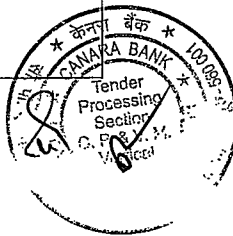


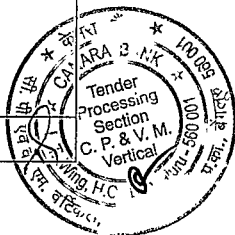
Replies to Pre Bid Queries to GeM Bid ref. no. GEW/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
1	65	Annexure 9: Scope of Work	1: Summary of project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What analytics tools are currently utilized by Canara Bank, and could you provide insights into their existing infrastructure, including databases, hardware, software, and cloud technologies in use?	Refer Technological stack The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
2	65	Annexure 9: Scope of Work	1: Summary of project	1.7: Set up Integrated Analytics platform offering capabilities like predictive analytics, machine learning, deep learning capabilities and for implementation of real time analytics for various delivery channels of the Bank.	Could you please clarify if you were referring to the Integration of AutoML capabilities within an analytics platform?	Refer Annexure 9 : Scope of work
3	65	Annexure 9: Scope of Work	1: Summary of project	1.4: Develop and Implement AI/ML use cases as per Bank's requirement, with - 1.4.1. Structured data 1.4.2. Semi-structured data 1.4.3. Unstructured data	What is the size of data?	Refer Annexure 9 : Scope of work
4	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	What are the relevant data sources available for this project?	Kindly refer to Clause No. 3.4 (Detailed Scope of Work) page No 69 of the RFP
5	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	Is historical data available for model training? For how much time period historical data is available?	Yes. Bank has Implemented Data warehouse and historical data will be made available as per the requirement of use case
6	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	What is the desired accuracy level for the all use cases?	It will be decided on case to case basis
7	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	How frequently should the model be updated to maintain accuracy?	Model updation frequency is on Case to case basis
8	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	What is the expected turnaround time for generating predictions for individual customers?	Will depend on down stream application integration
9	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	Should the model be integrated into an existing CRM or other canara bank applications?	Kindly refer to Clause No.3.11.4 (Detailed Scope of Work) page No 74 of the RFP
10	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	What are the technical requirements for deploying the model (e.g., cloud-based, on-premise)?	Kindly refer to Clause No.2.2 (Detailed Scope of Work) page No 67 of the RFP
11	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	How will the model integrate with the existing customer management processes? Are there any existing APIs available?	Kindly refer to Clause No.3.11.4 (Detailed Scope of Work) page No 74 of the RFP
12	65,66	Annexure 9: Scope of Work	1: Summary of project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	Are there any preferences or constraints for the programming language to be used?	Kindly refer to Clause No.3.8.8(Detailed Scope of Work) page No 72 of the RFP
13	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	What analytics tools or platforms does your organization currently use?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
14	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	Are there any specific preferences or limitations for tool selection?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
15	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	What are the primary data sources from which data needs to be extracted?	Refer Annexure 9 : Scope of work
16	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	Is there a need for real-time data extraction or will batch processing suffice?	Refer Annexure 9 : Scope of work



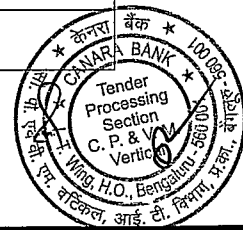
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17	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	Should the pre-processing pipeline be automated and customizable?	Refer Annexure 9 : Scope of work
18	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	How often should the model be re-evaluated to ensure its effectiveness?	Bank will take a call based on the relevant model metrics used for various use cases
19	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	What types of data visualizations are required to present insights and predictions to stakeholders?	Refer to clause 3.8 as part of AI/ML platform capabilities
20	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	What are the expected data volumes that the analytics layer should handle?	Refer clause 1.10 of Annexure -9
21	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	Who will have access to the various tools and functionalities within the analytics layer?	Data Scientists, Data Engineers, ETL team, Business Analysts and other relevant users
22	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	What are the different user roles and their respective permissions?	Will be shared with the Selected Bidder based on requirement
23	71	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.1: The proposed solution should provide tools in the analytics layer to perform - 3.7.1.1. Data extraction and preparation 3.7.1.2. Data pre-processing 3.7.1.3. Experimentation and model building 3.7.1.4. Model evaluation, deployment, feedback, re-calibration, data visualization etc. at scale.	Are there any existing data storage or analytics systems that the proposed solution needs to integrate with?	Refer Annexure 9 : Scope of work
24	72	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.4: The proposed solution should have capability of co-development by sharing analytics notebooks and experiments replicable across users / teams performing similar analysis.	Do you want share notebooks internally within Canara Bank or also with Vendors?	Refer Annexure 9 : Scope of work
25	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.3: The proposed solution should support end to end model lifecycle (Build, Deploy, Manage, Govern) of AI / ML use cases on a single platform.	For MLOps, do you want us to develop or can we propose any open source/licensed version tool for the same?	The bidders are expected to submit the complete solution with detailed BOM mentioning the tool they propose to use at each layer. While bidding no assumption needs to be made. Bank has the option to leverage any existing technology available with bank and same will be discussed with the successful bidder.
26	73	Annexure 9: Scope of Work	3.9: Model Deployment	3.9.1: Seamlessly promote models from development to deployment space with a click of a button.	Do you want on-premise as well as cloud deployment methodology?	Refer Annexure 9 : Scope of work
27	73	Annexure 9: Scope of Work	3.10: Model Management, Governance & Security	3.10.1: Ability to auto-build and publish detailed model reports and insights.	Do you want us to develop or can we propose any open source/licensed version tool for the same?	The bidders are expected to submit the complete solution with detailed BOM mentioning the tool they propose to use at each layer. While bidding no assumption needs to be made. Bank has the option to leverage any existing technology available with bank and same will be discussed with the successful bidder.
28	74	Annexure 9: Scope of Work	3.11: Data Consumption Layer	3.11.1: In this layer, analytical results shall be passed on to downstream applications for consumption.	Do you have already existing APIs for the CRM and other system where data from models will be consumed?	Refer Annexure 9 : Scope of work
29	78	Annexure 10: Technical Evaluation Criteria implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Section A: 1	The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	We have the relevant experience providing the asked service. Requesting to pls confirm on the data size can it be relaxed or can it be changed to implementation should have a data size of 5- TB ?	Refer revised Technical Qualification Corrigendum for section
30	69	Annexure 9: Scope of Work	3.4: Data Source Layer	Data Source Layer	Please confirm metadata information (data dictionaries, data table structure/ER Diagram etc.), functional and technical design document available for existing system?	Refer Annexure 9 : Scope of work



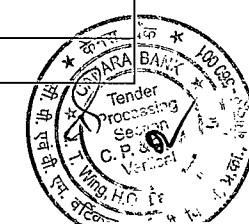
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31	69	Annexure 9: Scope of Work	3.4: Data Source Layer	Data Source Layer	Please provide us the below details for each of the scoped source system (CBS, Non CBS Applications, Business Applications) a. Existing Applications b. Data Source Type c. Platform (windows or Unix) d. Number of tables (Master & Transactional table) e. Number of attributes needs to be considered for the Data lakehouse f. What is the database size (data and index) g. In case of Data files - # of Files and Format of Data	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
32	69	Annexure 9: Scope of Work	3.4: Data Source Layer	Data Source Layer	What is the current architecture and technology stack of the existing Data Warehouse?	Refer Annexure 9 : Scope of work
33	69	Annexure 9: Scope of Work	3.4: Data Source Layer	Data Source Layer	Please confirm number of data marts and respective count of dimensions and facts in existing Data Marts?	Refer Annexure 9 : Scope of work
34	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	What mechanisms are in place to maintain data integrity and consistency?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
35	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	Is there is any process to check the data quality at regular intervals? If so share high level process details & frequency?	Bidder to propose and comply the RFP terms
36	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	Are there data validation rules that need to be applied during ingestion to ensure data integrity?	Bidder to propose and comply the RFP terms
37	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	Are there any data privacy or compliance requirements that need to be considered during the ingestion process?	Bidder to propose and comply the RFP terms
38	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	Are there any data governance policies or standards that need to be followed during ingestion?	Bidder to propose and comply the RFP terms
39	69,70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Data Ingestion Layer	What is history data requirement? How many years of history data to be migrated in proposed solution? Kindly share Data Retention & Data Archival requirements?	Yes, Bank has implemented Data warehouse and historical data will be made available as per the requirement of use case
40	70,71	Annexure 9: Scope of Work	3.6: Data Storage and Transformation Layer	Data Storage and Transformation Layer	What is the Life cycle of the data process and delta size of the records (daily, weekly and monthly)?	Bidder to propose and comply the RFP terms
41	70,71	Annexure 9: Scope of Work	3.6: Data Storage and Transformation Layer	Data Storage and Transformation Layer	What are the specific data transformation needs? (e.g., data cleansing, aggregation, enrichment, format conversion)	Bidder to propose and comply the RFP terms
42	70,71	Annexure 9: Scope of Work	3.6: Data Storage and Transformation Layer	Data Storage and Transformation Layer	Are there any ETL (Extract, Transform, Load) processes that need to be modified or extended?	Bidder to propose and comply the RFP terms
43	73,74	Annexure 9: Scope of Work	3.10: Model Management, Governance & Security	Model Management, Governance & Security	Please confirm the number of Key Performance Indicators & Reports count that would like to get developed: a) Standard Scheduled Reports b) Semi- Analytical Reports c) Highly-Analytical Reports	KPI of the model will be decided on case to case basis. As a part of scope of work , the bidder is suppose to provide the dashboard/report to monitor the developed use cases
44	73,74	Annexure 9: Scope of Work	3.10: Model Management, Governance & Security	Model Management, Governance & Security	What is the acceptable latency between the data output and the data display on the dashboard for real time data?	Bidder to propose and comply the RFP terms
45	3	Annexure 9: Scope of Work	1: Summary of project	1.12	As per RFP, entire project should be completed within 12 months (2 months + 10 months). Please clarify the deliverables within 2 months timeframe!	Refer Section C : Deliverable and service level agreement
46	40	General Query			How many users are anticipated to use this platform and expected concurrency?	From the prospective of developer community , anticipated users will be approx. 75 .For the consumption by down stream application , the system should have capability to scale up as per the requirement.
47	40	General Query			Does Canara Bank have any preference of tools for Data Lakehouse & End to End Analytics Solution?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
48	78	Annexure 10: Technical Evaluation Criteria Implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Section A: 2	The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Please confirm on If Housing finance company's reference will also be considered ?	Refer revised Technical Qualification Corrigendum for section
49	78	Annexure 10: Technical Evaluation Criteria Implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Section A: 1	The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Please confirm if Foreign banks also include Federal Credit Unions as well ?	Refer revised Technical Qualification Corrigendum for section
50	78	Annexure 10: Technical Evaluation Criteria Implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Section A: 1	The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Please confirm on, the implementation should have a dat size of 200TB is applicable only for the bidder or we can also use OEM's reference as well in this case.	Refer revised Technical Qualification Corrigendum for section
51	9	Section B: Introduction	3: About RFP	3.1: Bank intends to onboard vendor for implementation of Data Lakehouse & End-to-End Analytics Solution for 3 (three) years in Canara Bank as per the terms and conditions, technical requirements and scope of work described elsewhere in this document.	Our understanding of the Analytical use cases Implementation in the first year is 7 use cases post which the bank will share the additional use cases which will be taken on time and material basis.	Bidder to comply with RFP Terms and Conditions.

