphere Information Server for Data Integration																				
IBM InfoSphere Information Server for Data Quality																				
IBM Cognos																				
AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight or Sagemaker																				
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics or CosmosDB																				
Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig																				
Qualiware																				
CA Erwin Data Modeler V9+																				
SQL																				
XML																				

Point Rated Criteria		Max Points	Bidder's Response																
			Evaluation Guideline	Cross Reference to Contract Reference(s)															
R4	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a I.5. IM Architect (s), Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM Cognos</td></tr><tr><td>IBM SPSS Modeler v14+</td></tr><tr><td>IBM PureData</td></tr><tr><td>IBM Data Studio v4+</td></tr><tr><td>IBM InfoSphere Information Governance Catalog</td></tr><tr><td>IBM InfoSphere Information Server for Data Integration</td></tr><tr><td>IBM InfoSphere Information Server for Data Quality</td></tr><tr><td>IBM InfoSphere Information Analyzer</td></tr><tr><td>IBM InfoSphere Data Architect</td></tr><tr><td>IBM DB2 V9+</td></tr><tr><td>SQL</td></tr><tr><td>AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, Data Factory, Stream Analytics, CosmosDB, or Machine Learning</td></tr><tr><td>Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig</td></tr></tbody></table>	Technology	IBM Cognos	IBM SPSS Modeler v14+	IBM PureData	IBM Data Studio v4+	IBM InfoSphere Information Governance Catalog	IBM InfoSphere Information Server for Data Integration	IBM InfoSphere Information Server for Data Quality	IBM InfoSphere Information Analyzer	IBM InfoSphere Data Architect	IBM DB2 V9+	SQL	AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, Data Factory, Stream Analytics, CosmosDB, or Machine Learning	Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																			
IBM Cognos																			
IBM SPSS Modeler v14+																			
IBM PureData																			
IBM Data Studio v4+																			
IBM InfoSphere Information Governance Catalog																			
IBM InfoSphere Information Server for Data Integration																			
IBM InfoSphere Information Server for Data Quality																			
IBM InfoSphere Information Analyzer																			
IBM InfoSphere Data Architect																			
IBM DB2 V9+																			
SQL																			
AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,																			
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, Data Factory, Stream Analytics, CosmosDB, or Machine Learning																			
Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig																			

R5	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a I.5 IM Architect (Data Scientist), Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM Cognos</td></tr><tr><td>IBM SPSS Modeler v14+</td></tr><tr><td>SQL</td></tr><tr><td>Python</td></tr><tr><td>Java</td></tr><tr><td>R</td></tr><tr><td>XML</td></tr><tr><td>PowerBI</td></tr><tr><td>Machine Learning</td></tr><tr><td>IBM Infosphere suite</td></tr><tr><td>AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning</td></tr><tr><td>Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig</td></tr><tr><td>Spark</td></tr><tr><td>Kafka</td></tr><tr><td>Tableau</td></tr></tbody></table>	Technology	IBM Cognos	IBM SPSS Modeler v14+	SQL	Python	Java	R	XML	PowerBI	Machine Learning	IBM Infosphere suite	AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning	Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig	Spark	Kafka	Tableau	30	<p>Points will be awarded as follows:</p> <p>1 Technology = 5 points</p> <p>2 Technologies = 10 Points</p> <p>3 Technologies = 15 Points</p> <p>4 Technologies = 20 Points</p> <p>5 Technologies = 25 Points</p> <p>6 or more Technologies = 30 Points</p>
Technology																				
IBM Cognos																				
IBM SPSS Modeler v14+																				
SQL																				
Python																				
Java																				
R																				
XML																				
PowerBI																				
Machine Learning																				
IBM Infosphere suite																				
AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,																				
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning																				
Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig																				
Spark																				
Kafka																				
Tableau																				