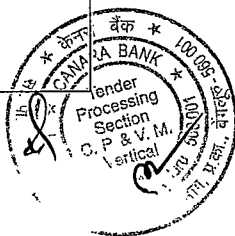


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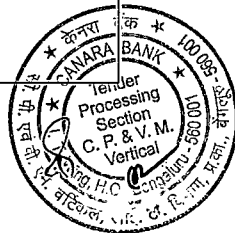
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
52	10	Section B: Introduction	6: Participation methodology	6.4: In the event of the bidder being not able to perform the obligations as per the provisions of the contract, the OEM/OSD/principal should assume complete responsibility on behalf of the bidder for providing end-to-end solution i.e., technology, personnel, financial and any other infrastructure that would be required to meet Intent of this RFP at no additional cost to the bank. To this effect bidder should provide a dealer/distributor certificate for the proposed solution as per Annexure-18.	While Bidder will take necessary steps to liaise with OEMs to get their confirmation through back-to-back arrangements on this requirement, Bank should appreciate the fact that it is the discretion of OEM to agree to this.	Bidder to comply with RFP Terms and Conditions.
53	12	Section B: Introduction	8: Scope of Work	8.2: Bank reserves the right to modify the scope due to change in regulatory instructions, market scenario and internal requirement within the overall objective of Data Lakehouse & End-to-End Analytics Solution.	Bidder suggests that any change shall be done through the change control process and mutually agreed upon by the parties in writing.	Bidder to comply with RFP Terms and Conditions.
54	12	Section B: Introduction	8: Scope of Work	8.3: During the course of the project, there might be related areas which Bank would like the selected Bidder to undertake which may not have envisaged earlier. Bank reserves the right to pause the work at any point of time and use the services for partial delivery of select modules of the Solution.	Bidder suggests that any change shall be done through the change control process and mutually agreed upon by the parties in writing.	Bidder to comply with RFP Terms and Conditions.
55	12	Section B: Introduction	9: Technical / Functional Requirements	9.1: The bidder shall comply with the Scope of Work, Technical & Functional Specifications narrated in Annexure-9 and adhere to the guidelines issued by RBI and other Regulatory bodies related. The bidder should also maintain confidentiality of Information shared with them during the tenure of the contract.	Bidder wishes to clarify that we are not an auditing or legal or tax advisory firm. We request Bank to clarify the guidelines issued by RBI and other Regulatory bodies needed to be complied with by Bidder by providing us with the relevant guidelines, so that Bidder can comply same while providing the services.	Bidder to comply with RFP Terms and Conditions.
56	13	Section C: Deliverable and Service Level Agreements	1: Project Time Line	1.8: Bank reserves the right to change/modify locations for supply of the items. In the event of any change/modification in the locations where the hardware items are to be delivered, the bidder in such cases shall deliver, install and commission at the modified locations at no extra cost to the Bank. However, if the hardware items are already delivered, and if the modifications in locations are made after delivery, the bidder shall carry out installation and commissioning at the modified locations and the Bank in such cases shall bear the shifting charges/arrange shifting. The Warranty should be applicable to the altered locations also.	Bank to note that the pricing proposed by Bidder is based on the Information provided in the RFP. If there is any change that has an commercial or operational impact, the same shall be mutually discussed by the parties through change control process.	Bidder to comply with RFP Terms and Conditions.
57	14	Section C: Deliverable and Service Level Agreements	3: Security	General	As we are expected to comply with Bank's Information security policies, we would like to disclaim our liability for any existing vulnerabilities in the Bank's systems by including the below language: "Our assumptions is that except with respect to vulnerabilities caused by Accenture's breach of its obligations under the Agreement, Bank is responsible to remediate any vulnerabilities in Bank Data or Bank systems at Bank's cost. Bank may engage Accenture to perform such remediation on Bank's behalf pursuant to Contract. For clarity, such remediation activities pursuant to a Contract are not considered as "services". In the event Bank fails to remediate a security vulnerability in Bank Data or Bank systems, Accenture will not be liable for the consequences resulting from such security vulnerability, including a data security breach, except to the extent such security vulnerability resulted from Accenture's breach of its obligations under the Agreement."	Bidder to comply with RFP Terms and Conditions.
58	14	Section C: Deliverable and Service Level Agreements	3: Security	3.2: The selected Bidder will ensure the software delivered is in conformity with security standards and is without any security vulnerability.	Bidder requests Bank to provide us with the security standards that is referred to in this clause.	Bidder to comply with RFP Terms and Conditions.
59	15	Section C: Deliverable and Service Level Agreements	3: Security	3.8: The selected Bidder is liable for not meeting the security standards or desired security aspects of all the ICT resources as per Bank's IT/Information Security / Cyber Security Policy. 3.9: The selected Bidder will have to establish all the necessary procedures/ Infrastructure/ technology / personnel to ensure the Information System Security as per the guidelines prescribed by RBI and the policies of the Bank.	Bidder wishes to clarify that we are not an auditing or legal or tax advisory firm. We request Bank to clarify the Bank's IT/Information Security / Cyber Security Policy and guidelines prescribed by RBI and the policies of the Bank needed to be complied with by Bidder by providing us with the relevant policies and guidelines, so that Bidder can comply same while providing the services.	Bidder to comply with RFP Terms and Conditions.
60	15	Section C: Deliverable and Service Level Agreements	4: Acceptance	Bank will evaluate the offered solution implemented by the selected Bidder. If the solution experiences no failures and functions according to the requirements of the RFP as determined by the Bank during the implementation period, then the solution will be accepted by the Bank and the project will be considered as deemed signed-off.	In the event Bank does not provide its acceptance or rejection of the submitted deliverable within the agreed time period such deliverable shall be deemed accepted.	Bidder to comply with RFP Terms and Conditions.
61	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	General	The Bidder requests the below modifications: 1. The Liquidated Damages proposed herein shall be Bank's sole and exclusive remedy for all delays and non-compliances mentioned herein. 2. The contract price for calculation of LD should be restricted to the 'affected services'. 3. The maximum liability of Bidder with respect to all liquidated damages or penalty mentioned under the Agreement in aggregate to be not greater than 5% of the cost of affected Services. 4. Levy of LD or penalty shall be for delays or non-conformance that are solely attributable to the Bidder. 5. Any levy of LD for delay shall be for delay of 'final' milestone and not for any 'interim' milestones."	Bidder to comply with RFP Terms and Conditions.
62	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.6: If any act or failure by the selected Bidder under the agreement results in failure or inoperability of systems and if the Bank has to take corrective actions, to ensure functionality of its property, the Bank reserves the right to impose penalty, which may be equal to the cost it incurs or the loss it suffers for such failures.	Bidder requests that any penalty be restricted to 5% of the cost of the affected services.	Bidder to comply with RFP Terms and Conditions.
63	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.7: If the selected Bidder fails to complete the due performance of the contract as per RFP terms, it will be considered as breach of contract and Bank reserves the right to either cancel the order or to recover a suitable amount as deemed reasonable as Penalty / Liquidated Damage for non-performance or both.	Bidder requests that, before exercising the right of cancellation or levying of penalty, Bidder be provided with a right to cure. If Bidder fails to cure, the Bank may exercise its rights. However, Bidder requests that any penalty be restricted to 5% of the cost of the affected services. Lastly, we are not agreeable for multiple remedies and Bank should reserve its right to either cancellation or levy of penalty.	Bidder to comply with RFP Terms and Conditions.
64	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.8: Any financial loss to the Bank on account of fraud taking place due to selected Bidder, its employee or their services provider's negligence shall be recoverable from the selected Bidder along with damages if any with regard to the Bank's reputation and goodwill.	While Bidder agrees to bear the responsibility for fraud by Bidder, it shall not include any claims for indirect damages such as reputation or goodwill.	Bidder to comply with RFP Terms and Conditions.
65	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.9: Bank may impose penalty to the extent of damage to its any equipment, if the damage was due to the actions directly attributable to the staff of the selected Bidder.	Since Bank can claim damages from the court of law for any damage to property, Bidder is not agreeable to this penalty clause.	Bidder to comply with RFP Terms and Conditions.



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
66	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	General	Since the software required in the performance of services by the Bidder will be provided to Bank on a resale model (as explained in this table), any escrow arrangement including costs shall be between the OEM, Bank and the Escrow agent. As such, we request this clause to be deleted.	Bidder to comply with RFP Terms and Conditions.
67	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	General	<p>We request to modify the warranty period to one month (30 days) as per prevalent market practice for the Services in question.</p> <p>Further, we are unable to provide a warranty for free from defects in workmanship and material, as such this is not practically feasible. And that is why warranty provided to rectify the defect, if any occur during std product warranty period or the period as may mutually be agreed by OEM. Therefore, we request deletion of the language as below:</p> <p>"9.1.The selected Bidder warrants that the supplied tools will be free of defects in workmanship and materials for a period of time consistent with industry standards and the nature of the Hardware & Software ("Warranty Period")."</p> <p>Further, we cannot agree to a rolling warranty clause, if that will be the case then warranty period would never end. Practically, any defect as notified during warranty period will be corrected, even if the warranty period would expire, but there must not extension of warranty period as per agreement. Therefore, we request deletion of the language as below:</p> <p>"If any defect in the Solution is not rectified by the selected bidder before the end of the Warranty Period, the Warranty Period shall be extended until, in the opinion of the Bank: a) the defect has been corrected; and b) the Solution functions in accordance with the Contract for a reasonable period of time."</p> <p>Additionally, we cannot assume liability for third party manufacturing defects in any Deliverables, which will be governed as per such third-party manufacturer's terms and conditions (End User License Agreement) and the resale agreement signed between the parties.</p>	Bidder to comply with RFP Terms and Conditions.
68	21	Section C: Deliverable and Service Level Agreements	15: Defect Liability	15.1: In case any of the supplies and equipment delivered under the Contract are found to be defective as to material and workmanship and / or not in accordance with the requirement, and/or do not achieve the guaranteed performance as specified herein, within the warranty period of the contract, the selected Bidder shall forthwith replace/make good such defective supplies at no extra cost to the bank without prejudice to other remedies as may be available to the bank as per RFP terms.	<p>We are unable to provide a warranty for free from defects in workmanship and material. We, therefore, request modification of the clause as below:</p> <p>"In case any of the supplies and equipment delivered under the Contract are found to be defective as to material and workmanship and / or not in accordance with the requirement, and/or do not achieve the guaranteed performance as specified herein, within the warranty period of the contract, the selected Bidder shall forthwith replace/make good such defective supplies at no extra cost to the bank without prejudice to other remedies as may be available to the bank as per RFP terms."</p>	Bidder to comply with RFP Terms and Conditions.
69	21	Section C: Deliverable and Service Level Agreements	16: Subcontracting	16.3: In case subcontracting is warranted in interest of the project, the selected bidder should take consent of the Bank before undertaking any such agreement. The selected bidder should further ensure subcontracting agreement is vetted by the Bank.	Subcontractor agreement is a subject matter between Bidder and subcontractor and Bank shall not have the right to vet such agreement. However, we can provide a confirmation that all necessary terms will be flowed down to the subcontractor.	Bidder to comply with RFP Terms and Conditions.
70	38	Section F: Ownership and Awarding of Contract	11: Execution of Agreement	11.4: The Selected Bidder and the OEM(s) shall enter into Tripartite Agreement with Bank within thirty days from the acceptance of the Purchase Order, in the bank's format without any change. The format of the Tripartite Agreement will be shared with the selected Bidder along with PO. The Agreement shall be valid till all contractual obligations are fulfilled.	<p>We would like to understand the modality of the tripartite agreement referred herein, as we don't see any specific template provided under the RFP. We request bank that we mutually discuss this requirement at the contracting stage and finalize an appropriate agreement in this regard.</p> <p>At the outset, we would like to summarize our understanding on this subject matter:</p> <ol style="list-style-type: none"> Accenture will supply all third-party products through the resale model, and such products shall be governed under the terms and conditions of the Resale Agreement to be signed between the parties, separately to the services agreement. Our standard resale agreement template is attached for your review and inputs. All OEM products shall be governed by the EULA/EJMA as provided by the respective OEM, which will be executed between the Bank and such OEM directly. Accenture will not provide any additional warranty, indemnities, liabilities with respect to third party products. Such warranties, indemnities, liabilities will be governed as per terms of EULA/EJMA shared by respective OEMs. We are not sure about the modality of private cloud procurement, whether Bank is expecting to procure this on resale model or on sub-contracting basis through bidder. We would like to refer OEM GTC condition on reseller model, which we believe that clause 24, CMS Quadrant 2 or 3 may be more relevant for this opportunity, as such always OEM shall be responsible for their product quality, warranty, indemnities and after sale support. 	Tri partite agreement attached as corrigendum to RFP
71	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract	13.1.The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions: 13.1.1.Delay in delivery of services in the specified period. 13.1.2.Serious discrepancies noted in the Inspection. 13.1.3.Breaches in the terms and conditions of the Order.	<p>Bidder would like to clarify that, any termination shall only be in full and not in part.</p> <p>Before the Bank exercises its right under this clause, it requests Bidder be provided with a cure of 30 days. If Bidder fails to cure the breach within 30 days, Bank shall exercise its right of termination.</p> <p>We request mutual right of termination for material breach by Bank as Bank may also commit material breach like payment delay, IP breach, Confidential information breach etc. Therefore, we request Bank to modify clause or we may mutually negotiate terms at the contracting stage.</p> <p>Lastly, Bidder expects to be paid for all services rendered until the date of termination.</p> <p>Based on the suggestions above, we request modifications to be mutually agreed at the time of contracting.</p>	Bidder to comply with RFP Terms and Conditions.