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R6	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a I.11. Technology Architect (s), Level 3 in the following technologies:</p> <table><tr><th>Technology</th></tr><tr><td>IBM SPSS Modeler V14+</td></tr><tr><td>IBM Cognos</td></tr><tr><td>IBM Infosphere Data Architect</td></tr><tr><td>CA Erwin Data Modeler V9+</td></tr><tr><td>IBM Data Studio V4+</td></tr><tr><td>IBM PureData</td></tr><tr><td>IBM DB2 V9+</td></tr><tr><td>SQL</td></tr><tr><td>Entity Relationship Modelling</td></tr><tr><td>Master Data Management</td></tr><tr><td>AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB</td></tr><tr><td>Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig</td></tr></table>	Technology	IBM SPSS Modeler V14+	IBM Cognos	IBM Infosphere Data Architect	CA Erwin Data Modeler V9+	IBM Data Studio V4+	IBM PureData	IBM DB2 V9+	SQL	Entity Relationship Modelling	Master Data Management	AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB	Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																		
IBM SPSS Modeler V14+																		
IBM Cognos																		
IBM Infosphere Data Architect																		
CA Erwin Data Modeler V9+																		
IBM Data Studio V4+																		
IBM PureData																		
IBM DB2 V9+																		
SQL																		
Entity Relationship Modelling																		
Master Data Management																		
AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker																		
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB																		
Hadoop: Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig																		
MAXIMUM AVAILABLE POINTS		250																
Minimum Pass Mark 70%		175																

2.0 WORKSTREAM 2 - BUSINESS WORKSTREAM

Point Rated Criteria					Max Points	Bidder's Response	
						Evaluation Guideline	Cross Reference to Contract Reference(s)
R1	The Bidder will be awarded points for demonstrated billable days experience in excess of the minimum Billable Days per Resource Category under M1.					100	The Bidder's demonstrated "Total Billable Days" provided in response to M1 will be used to evaluate this criterion. The Bidder will be awarded points as demonstrated in the example evaluation scenario on the left side. In this example, the Bidder would score 87.25 points out of a possible 100 points.
	EXAMPLE EVALUATION SCENARIO						
	BILLABLE DAYS						
	RESOURCE CATEGORY	(A)	(B)	(C)	(D)		
		BIDDER'S TOTAL	MINIMUM BILLABLE DAYS IDENTIFIED UNDER M1	BILLABLE DAYS IN EXCESS OF M1	BIDDER % INCREASE TO A MAXIMUM OF 100 (Rounded to two decimal places)		
		Appendix C of Attachment 2		(C)=(A)-(B)	(D)=(C)/(B)*100		
		2250	1200	1,050	87.50		
	B.1 Business Analyst						
B.1 Business Analyst (Data Analyst/Data Quality Analyst)	900	500	400	80.00			
B.5. Business Process Re-engineering (BPR) Consultant	1050	600	450	75.00			

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Point Rated Criteria					Max Points	Bidder's Response	
						Evaluation Guideline	Cross Reference to Contract Reference(s)
	P.5 Project Executive	2325	1200	1,125	93.75		
	P.9. Project Manager	2500	1200	1,300	100.00		
	BIDDER SCORE = SUM OF (D) FOR ALL 5 CATEGORIES / 5	87.25					

Point Rated Criteria		Max Points	Bidder's Response													
			Evaluation Guideline	Cross Reference to Contract Reference(s)												
R2	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of B.1. Business Analyst (s), Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM SPSS Modeler V14+</td></tr><tr><td>IBM Cognos</td></tr><tr><td>IBM Infosphere suite</td></tr><tr><td>IBM InfoSphere Information Governance Catalog</td></tr><tr><td>IBM InfoSphere Information Server for Data Integration</td></tr><tr><td>IBM InfoSphere Information Server for Data Quality</td></tr><tr><td>Tableau</td></tr><tr><td>PowerBI</td></tr><tr><td>AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB</td></tr><tr><td>SQL</td></tr></tbody></table>	Technology	IBM SPSS Modeler V14+	IBM Cognos	IBM Infosphere suite	IBM InfoSphere Information Governance Catalog	IBM InfoSphere Information Server for Data Integration	IBM InfoSphere Information Server for Data Quality	Tableau	PowerBI	AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB	SQL	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																
IBM SPSS Modeler V14+																
IBM Cognos																
IBM Infosphere suite																
IBM InfoSphere Information Governance Catalog																
IBM InfoSphere Information Server for Data Integration																
IBM InfoSphere Information Server for Data Quality																
Tableau																
PowerBI																
AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker																
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB																
SQL																

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Point Rated Criteria		Max Points	Bidder's Response																		
			Evaluation Guideline	Cross Reference to Contract Reference(s)																	
R3	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a B.1 Business Analyst (Data Analyst/Data Quality Analyst) (s), Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM Cognos</td></tr><tr><td>IBM SPSS Modeler v14+</td></tr><tr><td>SQL</td></tr><tr><td>Python</td></tr><tr><td>Java</td></tr><tr><td>R</td></tr><tr><td>XML</td></tr><tr><td>ETL frameworks</td></tr><tr><td>IBM InfoSphere suite</td></tr><tr><td>IBM InfoSphere Information Governance Catalog</td></tr><tr><td>IBM InfoSphere Information Server for Data Integration</td></tr><tr><td>IBM InfoSphere Information Server for Data Quality</td></tr><tr><td>Tableau</td></tr><tr><td>PowerBI</td></tr><tr><td>AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB</td></tr></tbody></table>	Technology	IBM Cognos	IBM SPSS Modeler v14+	SQL	Python	Java	R	XML	ETL frameworks	IBM InfoSphere suite	IBM InfoSphere Information Governance Catalog	IBM InfoSphere Information Server for Data Integration	IBM InfoSphere Information Server for Data Quality	Tableau	PowerBI	AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																					
IBM Cognos																					
IBM SPSS Modeler v14+																					
SQL																					
Python																					
Java																					
R																					
XML																					
ETL frameworks																					
IBM InfoSphere suite																					
IBM InfoSphere Information Governance Catalog																					
IBM InfoSphere Information Server for Data Integration																					
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Tableau																					
PowerBI																					
AWS: RDS, Redshift, Kinesis, Lambda, Firehose, EMR, DynamoDB, Glue. QuickSight, or Sagemaker																					
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, SQL Server, Data Factory, Stream Analytics, or CosmosDB																					

Point Rated Criteria		Max Points	Bidder's Response														
			Evaluation Guideline	Cross Reference to Contract Reference(s)													
R4	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a B.5. Business Process Re-engineering (BPR) Consultant, Level 3 in the following technologies:</p> <table><thead><tr><th>Technology</th></tr></thead><tbody><tr><td>IBM Infosphere suite</td></tr><tr><td>IBM PureData</td></tr><tr><td>IBM Data Studio V4+</td></tr><tr><td>IBM InfoSphere Information Governance Catalog</td></tr><tr><td>IBM InfoSphere Information Server for Data Integration</td></tr><tr><td>IBM InfoSphere Information Server for Data Quality</td></tr><tr><td>InfoSphere Business Glossary Anywhere</td></tr><tr><td>AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,</td></tr><tr><td>Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning</td></tr><tr><td>Barker notation</td></tr><tr><td>Zachman Framework</td></tr><tr><td>Qualiware</td></tr></tbody></table>	Technology	IBM Infosphere suite	IBM PureData	IBM Data Studio V4+	IBM InfoSphere Information Governance Catalog	IBM InfoSphere Information Server for Data Integration	IBM InfoSphere Information Server for Data Quality	InfoSphere Business Glossary Anywhere	AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,	Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning	Barker notation	Zachman Framework	Qualiware	30	Points will be awarded as follows: 1 Technology = 5 points 2 Technologies = 10 Points 3 Technologies = 15 Points 4 Technologies = 20 Points 5 Technologies = 25 Points 6 or more Technologies = 30 Points	
Technology																	
IBM Infosphere suite																	
IBM PureData																	
IBM Data Studio V4+																	
IBM InfoSphere Information Governance Catalog																	
IBM InfoSphere Information Server for Data Integration																	
IBM InfoSphere Information Server for Data Quality																	
InfoSphere Business Glossary Anywhere																	
AWS: Redshift, Spectrum, S3, Kinesis, Lambda, Firehose, EMR, DynamoDB,, QuickSight, or Sagemaker,																	
Azure: SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI,, Data Factory, Stream Analytics, CosmosDB, or Machine Learning																	
Barker notation																	
Zachman Framework																	
Qualiware																	