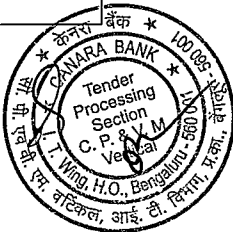


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
72	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract	<p>13.2.The Bank reserves the right to cancel the contract placed on the selected Bidder and recover expenditure incurred by the Bank on the following circumstances:</p> <p>13.2.1.Non submission of acceptance of order within 7 days of order.</p> <p>13.2.2.Excessive delay in execution of order placed by the Bank.</p> <p>13.2.3.The selected Bidder commits a breach of any of the terms and conditions of the bid.</p> <p>13.2.4.The Bidder goes into liquidation voluntarily or otherwise.</p> <p>13.2.5.An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid.</p> <p>13.2.6.The progress made by the selected Bidder is found to be unsatisfactory.</p> <p>13.2.7.If deductions on account of liquidated Damages exceeds more than 10% of the total contract price.</p> <p>13.2.8.If found blacklisted by any Govt. Department / PSU / other Banks / CERT-in, during the course of contracted period.</p> <p>13.2.9.Non satisfactory performance of the Project in terms of affecting the Core Systems of the Bank or the Core Business of the Bank and the functioning of the Branches/Offices of the Bank.</p>	<p>Except for Sections 13.2.4 and 13.2.5, before the Bank exercises its right under this clause, it requests Bidder be provided with a cure of 30 days. If Bidder fails to cure the breach within 30 days, Bank shall exercise its right of termination.</p> <p>Bidder expects to be paid for all services rendered until the date of termination.</p> <p>Based on the suggestions above, we request modifications to be mutually agreed at the time of contracting.</p>	Bidder to comply with RFP Terms and Conditions.
73	40	Section G: General Conditions	2: Roles & Responsibility during Project Implementation	2.1: All tools, tackles, testing instruments, consumables, vehicles, etc., as required during all operations such as transport, installation, testing, commissioning maintenance during contract period shall be provided by the selected Bidder at no extra cost to the Bank for completing the scope of work as per this RFP.	Bidder wishes to clarify that it is not in the business of providing the hardware items mentioned in this clause and requests that such requirement be desopped.	Bidder to comply with RFP Terms and Conditions.
74	41	Section G: General Conditions	4: Human Resource Requirement	4.2: The selected Bidder shall confirm that every person deployed by them on the project has been vetted through a third-party background check prior to their engagement. The selected Bidder shall manage the activities of its personnel or others engaged in the project, etc., and shall be accountable for all the personnel deployed/engaged in the project.	While we agree to this clause in-principle, we would like to note that we will not be able to provide any copies of the BG reports as they are confidential.	Bidder to comply with RFP Terms and Conditions.
75	41	Section G: General Conditions	4: Human Resource Requirement	4.3: In case the performance of the selected Bidder /their CSP/agent/employees engaged in the project is not satisfactory or is detrimental to the interests of the Bank, the selected Bidder shall have to replace the said person within the time limits stipulated by the Bank. Where the selected Bidder fails to comply with the Bank's request, the Bank may replace the said person or their agents/employees on its own.	The Bidder requests that any request for replacement be done upon mutual discussion between the Bidder and Bank.	Bidder to comply with RFP Terms and Conditions.
76	41	Section G: General Conditions	4: Human Resource Requirement	<p>4.6.The Bidder has to submit following KYC documents for onsite/Offsite engineer:</p> <p>4.6.1.Resume latest (Candidate Photograph should be part of Resume only) and Print should be in color only.</p> <p>4.6.2.Address Proof (Local and Permanent)- Duty attested photocopy by candidate and Bidder HR</p> <p>4.6.3.Aadhaar Card - Duty attested photocopy by candidate and Bidder HR</p> <p>4.6.4.Retiring Certificate of Previous employer - Duty attested photocopy by candidate and Bidder HR</p> <p>4.6.5.Passport - Duty attested photocopy by candidate and Bidder HR</p> <p>4.6.6.Background Police Verification report - Duty attested photocopy by candidate and Bidder HR</p>	<p>We wish to clarify that while we are fine to share the CV of resources for Bank's review and inputs, however, the other documents are not really required. Can Bank explain the need for the same?</p> <p>We request deletion of clauses 4.6.2 through 4.6.6. In any case, this is fixed price and SLA based project, and in the event of SLA failure Bank will have a right under contract itself to collect SLA Penalty, as may be agreed.</p>	Bidder to comply with RFP Terms and Conditions.
77	41	Section G: General Conditions	4: Human Resource Requirement	4.7: The selected Bidder shall extend all of the outsourced banking and financial services by deploying such personnel that have high integrity and meet the qualifications and other criteria stipulated by the Reserve Bank of India, Government or the Bank from time to time and agree and undertake that during the subsistence of this agreement they will not employ any personnel/individual below the Minimum Wages fixed by appropriate Government on this behalf from time to time, as per the provisions of Minimum Wages Act 1948.	Bidder agrees to abide by the criteria to the extent Bank makes those criteria available to the Bidder in advance and writing.	Bidder to comply with RFP Terms and Conditions.
78	42	Section G: General Conditions	5: Responsibility for Completeness	5.2: The selected Bidder shall deliver the services as per Technical specification and Scope of Work described elsewhere in the RFP and arrange for user level demo at selected Bidder's cost as per accepted time schedules. The selected Bidder is liable for penalties levied by Bank for any deviation in this regard. The selected Bidder shall provide for all drivers/software required to install, customize and test the system without any further charge, expense and cost to Bank.	<p>Bidder requests Bank to clarify on the amount or % of penalty that Bank expects to levy.</p> <p>In any case, Bidder would like to clarify that levy of penalties shall be subject to the below conditions:</p> <p>1.The penalty proposed herein shall be CFIL's sole and exclusive remedy for all delays and non-compliances mentioned herein.</p> <p>2.The maximum liability of Bidder with respect to all liquidated damages or penalty mentioned under the Agreement in aggregate to be not greater than 5% of the cost of affected Services.</p> <p>3.Levy of LD or penalty shall be for delays or non-conformance that are solely attributable to the Bidder.</p> <p>On the provision of drivers/software, Bidder would like to clarify that, Accenture will supply all third-party products /services through the resale model, and the resale of such products shall be governed under the terms and conditions of the Resale Agreement to be signed between the parties, separately to the services agreement. Our standard resale agreement template is attached at the end of this table below along with detailed rationale for your review and inputs. Further, the Bank shall sign the EULA directly with the OEM.</p>	Bidder to comply with RFP Terms and Conditions.
79	42	Section G: General Conditions	5: Responsibility for Completeness	5.3: The selected Bidder shall be responsible for any discrepancies, errors and omissions or other information submitted by him irrespective of whether these have been approved, reviewed or otherwise accepted by the bank or not. The selected Bidder shall take all corrective measures arising out of discrepancies, error and omission other information as mentioned above within the time schedule and without extra cost to the bank.	Bidder agrees to this clause, provided the claims are within the warranty period.	Bidder to comply with RFP Terms and Conditions.