Point Rated Criteria		Max Points	Bidder's Response						
			Evaluation Guideline	Cross Reference to Contract Reference(s)					
R5	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a P.5 Project Executive (s), Level 3 in the following technologies:</p> <table><tr><th>Technology</th></tr><tr><td>MS Project</td></tr><tr><td>MS Visio</td></tr><tr><td>MS Office Suite (Word, Excel, PowerPoint)</td></tr><tr><td>Project Portfolio Management software (other than MS Project)</td></tr></table>	Technology	MS Project	MS Visio	MS Office Suite (Word, Excel, PowerPoint)	Project Portfolio Management software (other than MS Project)	12	Points will be awarded as follows: 1 Technology = 3 points 2 Technologies = 6 Points 3 Technologies = 9 Points 4 Technologies = 12	
Technology									
MS Project									
MS Visio									
MS Office Suite (Word, Excel, PowerPoint)									
Project Portfolio Management software (other than MS Project)									
R6	<p>The Bidder will be awarded points as follows where contract reference(s) submitted for M1 demonstrates delivery of services of a P.9. Project Manager (s), Level 3 in the following technologies:</p> <table><tr><th>Technology</th></tr><tr><td>MS Project</td></tr><tr><td>MS Visio</td></tr><tr><td>MS Office Suite (Word, Excel, PowerPoint)</td></tr><tr><td>Project Portfolio Management software (other than MS Project)</td></tr></table>	Technology	MS Project	MS Visio	MS Office Suite (Word, Excel, PowerPoint)	Project Portfolio Management software (other than MS Project)	12	Points will be awarded as follows: 1 Technology = 3 points 2 Technologies = 6 Points 3 Technologies = 9 Points 4 Technologies = 12	
Technology									
MS Project									
MS Visio									
MS Office Suite (Word, Excel, PowerPoint)									
Project Portfolio Management software (other than MS Project)									
MAXIMUM AVAILABLE POINTS		214							
Minimum Pass Mark 70%		149							

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ATTACHMENT 9
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ATTACHMENT 3.1
BID EVALUATION CRITERIA – RESOURCE RATED REQUIREMENTS

1.0 WORKSTREAM 1 - TECHNICAL WORKSTREAM

1.1 - I.3 Database Analyst/IM Administrator (Data Engineer) – Level 3

I.3 Database Analyst/IM Administrator (Data Engineer) – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		

R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Event Driven architecture 2. Anthos 3. Alteryx 4. Graph database architectures 5. IBM DB2 6. IBM Infosphere Suite.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	AWS	10		6%	
	Extract Transform Load Frameworks	10		6%	
	IBM Infosphere Data Architect	10		2%	
	IBM SPSS V14+	10		2%	
	JSON	10		2%	
	Kafka	10		2%	
	Python	10		6%	
	R	10		6%	
	SQL	10		6%	

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
	Stream analytics architecture	10		3 3%	
	Alteryx	10		3 5%	
	Anthos	10		3 %	
R3	Event Driven architecture	10		3%	
	IBM DB2	10		5%	
	Graph database architectures	10		3%	
	IBM Infosphere Suite	10		3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