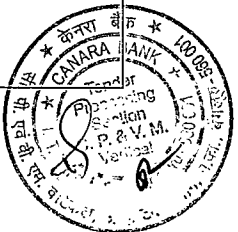


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
80	42	Section G: General Conditions	6: Inspection of Records	Bank at its discretion may verify the accounts and records or appoint third party for verification including an auditor for audit of accounts and records including Hardware, Software & other items provided to the Bank under this RFP and the selected Bidder shall extend all cooperation in this regard.	<p>We agree in principle about the requirement of audit during term of contract, we request Bank to include the following modifications in the provision:</p> <p>"The physical copy of records pertaining and maintained by the Bidder relating to this Contract only shall be available to BANK for conducting audit during validity of this Contract. The frequency of such audit will be limited to once a year. BANK will provide fourteen (14) days' prior written notice of its intention to conduct such an audit. BANK will conduct such audits in a manner that will result in minimal disruption to Bidder's business operations and subject to confidentiality obligations agreed at that stage. Audits shall be conducted only during normal business hours and working days of Bidder and that too once annually. Audit shall be conducted by BANK employees only and such third parties, which are mutually agreed (except for Bidder's competitors), subject to agreeing confidentiality provisions with us and will not involve intrusive testing of Bidder systems or IT environment.</p> <p>BANK will not be entitled to audit (i) data or information of other customers of Bidder; (ii) any cost information unless such is the basis of a reimbursable expense; (iii) Bidder quality assurance reviews and contract management reports; or (iv) any other Confidential information of Bidder that is not directly relevant for the authorized purposes of the audit."</p>	Bidder to comply with RFP Terms and Conditions.
81	42	Section G: General Conditions	7: Negligence	In connection with the work or contravenes the provisions of General Terms, if the selected Bidder neglects to execute the work with due diligence or expedition or refuses or neglects to comply with any reasonable order given to him in writing by the bank, in such eventuality, the Bank may after giving notice in writing to the selected Bidder calling upon him to make good the failure, neglect or contravention complained of, within such times as may be deemed reasonable and in default of the said notice, the Bank shall have the right to cancel the Contract holding the selected Bidder liable for the damages that the Bank may sustain in this behalf. Thereafter, the Bank may make good the failure at the risk and cost of the selected Bidder.	<p>White Bidder agrees to this clause in-principle, Bidder expects a minimum cure period of 30 days, please confirm.</p> <p>Regarding the last sentence that deals with replacement costs, Bidder is unable to agree to such costs and requests deletion.</p>	Bidder to comply with RFP Terms and Conditions.
82	43	Section G: General Conditions	11: Guarantees	The Bidder should guarantee that the hardware items delivered to the Bank are brand new, including all components. In the case of software, the Bidder should guarantee that the software supplied to the Bank includes all patches, updates etc., and the same are licensed and legally obtained. All hardware and software must be supplied with their original and complete printed documentation.	Bidder would like to clarify that, Accenture will supply all third-party products /services through the resale model, and the resale of such products shall be governed under the terms and conditions of the Resale Agreement to be signed between the parties, separately to the services agreement. Our standard resale agreement template is attached at the end of this table below along with detailed rationale for your review and inputs. Further, the Bank shall sign the EULA directly with the OEM.	Bidder to comply with RFP Terms and Conditions.
83	43 & 119	Section G: General Conditions AND Appendix G: Draft Contract Agreement	12: Intellectual Property Rights & 10: INTELLECTUAL PROPERTY RIGHTS:	12.1: Bidder warrants that the inputs provided shall not infringe upon any third-party intellectual property rights, including copyrights, patents and other intellectual property rights of any nature whatsoever. Bidder warrants that the deliverables shall not infringe upon any third-party intellectual property rights, including copyrights, patents and other intellectual property rights of any nature whatsoever. The Bidder should ensure that the Hardware and Software supplied to the Bank shall not infringe the third-party intellectual property rights, if any. The Bidder has to ensure that third party rights are not infringed even in case of equipment /software supplied on behalf of consortium as Bidder.	We cannot provide a warranty for non-infringement third-party intellectual property rights, as we are providing an indemnity for any such third-party IP infringement of Services. Please note that we cannot provide an indemnity for infringement of products as all hardware and software products will be provided by Bidder on a resale basis which will be governed by the terms and conditions of the resale agreement signed between the parties and the EULA to be signed between the Bank and OEM.	Bidder to comply with RFP Terms and Conditions.
84	43 & 119	Section G: General Conditions AND Appendix G: Draft Contract Agreement	12.2(c) & 10.2(c) of Appendix G	In the event that the Deliverables become the subject of claim of violation or infringement of a third party's Intellectual property rights, Bidder shall at its choice and expense: (c) If the rights to use cannot be procured or the deliverables cannot be replaced or modified, accept the return of the deliverables and reimburse bank for any amounts paid to Bidder for such deliverables, along with the replacement costs incurred by Bank for procuring an equivalent equipment in addition to the penalties levied by Bank. However, Bank shall not bear any kind of expense, charge, fees or any kind of costs in this regard. Notwithstanding the remedies contained herein, the Bidder shall be responsible for payment of penalties in case service levels are not met because of inability of the bank to use the proposed solution.	<p>We request following modifications in the provision:</p> <p>"In the event that the Deliverables become the subject of claim of violation or infringement of a third party's Intellectual property rights, bidder shall at its choice and expense:</p> <p>(c) If the rights to use cannot be procured or the deliverables cannot be replaced or modified, accept the return of the deliverables and reimburse bank for any amounts paid to bidder for such deliverables, along with the replacement costs incurred by Bank for procuring an equivalent equipment in addition to the penalties levied by Bank. However, Bank shall not bear any kind of expense, charge, fees or any kind of costs in this regard. Notwithstanding the remedies contained herein, the bidder shall be responsible for payment of penalties in case service levels are not met because of inability of the bank to use the proposed solution.</p>	Bidder to comply with RFP Terms and Conditions.
85	43 & 119	Section G: General Conditions AND Appendix G: Draft Contract Agreement	General Query		<p>There is no provision on protection of Bidder background IPR, if any used for rendering services with prior written permission of Bank. Hence, we request inclusion of the following verbiage in the clause to have clear understanding on this subject matter:</p> <p>"As between the Parties, Bidder, its affiliates and licensors will be the sole and exclusive owner of the Intellectual Property owned by Bidder or its affiliates or provided to BANK by Bidder under this Agreement including, without limitation, the Accenture-Provided Software (collectively the "Background IPR"). Background IPR will be deemed to include any derivatives, modifications, enhancements or improvements to the Background IPR."</p> <p>Subject to obligations of confidentiality, each party will be free to use the concepts, techniques and know-how retained in the unaided memories of those involved in the performance or receipt of the Services. In no event will Bidder be precluded from independently developing for itself, or for others, anything, whether in tangible or non-tangible form, which is competitive with, or similar to, the Deliverables provided and to the extent that they do not contain Bank Confidential Information."</p>	Bidder to comply with RFP Terms and Conditions.

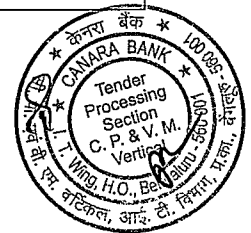


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
86	44	Section G: General Conditions	13: Confidentiality and Non-Disclosure	13.1: The selected Bidder shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. The selected Bidder shall suitably defend, Indemnify Bank for any loss/damage suffered by Bank on account of and to the extent of any disclosure of the confidential information. The selected Bidder shall furnish an undertaking as given in Annexure-6. 13.2: No media release/public announcement or any other reference to the RFP or any program there under shall be made without the written consent of the Bank, by photographic, electronic or other means.	We request that the confidentiality provisions be made mutual, since Bidder will also disclose its or its vendor commercial and proprietary confidential information to Bank and would like to protect the same the way Bank wants to protect its information. Further, we request following modifications as suggested below: "Nothing in this Agreement will prohibit or limit either party's use of information (i) previously known to it without an obligation not to disclose such information, (ii) independently developed by or for it without use of information, (iii) acquired by it from a third party which was not, to the receiver's knowledge, under an obligation not to disclose such information, or (iv) which is or becomes publicly available through no breach of this Agreement; or (v) is required to be disclosed under orders of Court of competent Jurisdiction or to fulfil legal or regulatory requirements." We request the following modification in Section 13.1: "The bidder shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. Bidder shall suitably defend, indemnify Bank for any loss/damage suffered by Bank on account of and to the extent of any disclosure of the confidential information. The bidder shall furnish an undertaking as given in Annexure-6." Personal Data related understanding: We further wish to clarify that any personal data shall be handled through separate data protection schedule to be executed between parties, since bidder will access bank's personal data under this project. Data privacy schedule is necessary for the effective processing, monitoring and security of personal data under the project.	Bidder to comply with RFP Terms and Conditions.
87	44 E 120	Section G: General Conditions AND Appendix G: Draft Contract Agreement	14: Indemnity B 11.1 of Appendix G	14.1: The Bidder shall keep and hold the Bank indemnified and harmless from time to time and at all times against all actions, proceedings, claims, suits, liabilities (including statutory liability), penalties, demands, charges, costs (including legal costs) and expenses, damages, losses and any other expenses which may be caused to or suffered by or made or taken against the Bank arising out of: 14.1.1. The breach, default or non-performance of undertakings, warranties, covenants or obligations by the Bidder; 14.1.2. Any contravention or non-compliance with any applicable laws, regulations, rules, statutory or legal requirements by the Bidder;	Bank does not require any indemnity provision to secure its right for breach of contractual T&Cs, as such, the bank itself will give right to Bank to initiate appropriate legal action. However, Bidder is agreeable to provide indemnity for personal injury, death and damage to tangible property. Hence, we request the following modifications in the provision: 14.1. The bidder shall keep and hold the Bank indemnified and harmless from time to time and at all times against all third party actions, proceedings, claims, suits, liabilities (including statutory liability), penalties, demands, charges, costs (including reasonable legal costs) and expenses, damages, losses and any other expenses which may be caused to or suffered by or made or taken against the Bank arising out of third party claim from: 14.1.1. The death or personal injury arising as a result of Bidder's Gross Negligence or Willful Misconduct/breach, default or non-performance of undertakings, warranties, covenants or obligations by the bidder; 14.1.2. Damage to real or tangible property arising as a result of Bidder's Gross Negligence or Willful Misconduct/Any contravention or non-compliance with any applicable laws, regulations, rules, statutory or legal requirements by the bidder; We request the inclusion of definitions of the terms "Gross negligence" and "Willful misconduct" used under this clause: "Willful Misconduct" means any act or failure to act with an intentional disregard of any provision of this Agreement, which a party knew or should have known if it was acting as a reasonable person, which would result in injury, damage to life, personal safety, real property, harmful consequences to the other party, but shall not include any error of judgment or mistake made in good faith. "Gross Negligence" means any act or failure to act by a party which was in reckless disregard of or gross indifference to the obligation of the party under this Agreement and	Bidder to comply with RFP Terms and Conditions.
88	44 E 120	Section G: General Conditions AND Appendix G: Draft Contract Agreement	14: Indemnity E 11.2 of Appendix G	14.2: The Bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of service provided by them.	Bidder submits that, Bidder must not be penalized in the event of no default from Bidder's services, but such infringement is result of use of Bank's provided material or using deliverables differently than agreed or other acts of Bank. As such, we propose the below deviations and the inclusion of the exceptions to IP Infringement Indemnity: 14.2 The Bidder shall indemnify, protect and save the Bank against all third party claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of service provided by them. Additional carve out provisions to be added for the reason explained above: "In case of IP Infringement Indemnity, the indemnifying Party will have no liability, however, to any Indemnified Party under this RFP to the extent that the Infringement Claim is based upon: (i) modifications to any item made by or on behalf of the Indemnified Party in a manner that causes the infringement; (ii) use of any item in combination with any hardware, software or other products or services in a manner that causes the infringement and where such combination was not within the reasonable contemplation of the Parties given the intended use of the item; (iii) the failure of an Indemnified Party to use corrections or enhancements to such item that are made available by the indemnifying Party; (iv) specifications or direction provided by the Indemnified Party caused such infringement claim; or (v) use not authorized under this Agreement."	Bidder to comply with RFP Terms and Conditions.
89	45 E 120	Section G: General Conditions AND Appendix G: Draft Contract Agreement	14: Indemnity E 11.2.2 of Appendix G	14.2.2: The limits specified in above clause shall not apply to claims made by the Bank/Third parties in case of infringement of intellectual property rights or for claims relating to the loss or damage to real property and tangible personal property and for bodily injury or death and in these cases the liability will be unlimited.	Bidder requests clarity on the limits that is referred to in this clause as there are no liability limits mentioned the clause above. In any case, with regard to unlimited liability for IP infringement claims, Bidder is fine to give unlimited liability in case of direct damages for indemnification claim with respect to intellectual property rights, provided the exceptions to IP Infringement Indemnity as proposed above in clause 14.2 is agreed by Bank.	Bidder to comply with RFP Terms and Conditions.

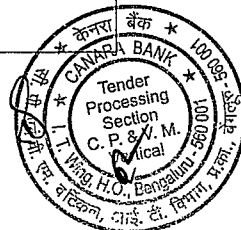


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

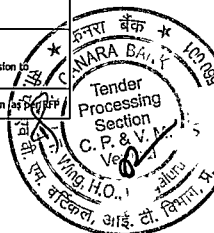
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
90	45 6 120	Section G: General Conditions AND Appendix G: Draft Contract Agreement	Inclusion of liability cap for direct damages and exclusion of indirect damages.		<p>Since there is no clause on direct damages cap nor any clause relating to exclusion of indirect damages, we are proposing the below clauses:</p> <p>*Notwithstanding anything to the contrary contained elsewhere, in no event shall either party be liable for any consequential, incidental, indirect, special or punitive damages, loss or expenses (including but not limited to business interruption, lost business, lost profits, lost revenues, lost data or lost savings, loss of or corruption to data and/or to software, loss of revenues, loss of goodwill or reputation, loss of competitive advantage) even if it has been advised of their possible existence.</p> <p>The maximum aggregate liability of Bidder, subject to clause 11.2.2 of Appendix G, in respect of any claims, losses, costs or damages arising out of or in connection with this Agreement shall not exceed the total Project Cost.*</p> <p>OR</p> <p>Alternatively, since this is a GeM bid, we assume that the liability clause in the Gem GTC will be applicable, please confirm our understanding.</p>	Bidder to comply with RFP Terms and Conditions.
91	46	Section G: General Conditions	16: Responsibilities of the Bidder	<p>16.5: The Bidder represents and acknowledges to the Bank that it possesses necessary experience, expertise and ability to undertake and fulfill its obligations, under all phases involved in the performance of the provisions of this RFP. The Bidder represents that all software and hardware to be supplied in response to this RFP shall meet the requirement of the solution proposed by the Bidder. The Bidder shall be required to independently arrive at a solution, which is suitable for the Bank, after taking into consideration the effort estimated for implementation of the same. If any services, functions or responsibilities not specifically described in this RFP are an inherent, necessary or customary part of the deliverables or services and are required for proper performance or provision of the deliverables or services in accordance with this RFP, they shall be deemed to be included within the scope of the deliverables or services, as if such services, functions or responsibilities were specifically required and described in this RFP and shall be provided by the Bidder at no additional cost to the Bank. The Bidder also acknowledges that the Bank relies on this statement of fact, therefore neither accepting responsibility for, nor relieving the Bidder of responsibility for the performance of all provisions and terms and conditions of this RFP, the Bank expects the Bidder to fulfill all the terms and conditions of this RFP.</p>	<p>Bidder would like to clarify that all third party products are provided to the Bank on a resale basis.</p> <p>Bidder would like to clarify that, any solution that Bidder proposes to Bank is based on the information provided in the RFP and by the Bank.</p> <p>Any items that are not specifically mentioned in the Scope of Work but are required which leads to an increase in cost or effort shall be mutually discussed and provided by Bidder as per the change control process.</p> <p>Based on the above explanation, the Bidder requests the below modifications:</p> <p>*The Bidder represents and acknowledges to the Bank that it possesses necessary experience, expertise and ability to undertake and fulfill its obligations, under all phases involved in the performance of the provisions of this RFP. The Bidder represents that all software and hardware to be supplied in response to this RFP shall meet the requirement of the solution proposed by the Bidder. The Bidder shall be required to independently arrive at a solution, which is suitable for the Bank, after taking into consideration the effort estimated for implementation of the same. If any services, functions or responsibilities not specifically described in this RFP are an inherent, necessary or customary part of the deliverables or services and are required for proper performance or provision of the deliverables or services in accordance with this RFP, they shall be deemed to be included within the scope of the deliverables or services, as if such services, functions or responsibilities were specifically required and described in this RFP and shall be provided by the Bidder at no additional cost to the Bank. The Bidder also acknowledges that the Bank relies on this statement of fact, therefore neither accepting responsibility for, nor relieving the Bidder of responsibility for the performance of all provisions and terms and conditions of this RFP, the Bank expects the Bidder to fulfill all</p>	Bidder to comply with RFP Terms and Conditions.
92	46	Section G: General Conditions	16: Responsibilities of the Bidder	<p>16.6: The selected Bidder should abide by guidelines issued by RBI Master Direction on Outsourcing of IT Services.</p> <p>16.7: The selected Bidder should also abide by the provisions of Digital Data Protection Bill.</p>	<p>Bidder wishes to clarify that we are not an auditing or legal or tax advisory firm. We request Bank to clarify the RBI Master Direction on Outsourcing of IT Services and provisions of Digital Data Protection Bill requirements needed to be complied with by Bidder by providing us with the relevant requirements, so that Bidder can comply same while providing the services.</p>	Bidder to comply with RFP Terms and Conditions.
93	47	Section G: General Conditions	17: Corrupt and Fraudulent Practices	<p>17.7: The selected Bidder shall ensure compliance of CVC guidelines issued or to be issued from time to time for selection of vendor for Supply, Implementation, Migration and Support of the Solution by the Bank.</p>	<p>Bidder wishes to clarify that we are not an auditing or legal or tax advisory firm. We request Bank to clarify the CVC guidelines requirements needed to be complied with by Bidder by providing us with the relevant requirements, so that Bidder can comply same while providing the services.</p>	Bidder to comply with RFP Terms and Conditions.
94	48 6 121	Section G : General Conditions AND Appendix G: Draft Contract Agreement	22: Social Media Policy; 14 of Appendix G		<p>Bidder requests Bank to provide us with the policy for our review, until then our comments to this Section 22 are reserved.</p>	Bidder to comply with RFP Terms and Conditions.
95	49	Section G: General Conditions	24: Legal Disputes and Jurisdiction of the court	<p>24.1: The Bank Clarifies that the Bank shall be entitled to an Injunction, restraining order, right for recovery, specific performance or such other equitable relief as a court of competent jurisdiction may deem necessary or appropriate to restrain Bidder /prospective Bidder from committing any violation or enforce the performance of the covenants, obligations and representations contained in this RFP. These Injunctive remedies are cumulative and are in addition to any other rights and remedies the Bank may have at law or in equity, including without limitation a right for recovery of any amounts and related costs and a right for damages.</p>	<p>Bidder requests to make this clause mutual as Bidder should also be entitled to the rights provided to Bank under this clause.</p>	Bidder to comply with RFP Terms and Conditions.
96	53	Annexure 1: Bid Covering Letter	Bid Covering Letter	<p>We accept all the Instructions, Terms and Conditions and Scope of Work of the subject RFP. We understand that the Bank is not bound to accept the lowest or any offer the Bank may receive without assigning any reason whatsoever.</p> <p>We confirm that we have noted the contents of the RFP and have ensured that there is no deviation in filling our response to the RFP and that the Bank will have the right to disqualify us in case of any such deviations.</p>	<p>Subject to the deviations submitted and mutually agreed between the parties, we agree to abide by the RFP terms and conditions. As such, we propose the below modifications:</p> <p>*Subject to the deviations submitted as part of our proposal, We accept all the Instructions, Terms and Conditions and Scope of Work of the subject RFP. We understand that the Bank is not bound to accept the lowest or any offer the Bank may receive without assigning any reason whatsoever.*</p> <p>*Subject to the deviations submitted as part of our proposal, We confirm that we have noted the contents of the RFP and have ensured that there is no other deviation in filling our response to the RFP and that the Bank will have the right to disqualify us in case of any such other deviations.*</p>	Bidder to comply with RFP Terms and Conditions.



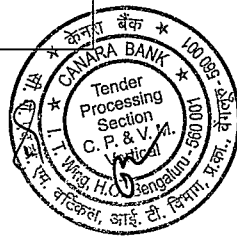
Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
104	117	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.1: The Bank reserves its right to cancel the entire / unexecuted part of CONTRACT at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions: 8.1.1. Delay in delivery beyond the specified period for delivery. 8.1.2. Serious discrepancies noted in the items delivered. 8.1.3. Breaches in the terms and conditions of the Order.	Bidder would like to clarify that, any termination shall only be in full and not in part. Before the Bank exercises its right under this clause, it requests Bidder be provided with a cure of 30 days. If Bidder fails to cure the breach within 30 days, Bank shall exercise its right of termination. We request mutual right of termination for material breach by Bank as Bank may also commit material breach like payment delay, IP breach, Confidential Information breach etc. Therefore, we request Bank to modify clause or we may mutually negotiate terms at the contracting stage. Lastly, Bidder expects to be paid for all services rendered until the date of termination. Based on the suggestions above, we request modifications to be mutually agreed at the time of contracting.	Bidder to comply with RFP Terms and Conditions.
105	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.2: The Bank reserves the right to cancel the contract placed on the Vendor/Service Provider and recover expenditure incurred by the Bank on the following circumstances: 8.2.1. Non submission of acceptance of order within 7 days of order. 8.2.2. Excessive delay in execution of order placed by the Bank. 8.2.3. The Vendor/Service Provider commits a breach of any of the terms and conditions of the bid. 8.2.4. The Vendor/Service Provider goes in to liquidation voluntarily or otherwise. 8.2.5. An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid. 8.2.6. The progress made by the Vendor/Service Provider is found to be unsatisfactory. 8.2.7. If deductions on account of liquidated Damages exceeds more than 10% of the total contract price.	Except for Sections 8.2.4 and 8.2.5, before the Bank exercises its right under this clause, it requests Bidder be provided with a cure of 30 days. If Bidder fails to cure the breach within 30 days, Bank shall exercise its right of termination. Bidder expects to be paid for all services rendered until the date of termination. Based on the suggestions above, we request modifications to be mutually agreed at the time of contracting.	Bidder to comply with RFP Terms and Conditions.
106	39&118	Section E: Selection of Bidder AND Appendix G: Draft Contract Agreement	13: Order Cancellation/Termination of Contract 8: Order Cancellation/Termination of Contract	13.3: Bank shall serve the notice of termination to the Vendor/Service Provider at least 30 days prior, of its intention to terminate services without assigning any reasons. 8.3: Bank shall serve the notice of termination to the Vendor/Service Provider at least 30 days prior, of its intention to terminate services without assigning any reasons.	While Bidder agrees to this clause in-principle, it requests that the notice period be increased to 180 days. Further, if the contract is terminated under this provision, the Bidder is entitled to be compensated as under: "Bank shall pay Accenture for the Services rendered and expenses incurred by Accenture up to the date of termination (including a pro-rata portion for services in progress). Upon termination by Bank for convenience or by Accenture for Client's breach, Client shall also pay to Accenture termination charges set forth in the Agreement."	Bidder to comply with RFP Terms and Conditions.
107	39&118	Appendix G: Draft Contract Agreement	8: Order Cancellation/Termination of Contract	8.4: In case the Vendor/Service Provider fails to deliver the quantity as stipulated in the delivery schedule, the Bank reserves the right to procure the same or similar materials from alternate sources at the risk, cost and responsibility of the Vendor/Service Provider by giving 7 days' prior notice to the Vendor/Service Provider.	Bidder feels that the period of 7 days is too short and requests it to be modified to 30 days.	Bidder to comply with RFP Terms and Conditions.
108	39&118	Appendix G: Draft Contract Agreement	8: Order Cancellation/Termination of Contract	8.5: After the award of the contract, if the Vendor/Service Provider does not perform satisfactorily or delays execution of the contract, the Bank reserves the right to get the balance contract executed by another party of its choice by giving one month's notice for the same. In this event, the Vendor/Service Provider is bound to make good the additional expenditure, which the Bank may have to incur for the execution of the balance of the order/contract. Such additional expenditure shall be incurred by the bank within reasonable limits & at comparable price prevailing in the market. This clause is also applicable, if for any reason, the contract is cancelled.	We request deletion of this provision. As we understand that Bank is free to get the undelivered portion of services from any third party and realize damage claim as per applicable process of law & contract and hence, we suggest for deletion of Risk Purchase provision.	Bidder to comply with RFP Terms and Conditions.
109	120	Appendix G: Draft Contract Agreement	12: Confidentiality and Non-Disclosure	12.1: VENDOR/ SERVICE PROVIDER shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. VENDOR/ SERVICE PROVIDER shall suitably defend, indemnify BANK for any loss/damage suffered by BANK on account of and to the extent of any disclosure of the confidential information. VENDOR/ SERVICE PROVIDER shall furnish an undertaking in the prescribed format.	We request that the confidentiality provisions be made mutual, since Bidder will also disclose its or its vendor commercial and proprietary confidential information to Bank and would like to protect the same the way Bank wants to protect its information. We request the following modification in Section 13.1: "VENDOR/ SERVICE PROVIDER shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. VENDOR/ SERVICE PROVIDER shall suitably defend, indemnify BANK for any loss/damage suffered by BANK on account of and to the extent of any disclosure of the confidential information. VENDOR/ SERVICE PROVIDER shall furnish an undertaking in the prescribed format." Personal Data related understanding: We further wish to clarify that any personal data shall be handled through separate data protection schedule to be executed between parties, since bidder will access bank's personal data under this project. Data privacy schedule is necessary for the effective processing, monitoring and security of personal data under the project. In case if Bank is going to share any EU/UK regime personal data under this project, then we would like to understand the data flow so that we can mutually agree to execute an appropriate document as per GDPR regulations.	Bidder to comply with RFP Terms and Conditions.