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1.2 - I.4 Database Modeler/IM Modeler (Data Architect) – Level 3

I.4 Database Modeler/IM Modeler (Data Architect) – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		

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R3	<p>The Bidder should demonstrate that the proposed resource has experience* in the following technologies:</p> <ol style="list-style-type: none">1. CA Erwin Data Modeler V9+2. Event Driven Architecture3. IBM Infosphere Suite4. IBM PureData5. IBM SPSS Modeler v14+6. Kimball Dimensional Methodology7. Qualiware8. Stream Analytics Architecture9. XML.	<p>10 points per technology. Please refer to the Evaluation Grid and Weights below.</p>	<p>0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points</p>		
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*The experience must have been acquired prior to the Initial Solicitation Closing Date

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	AWS**	10		6%	
	Aginity Workbench	10		6%	
	Data Warehouse Technologies	10		2%	
	Extract Transform Load Frameworks	10		2%	
	IBM Cognos v101+	10		2%	
	IBM Data Studio V4+	10		2%	

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R3	IBM InfoSphere DataStage and QualityStage Designer	10		6%	
	IBM InfoSphere DataStage®	10		6%	
	SQL	10		6%	
	CA Erwin Data Modeler V9+	10		3%	
	Event Driven architecture	10		3%	
	IBM InfoSphere Suite	10		3%	
	IBM PureData	10		5%	
	IBM SPSS Modeler v14+	10		3%	
	Kimball Dimensional Methodology	10		3%	
	Qualiware	10		3%	
	Stream Analytics Architecture	10		3%	
	XML	10		3%	
	Total Score:			100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

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1.3 - 1.5 IM Architect – Level 3

1.5 IM Architect – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		

R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. CA Erwin Data Modeler V9+ 2. IBM SDData Studio V4 3. IBM InfoSphere Information Server for Data Quality 4. IBM InfoSphere Information Analyzer 5. IBM InfoSphere Information Governance Catalog 6. SQL 7. XML.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	AWS	10		6%	
	Data Warehouse Technologies	10		6%	
	IBM Cognos v10 1 +	10		2%	
	IBM InfoSphere Data Architect	10		2%	
	IBM InfoSphere Suite	10		2%	
	Kimball Dimensional Methodology	10		2%	
	MS Office Suite (Word, Excel, Powerpoint)	10		6%	

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
	MS Visio	10		6%	
	CA Erwin Data Modeler V9+	10		3%	
	IBM Data Studio V4+	10		3%	
	IBM InforSphere Information Server	10		3%	
	for Data Quality				
R3	IBM InfoSphere Information Analyzer	10		5%	
	IBM InfoSphere Information Governance Catalog	10		3%	
	SQL	10		3%	
	XML	10		3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

1.4 - I.5 IM Architect (Data Scientist) – Level 3

I.5 IM Architect (Data Scientist) – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years = 3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Alteryx 2. ArcGIS 3. Graph Database architectures 4. Hadoop ** 5. IBM Cognos v101+ 6. IBM 12 7. IBM Infosphere Suite 8. Java 9. JSON 10. Kafka 11. Keras 12. Spark	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

	13. Stream analytics architecture 14. Tensorflow 15. XML.				
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*The experience must have been acquired prior to the Initial Solicitation Closing Date

** Apache, MapReduce, Hbase, oozie, Flume, MongoDB, Cassandra, or Pig

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	AWS**	10		65%	
	Data Warehouse Technologies	10		64%	
	Artificial Intelligence Technologies	10		2%	
	Data Warehouse Technologies	10		2%	
	OpenSource Analytics	10		2%	
	IBM Infosphere Data Architect	10		63%	
	IBM SPSS Modeler v14+	10		63%	
	Machine Learning	10		64%	
	Python	10		3	
	R	10		3	
	SQL	10		2	
	Tableau	10		3	

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ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R3	Alteryx	10		3%	
	ArcGIS	10		32%	
	Graph database architectures	10		32%	
	Hadoop***	10		53%	
	IBM Cognos v101+	10		32%	
	IBM 12	10		32%	
	IBM Infosphere Suite	10		32%	
	Java	10		32%	
	JSON	10		3%	
	Kafka	10		3%	
	Keras	10		3%	
	Spark	10		3	
	Stream analytics architecture	10		2	
Total Score:				100%	

Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.