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
110	121	Appendix G: Draft Contract Agreement	12: Confidentiality and Non-Disclosure	12.3: Provided that the Confidentiality Clause may not be applied to the data or Information which; a) Was available in the public domain at the time of such disclosure through no wrongful act on the part of VENDOR/ SERVICE PROVIDER. b) Is received by VENDOR/ SERVICE PROVIDER without the breach of this Agreement. c) Is required by law or regulatory compliance to disclose to any third person. d) Is explicitly approved for release by written authorization of the Bank.	Further, we request following additional exclusions as suggested below: *(i) previously known to it without an obligation not to disclose such information, and (ii) independently developed by or for it without use of Information."	Bidder to comply with RFP Terms and Conditions.
111	121	Appendix G: Draft Contract Agreement	12: Confidentiality and Non-Disclosure	THESE CONFIDENTIALITY OBLIGATIONS SHALL SURVIVE THE TERMINATION OF THIS CONTRACT AND THE VENDOR/ SERVICE PROVIDER SHALL BE BOUND BY THE SAID OBLIGATIONS.	Bidder requests that the survival period be restricted to 1 year.	Bidder to comply with RFP Terms and Conditions.
112	122	Appendix G: Draft Contract Agreement	15: Right to Audit	General	While we agree in principle about the requirement of audit during term of contract, we request Bank to include the following modifications in the provision: *The physical copy of records pertaining and maintained by the Bidder relating to this Contract only shall be available to BANK for conducting audit during validity of this Contract. The frequency of such audit will be limited to once a year. BANK will provide fourteen (14) days' prior written notice of its intention to conduct such an audit. BANK will conduct such audits in a manner that will result in minimal disruption to Bidder's business operations and subject to confidential obligations agreed at that stage. Audits shall be conducted only during normal business hours and working days of Bidder and that too once annually. Audit shall be conducted by BANK employees only and such third parties, which are mutually agreed (except for Bidder's competitors), subject to agreeing confidentiality provisions with us and will not involve intrusive testing of Bidder systems or IT environment. BANK will not be entitled to audit (i) data or information of other customers of Bidder; (ii) any cost information unless such is the basis of a reimbursable expense; (iii) Bidder quality assurance reviews and contract management reports; or (iv) any other Confidential Information of Bidder that is not directly relevant for the authorized purposes of the audit."	Bidder to comply with RFP Terms and Conditions.
113	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Setting up multiple environments is time consuming, hence we would request to kindly change the clause to only development environment set up in the first 2 months.	Bidder to comply with RFP Terms and Conditions.
114	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.13: The proposed solution should be an excellent Digital Data Platform with real time data processing and transfer to data layers and then to app/ consumption layers	Do we need to procure licenses for realtime data processing tools or we can repurpose the existing tools of the Bank	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
115	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.4: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CRM, Non-CRM applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Can we assume that for the new DataLakehouse solution, existing DWH is the single source of truth	Bidder to comply with RFP Terms and Conditions. Please refer to clause 2 & 3 of Annexure 9
116	86	Annexure 10: Section B	Section B - Bidder's capability including proven relevant experience and capabilities of identified professionals for the project" is given below: No. of branches (in case of Banks)	General	Would request to kindly change "No. of Branches" for Banks to any public sector organization scale	Refer revised Technical Qualification Corrigendum for section
117	40	General Query			Request to kindly share the technical architecture and software components of existing Data Warehouse platform	Refer to clause 2 & 3 of Annexure 9
118	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.4: The selected bidder should supply, install, integrate and implement the proposed Data Lakehouse & End-to-End Implementation of Analytics Solution as per RFP within Fifty Two (52) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness by the Bank whichever is later.	Bank is requested to suggest and provide template / format for Bidder to submit proposed solution in detail.	Bidder to comply RFP Terms and Conditions
119	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.5: Supply, Installation of Licenses/Softwares/OS/OB/Other Items	We see DC, DRC & UAT as scope for RFP will there be separate Dev and test environment? How much data in each Non-Prod env?	Hardware sizing solution are to be provided for all 3 are required
120	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	7.2: The selected Bidder will place the Source Code (and the procedures necessary to build the source into executable form) along-with flow diagrams and technical write up for the Software, within Thirty (30) days of Implementation in escrow with a reputable agency acceptable to both the parties.	Bank is requested to consider to allow selected bidder to submit the source code developed by bidder for Bank. OEM and other software etc. may be exempted.	Bidder to comply RFP Terms and Conditions
121	32	Section E : Selection of Bidder	3.5: Bidders Presentation /Site Visits / Product Demonstration/POC	3.5.2: The Bank at its discretion call for providing of Proof of Concept (POC) of proposed solution at the location which is identified by the Bank. Hence, Bidder is required to arrange the required software in prior and need to submit the pre-requisites document in order to complete the POC within 10 Days.	Bank is requested to re-consider the clause. As a bidder, BizMetric can demonstrate the PoC once H/W and S/W is delivered and configured at Bank's premises. Also, bank is requested to consider timeline for PoC completion based on scope and mutual discussion with bidder.	Bidder to demonstrate capabilities by PoC, if required, on bidder's Infrastructure or on cloud Infrastructure arranged by the bidder
122	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: Indicative list of use cases	Bank is requested to provide more details on ML use cases specially about different sources and their nature e.g. structured, semi structured and real time	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
123	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources	Our understanding is - Only data related to uses cases needs to be populated in Data Lake as part of RFP. Bank is requested to whether our understanding is correct? It may please be noted that any additional data migration will be considered separately according to change management request.	Any activity required for the indicative use case will be part of scope of work and new use case will be taken up with change request Any subscription cost for obtention of data will be borne by bank
124	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources...	Proposed solution will compatible with cloud platforms but same licenses for proposed solution will not be used for Cloud. We have subscription based licenses which will be renewed every year.	Refer Annexure 9 Scope of work sub-clause 2.3 Page no. 67 Additionally licensing cost will be decided mutually at the time of bank decision to migrate to cloud
125	66	Annexure 9: Scope of Work	1: Summary of Project	1.11: Proposed solution should be set up by end-to-end Integration and testing, and should meet the desired performance benchmarks specified by the Bank.	Is there any query response SLA? Is there a expected or estimated queries volume that you can share? Do we have any existing benchmarks?	To be decided by the bidder to maintain the SLA for maintenance of platform

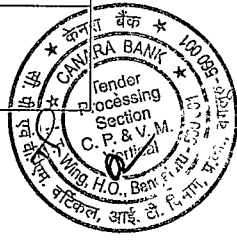


Replies to Pre Bid Queries to GeM Bid ref. no. GEW/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
126	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Bank is requested to provide blueprint of existing hardware and software architecture in use. Bank may provide list of existing applications, data/information feed, frequency and volume to proposed Data Lakehouse solution. Bank may also provide details of existing ETLs in use with execution frequency.	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage. Refer Technological stack
127	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc., with no manual intervention. It should be capable of performing in-memory processing and should be equipped with tools to perform analytics on real-time data in real-time / near real-time.	Bank is requested to provide blueprint of proposed hardware and software architecture to be used. Bank may provide list of existing applications, likely to provide data/information feed to proposed Data Lakehouse solution. Bank may also provide details of no. of ETLs / interface(s) to be developed with their execution frequency.	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage. Refer Technological stack
128	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc.,	Bank is requested to provide and Idea about the volume of data expected for near-real-time/streaming ingestion?	Will be shared with successful bidder
129	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.7: Data sanity checks, validations and reconciliation of data should be available....	How PII is handled in existing system Is there any data encryption needed for PII ?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
130	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.3.5: Provide a unified interface to ensure seamless data access to the users and reports between Data Warehouse and Data Lakehouse.	Reporting tools like Power BI and DBIEE can be used to unify data between Datawarehouse and Datalake? Can we get more clarity on unified interface for seamless data access. Can we use Cloud based AI API like Open AI ChatGPT 4 ?	Bidder to propose analytical solution which has a unified interface right from data access to the users, processing, creating pipelines from different sources like DWH & Data Lakehouse for whole ML model lifecycle.
131	77	Annexure-9(A): Hardware / Software requirement Specifications for the proposed	Table A: Hardware requirement Specifications Table B: Software requirement Specifications (System and other related software)	Column Name "Value"	Pls. specify whether indicative cost to be entered ?	Yes, Indicative Value to be provided
132	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	Section-A	Volume of data to be migrated from structured databases like Datawarehouse to Data Lake ?	The proposed datalake solution is expected to reach the size of 60TB from all sources including DW)
133	83	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	54. Provide a robust change management framework to track versioning, change history with date and user information...	Do we need to integrate with existing incident or change management process like servicehow	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
134	97	Annexure 17: Bill of Material	Table C: Cost for Training of Bank Officials	Column C and Column F	Both column heading refers to Total Cost (Incl. of Tax). Suggested to amend Column C so as to read as "Total Cost (Excl. of Tax)"	Please refer Corrigendum
135	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during contract period	10.6: Only licensed copies of software shall be supplied. The selected Bidder shall grant an irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.	Please confirm our understanding that bank requires Subscription License	Refer revised Bill of Material (BOM) as corrigendum
136	56	Annexure 2: Pre- Qualification Criteria	5	The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	We request Canara Bank to modify the pre-qualification criteria statement to: "The Bidder or OEM should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks."	Refer revised Pre Qualification Corrigendum for section
137	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.6: The proposed solution should support analysis / modelling activity based on various skill level of users (Business users, Data Analyst, Data Scientist etc.).	What is the total number of data scientists to be considered for platform sizing?	Bidder to decide based on scope of work, timelines and solution offered
138	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	We request Canara Bank to modify the technical evaluation criteria statement to: "The Bidder or OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB."	Refer revised Technical Qualification Corrigendum for section
139	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
140	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	We request Canara Bank to modify the technical evaluation criteria statement to: "The Bidder or OEM should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years."	Refer revised Technical Qualification Corrigendum for section
141	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: Copies of Work order / PO and Completion / Sign off to be submitted for data lake / lake house implementation. PO / SCOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
142	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to let us know if the existing datawarehouse model and solution diagram is available. If yes, request the bank to share	Refer Technological stack
143	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to share facts table, dimension tables information in the current environment	Refer Technological stack

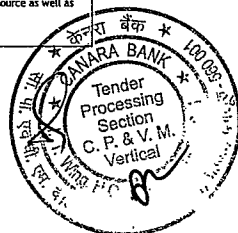


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
144	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to share a list of all source systems with table counts that are expected to be ingested to lakehouse other than the existing data warehouse	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
145	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	As per RFP document, expected size in 2023 is 60TB. Request bank to clarify if this number indicates current DW sizing or is an approximation of size after ingesting new sources that currently are not getting loaded to current DW. Request clarity from the bank on this point.	The proposed data lake solution is expected to reach the size of 60TB from all sources including DW
146	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is the size of the current Data Warehouse?	Refer Technological stack
147	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if bank's existing ETL tools can be used for loading and transformation purpose	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
148	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is current database environment, request the bank to share inventory details such as number of tables, views, procedures, functions, triggers.	Refer Technological stack
149	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide clarity on the replication mechanism between DC and DR	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank
150	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide details on data size and data type for movement from various data sources (DWH, CBS, etc.) to lakehouse	Refer Technological stack
151	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if UAT environment will be considered as Dev environment.	Yes
152	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm the volume of data archived every year	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
153	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm the capacity considered of UAT environment? (as % of DC)	30% Capacity of live environment
154	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm on number of ETL Jobs, BI Reporting Jobs, Data migration jobs	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
155	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request bank to confirm the number of downstream applications accessing the Data Lakehouse in the future	Approx. 15.

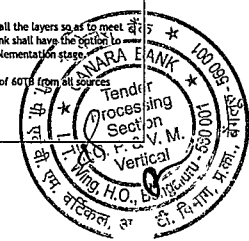


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
156	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is the frequency, Type(Batch/ Stream/ API Access etc) and volume of data on a days basis for below data sources: Structured 3.4.1.1. Data Warehouse 3.4.1.2. Business Systems (CBS, Credit Card, Digital channels etc.) 3.4.1.3. Non-CBS Systems 3.4.2.1. Emails 3.4.2.2. Application logs 3.4.2.3. Credit Information Companies' data 3.4.2.4. Clickstream data from various customer touch points 3.4.2.5. Loan Application Processing System Unstructured 3.4.3.1. Non-CBS Systems 3.4.3.2. Call Centre Data 3.4.3.3. Customer Complaints data 3.4.3.4. Document Management System 3.4.3.5. CCTV recordings 3.4.3.6. Social Media Data 3.4.3.7. News & Aesual Reports 3.4.3.8. Geo-location data 3.4.3.9. Logs data 3.4.3.10. Any other external data	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
157	100	Annexure 18: Manufacturer Authorization Form		We (Manufacturer/Original Software Owner/Developer) hereby extend our full guarantee and warranty as per terms and conditions of the GeM bid and the contract for the solution, products/equipment and services offered against this Invitation for GeM bid offer by the above firm and will extend technical support and updates and ensure availability of spares including processors for our products for contract period from the date of installation.	While the Bidder will be able to offer 'full guarantee and warranty' for the solution and services offered, OEM will only be able to confirm that the SI is authorized to resell Products and that when such products are resold by the bidder, the products will be governed by the standard end user licensing terms and conditions. Please confirm if the understanding is correct.	Bidder to comply as per RFP terms
158	100	Annexure 18: Manufacturer Authorization Form		We (Manufacturer/Original Software Owner/Developer) also confirm that we will ensure all product updates (including management software updates and new product feature releases) are provided by M/s _____ for all the products quoted for and supplied to the bank during the Contract period. In case this is not considered while quoting and in the event M/s _____ fail in their obligations to provide the updates within 30 days of release/announcement, we hereby confirm that we will provide the same to the bank at no additional cost to the bank and we will directly install the updates and any new Operating Software releases at the bank's premises.	Subject to the terms of a valid and subsisting S&S order that is placed on OEM by the bidder, OEM will provide updates and releases that are covered under OEM's standard S&S program through the bidder for the contract period. OEM will not be able to provide any direct services to the Bank including installation.	Bidder to comply as per RFP terms
159	100	Annexure 18: Manufacturer Authorization Form		We also confirm that the proposed solution offered by the bidder to the Bank are correct, viable, technically feasible for implementation and the solution will work without any hassles in all the locations. We also confirm that all the equipment offered are not "End of Life" during the next One Year and "End of Support" for total Contract Period.	OEM will not be able to provide any confirmation in re the solution to be provided by the bidder. However, we can confirm on the end of life/end of support period for our proprietary products in our capacity as the OEM.	Bidder to comply as per RFP terms
160	100	Annexure 18: Manufacturer Authorization Form		We hereby commit to the GeM bid terms and conditions and will not withdraw our commitments during the process and or during the period of contract.	GeM terms should not be applicable to the OEM. Standard COTS products shall be supplied subject to standard end user licensing terms and conditions.	Bidder to comply as per RFP terms
161	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Please share the supported connectors for each of the source systems	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
162	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Are there any specific regulatory requirements that the proposed solution should comply with, as the data is related to Consumer Banking?	Bidder to comply as per RFP terms
163	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	How are the data related to Clickstream, Call Centre, Social Media and unstructured data stored? Please explain.	Bidder to propose the same based on the proposed solution and defined use cases
164	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	Is there any data archiving and retention policy that will be applicable to the proposed solution? If yes, please provide more details.	Yes and will be shared with successful bidder
165	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	We understand that all source data listed (structured, unstructured, semi-structured) needs to be migrated to data lakehouse. Please confirm.	Bidder to propose the same based on the proposed solution and defined use cases
166	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRA, Analytical CRA, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Can you provide more insights on the requirement for bi-directional flow of data?	Bi-directional means there will be some data sources which will have 2 way communication with proposed solution. A single application can act as source as well as consumer

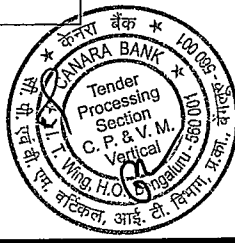


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
167	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.3: Supply, Installation of Licenses/Softwares/OS/DB/Other Items and Implementation of the proposed solution in DC, DR & UAT (dev/test) setup of the Bank should be completed within Eight (8) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness of the respective environment (DC / DR / UAT) by the Bank whichever is later. The selected bidder has to complete the implementation of all the functionalities defined elsewhere in the RFP.	We understand that the proposed solution should be implemented across 3 environments - DC, DR & UAT. Please confirm	Yes
168	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.6: The selected bidder should implement any of the two use case as defined by the Bank within twenty four (24) Weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness by the Bank whichever is later.	Our understanding on Timelines are as follows: 1. Supply, Installation of the software licences across On-Prem hardware: 8 weeks from acceptance of PO 2. Implementation of any 2 use cases: 24 weeks from acceptance of PO 3. Implementation of another 3 use cases: 36 weeks from acceptance of PO 4. Implementation of remaining 2 use cases: 52 weeks from acceptance of PO 5. Support & Maintenance of the proposed solution: Beyond 52 weeks until 3 years from acceptance of PO Please confirm	Bidder to refer section C Deliverables and Service level agreement Clause no 1.4-1.6
169	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.4: The selected bidder shall make availability of spare parts/services, components etc. as and when required, and complete maintenance of the hardware/software/solution during Contract Period.	We understand that hardware installation, configuration, deployment and maintenance will be taken care by Canara Bank. Please Confirm	Yes with respect to Hardware
170	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	3.5.7: Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as masking personally identifiable information or using canonical data representations, as well as monitoring the inbound data flow for completeness, consistency and accuracy.	Are there any transformations of data required across any of the source systems?	Bidder to propose the same based on the proposed solution and defined use cases
171	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.1: AI/ML based model to predict customer attrition risk and prioritization of customer based on attrition risk.	Please confirm if the output required is in terms of binary or multi class classification.	Bidder to propose the same based on the proposed solution and defined use cases
172	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.1: AI/ML based model to predict customer attrition risk and prioritization of customer based on attrition risk.	Please share the expected output of the solution along with output label names.	Bidder to propose the same based on the proposed solution and defined use cases
173	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.1: AI/ML based model to predict customer attrition risk and prioritization of customer based on attrition risk.	Please share the relevant input data sources for this use case along with the data formats	Bidder to propose the same based on the proposed solution and defined use cases
174	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.2: Prescriptive model for NBA and NBO based on CLV, customer attrition risk and optimization of retention offer	Please share the list of the NBA or NBO that would be prescribed as part of this use case	Bidder to propose the same based on the proposed solution and defined use cases
175	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.3: Predictive model to determine product propensity for bank identified products	Please confirm if the output required is in terms of binary classification or likelihood prediction.	Bidder to propose the same based on the proposed solution and defined use cases
176	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.3: Predictive model to determine product propensity for bank identified products	Please share the expected output of the solution along with output label names.	Bidder to propose the same based on the proposed solution and defined use cases
177	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.3: Predictive model to determine product propensity for bank identified products	Please share the list of products along with the description that will be subjected for cross selling / up selling	Bidder to propose the same based on the proposed solution and defined use cases
178	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.4: Predict the likelihood of default for borrowers for efficient collection management	Please confirm if the output required is in terms of binary or multi class classification.	Bidder to propose the same based on the proposed solution and defined use cases
179	65	Annexure 9: Scope of Work	1: Summary of Project	1.5.4: Predict the likelihood of default for borrowers for efficient collection management	Please share the relevant input data sources for this use case along with the data formats	Bidder to propose the same based on the proposed solution and defined use cases
180	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.5: Prescriptive analytics to provide automated credit decisions for customers based on rich and real-time business and operational performance information	Please share the key objectives of the credit decision process. Example are minimizing default risk, maximizing loan approval rates, or optimizing profitability.	Bidder to propose the same based on the proposed solution and defined use cases
181	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.5: Prescriptive analytics to provide automated credit decisions for customers based on rich and real-time business and operational performance information	Please share the relevant input data sources for this use case along with the data formats	Bidder to propose the same based on the proposed solution and defined use cases
182	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.6: AI/ML based model to offer personalized offers to the customers via personalized communication channels	Please share the relevant input data sources for this use case along with the data formats	Bidder to propose the same based on the proposed solution and defined use cases
183	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.6: AI/ML based model to offer personalized offers to the customers via personalized communication channels	Please share the required outputs or the types of personalized offers that would be subjected to this use case.	Bidder to propose the same based on the proposed solution and defined use cases
184	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.6: AI/ML based model to offer personalized offers to the customers via personalized communication channels	At what frequency, the data updates are required for real-time or near-real-time personalization.	Bidder to propose the same based on the proposed solution and defined use cases
185	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.7: AI/ML model to optimize the placement of branches and ATMs, branch performance, branch operating cost reduction etc.	Please share the relevant input data sources for this use case along with the data formats	Bidder to propose the same based on the proposed solution and defined use cases
186	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.7: AI/ML model to optimize the placement of branches and ATMs, branch performance, branch operating cost reduction etc.	Please share the list of outputs required in this use case.	Bidder to propose the same based on the proposed solution and defined use cases
187	66	Annexure 9: Scope of Work	1: Summary of Project	1.5.7: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	We assume Canara Bank will provide domain SMEs to support the use cases. Please confirm	Bidder to propose the same based on the proposed solution and defined use cases
188	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.11: The proposed solution should provide CI/CD/CT (Continuous Integration, Continuous Delivery & Continuous Training) for the models. It should have capability for robust feedback process from business applications to continually train and improve the models in place.	Please confirm if the retraining of models be periodic or demand based/API call based or performance threshold based?	Bidder to propose the same based on the proposed solution and defined use cases
189	74	Annexure 9: Scope of Work	3.11: Data Consumption Layer	3.11.1: In this layer, analytical results shall be passed on to downstream applications for consumption.	Is there a requirement to display the outputs of all the AI/ML use cases through dashboards and charts?	Yes
190	74	Annexure 9: Scope of Work	3.11: Data Consumption Layer	3.11.1: In this layer, analytical results shall be passed on to downstream applications for consumption.	If the answer to the above question is yes, will Power BI/OBIEE be utilized? Will the development of dashboards and charts fall under the scope of vendor? Please confirm	Bidder to propose the same based on the proposed solution and defined use cases
191	73	Annexure 9: Scope of Work	3.10: Model Management, Governance & Security	3.10.4: Ability to detect, alert and mitigate data drift, model drift, concept drift and prediction bias in the deployed models.	Is there a requirement to have notifications if the model performance goes below a certain threshold? If yes, what is the preferred notification channel	Bidder to propose the same based on the proposed solution and defined use cases
192	79	Annexure 10: Technical Evaluation Criteria	7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc., with no manual intervention. It should be capable of performing in-memory processing and should be equipped with tools to perform analytics on real-time data in real-time / near real-time.	The proposed solution should be integrated to existing and future versions Business Intelligence tools like Power BI / OBIEE (Present Version of Power BI: 2.117.286.0, Present Version of OBIEE: 12.2.1.4). Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Does bidder needs to provide another Business Intelligence tool or bank will continue with current set of tools for Visual analytics Does bidder needs to move 60TB of data in 2 months or will the movement of 60TB span over 12 months	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the right to leverage any existing technology available if any, during implementation stage. The proposed data lake solution is expected to reach the size of 60TB from all sources including DW Span over 12 months

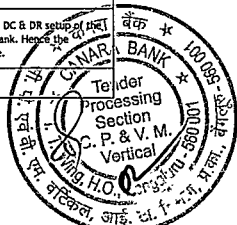


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
193	55	Annexure 2: Pre- Qualification Criteria	5	The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks	The Bidder/ OEM should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks	Refer revised Pre Qualification Corrigendum for section
194	56	Annexure 2: Pre- Qualification Criteria	8	The bidder should have at least 50 SME resources on their rolls who are experienced across areas like Analytics, Data Sciences and Data Warehouse / Data Lakehouse Implementation to deliver and support the proposed solution.	The bidder/ OEM should have at least 50 SME resources on their rolls who are experienced across areas like Analytics, Data Sciences and Data Warehouse / Data Lakehouse Implementation to deliver and support the proposed solution.	Refer revised Pre Qualification Corrigendum for section
195	86	Annexure 10: Technical Evaluation Criteria		Section C - Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	Section C - Bidder's/ OEM capability including proven relevant experience and capabilities of Identified professionals for the project* is given below:	Refer revised Technical Qualification Corrigendum for section
196	88	Annexure 10: Technical Evaluation Criteria		Section D - Understanding Bank's requirement and proposed solution architecture	B: Bidder's/ OEM capability including proven relevant experience and capabilities of Identified professionals for the project.	Refer revised Technical Qualification Corrigendum for section
197	72	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.3: The proposed solution should be integrated to existing and future versions Business Intelligence tools like Power BI / OBIEE (Present Version of Power BI: 2.117.286.0, Present Version of OBIEE: 12.2.1.4).	Does bidder needs to provide another Business Intelligence tool or bank will continue with current set of tools for Visual analytics	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
198	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Does bidder needs to move 40TB of data in 2 months or will the movement of 60TB span over 12 months	The proposed datalake solution is expected to reach the size of 60TB from all sources including DW Span over 12 months
199	10	Section B: Introduction	4: Objective	4.4: A Data Lakehouse which complements the existing Data Warehouse and should support data ingestion, storage and processing of high volume, velocity, variety and veracity.	Kindly share the details of the existing Data Warehouse solution which has to be integrated with new Solution	Refer Technological stack
200	12	Section B: Introduction	8.4: Project Completion and Management	8.4.1: For smooth completion of project, the selected Bidder should identify one or two of its representatives at Bengaluru as a single point of contact for the Bank.	Whether these are apart from the dedicated resources and required onsite?	Bidder to provide single point of contact as per Annexure -3.
201	14	Section C: Deliverable and Service Level Agreements	2: Integration & Interfaces	2.1: The selected Bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period. 2.2: The selected Bidder has to work with different teams of Bank & application OEMs to understand the policies requirement and configurations of respective applications for the offered solution.	Kindly share the details of applications to be integrated with new solution.	15-20 applications
202	15	Section C: Deliverable and Service Level Agreements	4: Acceptance	Bank will evaluate the offered solution implemented by the selected Bidder. If the solution experiences no failures and functions according to the requirements of the RFP as determined by the Bank during the implementation period, then the solution will be accepted by the Bank and the project will be considered as deemed signed-off.	Kindly confirm the testing and acceptance timeline.	will be shared with successful bidder
203	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc.	Assume that no onsite call logging / helpdesk facility required.	Bidder to comply with RFP terms
204	56	Annexure 2: Pre- Qualification Criteria	Point 5	The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	We kindly request the bank to confirm the minimum number of purchase orders necessary to meet this requirement. We estimate that a minimum of 1 PO would be required. Please confirm as such considering as per GOI Guidelines, MSEs are exempted from prior experience criteria. Also requesting that the bank kindly accept POs older than five years into consideration.	Refer revised Pre Qualification Corrigendum for section
205	56	Annexure 2: Pre- Qualification Criteria	Point 6	The Bidder should have average annual turnover of Rs.100.00 Crores in the last three financial years (i.e., 2019-20, 2020-21 and 2021-22). This must be the individual company turnover and not of any group of companies.	We humbly request to please consider lowering the turnover criteria to 5 crores for MSE during the last three completed financials. As per GOI guidelines, MSEs are exempted from turnover and prior experience. Request bank to consider GOI guidelines and consider lowering the turnover criteria.	Refer revised Pre Qualification Corrigendum for section
206	56	Annexure 2: Pre- Qualification Criteria	Point 8	The bidder should have at least 50 SME resources on their rolls who are experienced across areas like Analytics, Data Sciences and Data Warehouse / Data Lakehouse Implementation to deliver and support the proposed solution.	We request the bank to consider reducing the requirement to at least 10 SME resources in order to implement and support the proposed solution.	Refer revised Pre Qualification Corrigendum for section
207	56	Annexure 2: Pre- Qualification Criteria	Point 9	The Bidder shall have local office in Bengaluru to liaison various activities.	Our office is located in Mumbai. We request the bank to kindly consider waiving off the requirement for the Bangalore office. All services can be delivered by the bidder from its main office.	Refer revised Pre Qualification Corrigendum for section
208	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	3.5.10: The tool(s) of choice should be able to provide audit logs for data validation and tracking data lineage.	Data lineage can only be handled when data tracks for usage is defined by our data lake house. Older data lineage need to be provided in the structured format as defined by platform to capture previous lineage capabilities defined as well	Bidder to propose and comply the RFP terms
209	70	Annexure 9: Scope of Work	3.6: Data Storage and Transformation Layer	3.6.1.1: Store reliably, efficiently and optimally irrespective of the data type (structured data, flat files, extracts, logs, xml / JSON / BSON type data, text, images, audio, video, sensor data, GIS data etc.).	Currently we are not supporting , images, audio, video, sensor data, GIS data but we can implement it.	Refer revised Technical Qualification Corrigendum for section
210	105	Appendix E:	Proforma of Bank Guarantee for Contract Performance	Bank Guarantee Percentage 10% of the Contract Value plus GST	Government of India (GOI) order on PBG titled "Amendment in General Financial Rules, 2017-Rule 171 (f), Performance Security Regarding for MSMEs, dated 03/04/2023, states that the PBG should range from 3% to 10% of the Total Contract. Therefore, We request the bank to kindly consider reducing the PBG to 3% for MSMEs.	Bidder to comply as per RFP terms
211	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.4: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRA, Analytical CRA, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	What are the Source side applications behind this system? Bank's existing source systems like: Data Warehouse, CBS, Non-CBS applications etc. business applications such as, but not limited to, Operational CRA, Analytical CRA, Digital Lending Platform, Lead Management System, Loan Origination System, etc. with provision for bi-directional flow of data.	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.

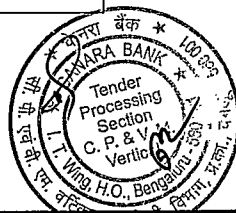


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
212	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	At source side, what will be the refresh frequency of data i.e hourly data, daily data, etc	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
213	65	Annexure 9: Scope of Work		General Query	Does this Source system provides API?	Yes. The platform should be capable to consume the API wherever required from the published source.
214	65	Annexure 9: Scope of Work		General Query	Number of API Requests per hour or how many requests can be performed on the API?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
215	65	Annexure 9: Scope of Work		General Query	How many use cases are batch and near real-time?	Refer 1.5 for Indicative use cases
216	65	Annexure 9: Scope of Work		General Query	Per source system give inputs on : 1> Approx count of tables 2> Size per source system in GB	Will be shared with successful bidder
217	65	Annexure 9: Scope of Work		General Query	Current data platform (infrastructure) and back end behind this platform	Refer Technological stack
218	72	Annexure 9: Scope of Work	3.7: Analytics Layer	3.7.3: The proposed solution should be integrated to existing and future versions Business Intelligence tools like Power BI / OBIEE (Present Version of Power BI: 2.117.286.0, Present Version of OBIEE: 12.2.1.4).	Current system is using Power BI and the Present Version of OBIEE: 12.2.1.4), is this the preferred choice or you are open for recommendations	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
219	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	General	can you help us to know where we can find the Table-F of Annexure-17 (Bill of Material).	Page no. 98
220	9			General Query	is there any clarity on tentative budget?	Bidder to propose and comply the RFP terms
221	11	Section B: Introduction	8: Scope of Work	General	can you help to understand the number of near real-time use cases	Refer 1.5 for Indicative use cases
222	66	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements		Can you elaborate on the unified user interface with a single-user login?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
223	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Regarding the statement from Scope of Work document (Para 1.12) "Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later" - we would like to understand what is the expectation in first 2 months?	Refer Section C : Deliverable and service level agreement
224	66	Annexure 9: Scope of Work	1: Summary of Project	Scope	We have visibility in the first 12 month's scope. We would like to know the scope for 2nd and 3rd year as the RFP is covering three years.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
225	66	Annexure 9: Scope of Work	1: Summary of Project	Scope	The scope covers retaining existing data warehouses and analytics tools; we would like to details about existing solutions, use cases, reports etc. that needs to migrated to the to-be solution	Refer Technological stack
226	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Ingestion	Kindly support with the following information: (1) # of Data Sources (2) # of Data Objects / sources (ex: 'X' table from DWH, 'Y' items from CBS etc.)	Will be shared with successful bidder
227	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Ingestion	Which are the Social Media platforms in scope of Data Ingestion? Note: API for Extraction of Data from Social Media platforms might incur additional cost	Proposed platform should have capability to integrate external/social media data. The subscription cost and other modality are out of scope for RFP
228	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Ingestion	Are there available APIs for Data Extraction from "Credit Information Companies' data" or other External Data sources?	Proposed platform should have capability to integrate external/social media data. The subscription cost and other modality are out of scope for RFP
229	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Ingestion	For audio & video is it going to be streaming ingestion or offline ingestion? i.e. is Near Real Time ingestion the desired approach, or Batch Approach is ok.	Bidder to propose and comply the RFP terms
230	70	Annexure 9: Scope of Work	3.5: Data Ingestion Layer	Ingestion	Is Data Observability in scope for Data Ingestion (Job status, # at source v/s # at target etc.)?	Bidder to propose and comply the RFP terms
231	71			Curation	An assumption is that Profile information is distributed, missing a single source of truth. Hence HDM is considered in scope. Is this assumption correct?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
232	71			Curation	Data Quality check is only applicable to Structured & Semi Structured data sources. Unstructured files like logs, videos, audios etc. will not have any DQ check. Is this assumption correct?	Bidder to propose and comply the RFP terms
233	72			Platform	Utilizing both OnPrem & Cloud native Data Journey, Canara Bank will have to bear both CAPEX & OPEX, which will have a high infrastructure expenditure. Is Canara bank open to overall solution deployment on Cloud from the Initial Instance?	Kindly refer to Clause No.2.2 (Detailed Scope of Work) page No 67 of the RFP
234	72			Platform	Utilizing both OnPrem & Cloud native Data Journey, Canara Bank will have to bear both CAPEX & OPEX, which will have a high infrastructure expenditure. Is Canara bank open to overall solution deployment on Cloud from the Initial Instance?	Kindly refer to Clause No.2.2 (Detailed Scope of Work) page No 67 of the RFP
235	72			Platform	If Canara Bank is opting for OnPrem solution, Deloitte can support in Operate of cloud native solution, & Training of Canara Bank executives, till they are fully equipped with competencies to Operate the solution. This being a less expensive, and a more streamlined approach, is Canara bank open to this?	Kindly refer to Clause No.2.2 (Detailed Scope of Work) page No 67 of the RFP
236	72			Platform	What are the current Platform & Tools Capabilities, Canara Bank is utilizing for their Data Exercises?	Refer Technological stack
237	72			Platform	What are the current