1.5 - I.11 Technology Architect – Level 3

I.11 Technology Architect – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years = 3 points 5+ to 6 years = 7 points 6+ years = 10 points		

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R3	<p>The Bidder should demonstrate that the proposed resource has experience* in the following technologies:</p> <ol style="list-style-type: none">1. Azure **2. Graph Database architectures3. IBM InfoSphere Data Architect4. IBM InfoSphere DataStage V8.5+5. IBM InfoSphere Information Governance Catalog6. IBM InfoSphere QualityStage v8.5+7. IBM InfoSphere Suite ***8. Master Data Management9. Stream Analytics architecture.10. XML	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		
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*The experience must have been acquired prior to the Initial Solicitation Closing Date

** SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics, or CosmosDB

*** IBM InfoSphere DataStage®, IBM InfoSphere QualityStage®, IBM InfoSphere DataStage and QualityStage Designer, IBM InfoSphere Information Analyzer or IBM InfoSphere Information Governance Catalog

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	Alteryx	10		6%	
	Data Warehouse Technologies	10		6%	
	AWS	10		2%	

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ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R3	Hadoop	10		2%	
	IBM Cognos	10		2%	
	IBM Data Studio v4+	10		2%	
	IBM DB2	10		6%	
	IBM InfoSphere Change Data Capture	10		6%	
	SQL	10		6%	
	Azure	10		3%	
	Graph Database architectures	10		3%	
	IBM InfoSphere Data Architect	10		3%	
	IBM InfoSphere DataStage V8.5+	10		5%	
	IBM InfoSphere Information Governance Catalog	10		3%	
	IBM InfoSphere QualityStage v8.5+	10		3%	
	IBM InfoSphere Suite	10		3%	
	Master Data Management	10		3%	
Total Score:	Stream analytics architecture	10		3%	
	XML	10		3%	
				100%	

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Technologies and Certifications		Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
ID		Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.			

2.0 WORKSTREAM 2 - BUSINESS WORKSTREAM

2.1 - B.1 Business Analyst – Level 3

B.1 Business Analyst – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Aginity Workbench 2. Azure**	10 points per technology. Please refer to the Evaluation Grid and	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

	3. IBM Infosphere Information Governance Catalog 4. Power BI 5. SQL.	Weights below.		
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*The experience must have been acquired prior to the Initial Solicitation Closing Date
** SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics, or CosmosDB

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
	AWS	10		6%	
R2	Data Warehouse Technologies	10		6%	
	IBM Cognos v11+	10		2%	
	IBM Infosphere Suite	10		2%	
	Aginity Workbench	10		3%	
	Azure	10		3%	
R3	IBM Infosphere Information Governance Catalog	10		3%	
	Power BI	10		5%	
	SQL	10		3%	
Total Score:				100%	

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ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

2.2 - B.1 Business Analyst (Data Analyst / Data Quality Analyst) – Level 3

B.1 Business Analyst (Data Analyst / Data Quality Analyst) – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Aginity Workbench 2. Azure** 3. IBM InfoSphere Data Architect 4. IBM InfoSphere Information Server for Data Quality 5. IBM InfoSphere suite 6. IBM SPSS Modeler v14+ 7. Power BI	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

	8. Python				
	9. R				
	10. SQL				
	11. Tableau.				

*The experience must have been acquired prior to the Initial Solicitation Closing Date

** SQL Data Warehouse, Databricks, HDInsight, Event Hubs, PowerBI, SQL Server, Data Factory, Stream Analytics, or CosmosDB

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	AWS	10		6%	
	IBM InfoSphere Information Analyzer	10		6%	
	InfoSphere Business Glossary Anywhere	10		2%	
	IBM InfoSphere Information Governance Catalog	10		2%	
	SQL	10		3%	
	Aginity Workbench			3%	
R3	Azure			3%	
	IBM InfoSphere Data Architect			3%	
	IBM InfoSphere Information Server for Data Quality			5%	
	IBM InfoSphere suite			2%	
	IBM SPSS Modeler v14+			2%	

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
	Power BI			2%	
	Python			2%	
	R			2%	
	SQL			2%	
	Tableau			3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive					

2.3 - B.5 Business Process Re-engineering (BPR) Consultant – Level 3

B.5 Business Process Re-engineering (BPR) Consultant – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years = 3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. IBM InfoSphere suite*	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	IBM Cognos v11 1 +	10		6%	
	MS Office Suite (Word, Excel, PowerPoint)	10		6%	
	MS Visio	10		2%	
R3	IBM InfoSphere suite*	10		3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

2.4 - P.5 Project Executive – Level 3

P.5 Project Executive – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Project Portfolio Management Software (other than MS Project).	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	MS Project	10		6%	
	MS Office Suite (Word, Excel, PowerPoint)	10		6%	
	MS Visio	10		2%	
R3	Project Portfolio Management Software (other than MS Project)	10		3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

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2.5 - P.9 Project Manager – Level 3

P.9 Project Manager – Level 3					
RATED	Point Rated Technical Criteria	Maximum Number of points	Points Allocation	Demonstrated Experience	Insert Page # of Resume
R1	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M1. The experience* must have been acquired within the past 15 years.	10	10+ to 11 years = 2 points 11+ to 12 years = 4 points 12+ to 13 years = 6 points 13 + to 14 years = 8 points 14+ years = 10 points		
R2	The Bidder should demonstrate that the proposed resource has experience over and above the experience demonstrated in M2. The experience* must have been acquired within the past 8 years.	10 points per technology. Please refer to the Evaluation Grid and Weights below.	4+ to 5 years =3 points 5+ to 6 years = 7 points 6+ years = 10 points		
R3	The Bidder should demonstrate that the proposed resource has experience* in the following technologies: 1. Project Portfolio Management Software (other than MS Project).	10 points per technology. Please refer to the Evaluation Grid and Weights below.	0 to 1 year = 0 points 1+ to 2 years = 2 points 2+ to 3 years = 4 points 3+ to 4 years = 6 points 4+ to 5 years = 8 points 5+ years = 10 points		

*The experience must have been acquired prior to the Initial Solicitation Closing Date

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Evaluation Grid and Weights

ID	Technologies and Certifications	Max Points	Points Achieved by Contractor (A)	Evaluation Weight (B)	Weighted Result (A x B)
R1	N/A	10		40%	
R2	MS Project	10		6%	
	MS Office Suite (Word, Excel, PowerPoint)	10		6%	
	MS Visio	10		2%	
R3	Project Portfolio Management Software (other than MS Project)	10		3%	
Total Score:				100%	
Each proposed resource must meet the minimum pass mark of 70% to be deemed responsive.					

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ATTACHMENT 10
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ATTACHMENT 4
PRICING SCHEDULE

Unless otherwise indicated, bidders must include a single, firm, all-inclusive per diem rate quoted in Canadian dollars in each cell requiring an entry in the pricing tables below.

WORKSTREAM 1

Initial Contract Period		
Date of Contract award to _____		
Resource Category	Level of Expertise	Firm All-inclusive Per Diem Rates
Application/Software Architect (Analytics)	3	\$
Programmer/Software Developer	3	\$
Programmer/Software Developer	2	\$
Programmer/Analyst	3	\$
Database Administrator	3	\$
Database Analyst / IM Administrator	3	\$
Database Analyst / IM Administrator (Data Engineer)	3	\$
Database Modeller / IM Modeller	3	\$
Database Modeller/IM Modeller (Data Architect)	3	\$
IM Architect	3	\$

IM Architect (Data Scientist)	3	\$
IM Architect (Privacy Architect)	3	\$
Technology Architect	3	\$

Option Periods:

Option Period 1 _____ to _____		
Resource Category	Level of Expertise	Firm All-inclusive Per Diem Rates
Application/Software Architect (Analytics)	3	\$
Programmer/Software Developer	3	\$
Programmer/Software Developer	2	\$
Programmer/Analyst	3	\$
Database Administrator	3	\$
Database Analyst / IM Administrator	3	\$
Database Analyst / IM Administrator (Data Engineer)	3	\$
Database Modeller / IM Modeller	3	\$
Database Modeller/IM Modeller (Data Architect)	3	\$

IM Architect	3	\$
IM Architect (Data Scientist)	3	\$
IM Architect (Privacy Architect)	3	\$
Technology Architect	3	\$

Option Period 2 _____ to _____		
Resource Category	Level of Expertise	Firm All-inclusive Per Diem Rates
Application/Software Architect (Analytics)	3	\$
Programmer/Software Developer	3	\$
Programmer/Software Developer	2	\$
Programmer/Analyst	3	\$
Database Administrator	3	\$
Database Analyst / IM Administrator	3	\$
Database Analyst / IM Administrator (Data Engineer)	3	\$
Database Modeller / IM Modeller	3	\$
Database Modeller/IM Modeller (Data Architect)	3	\$

IM Architect	3	\$	
IM Architect (Data Scientist)	3	\$	
IM Architect (Privacy Architect)	3	\$	
Technology Architect	3	\$	

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WORKSTREAM 2

Initial Contract Period Date of Contract award to _____			
Resource Category	Level of Expertise	Firm All-inclusive Per Diem Rates	
Business Analyst	2	\$	
Business Analyst	3	\$	
Business Analyst (Data Analyst/Data Quality Analyst)	2	\$	
Business Analyst (Data Analyst/Data Quality Analyst)	3	\$	
Business Architect	2	\$	
Business Architect	3	\$	
Business Consultant	2	\$	
Business Consultant	3	\$	
Business Process Re-engineering (BPR) Consultant	3	\$	
Instructor, Information Technology	3	\$	
Change Management Consultant	3	\$	
Project Executive	3	\$	
Project Manager	2	\$	
Project Manager	3	\$	
Risk Management Specialist	3	\$	

Option Periods:

Option Period 1			
Resource Category		Level of Expertise	Firm All-inclusive Per Diem Rates
Business Analyst		2	\$
Business Analyst		3	\$
Business Analyst (Data Analyst/Data Quality Analyst)		2	\$
Business Analyst (Data Analyst/Data Quality Analyst)		3	\$
Business Architect		2	\$
Business Architect		3	\$
Business Consultant		2	\$
Business Consultant		3	\$
Business Process Re-engineering (BPR) Consultant		3	\$
Instructor, Information Technology		3	\$
Change Management Consultant		3	\$
Project Executive		3	\$
Project Manager		2	\$
Project Manager		3	\$
Risk Management Specialist		3	\$

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Option Period 2			
Resource Category		Level of Expertise	Firm All-inclusive Per Diem Rates
Business Analyst		2	\$
Business Analyst		3	\$
Business Analyst (Data Analyst/Data Quality Analyst)		2	\$
Business Analyst (Data Analyst/Data Quality Analyst)		3	\$
Business Architect		2	\$
Business Architect		3	\$
Business Consultant		2	\$
Business Consultant		3	\$
Business Process Re-engineering (BPR) Consultant		3	\$
Instructor, Information Technology		3	\$
Change Management Consultant		3	\$
Project Executive		3	\$
Project Manager		2	\$
Project Manager		3	\$
Risk Management Specialist		3	

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END OF AMENDMENT 002

ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME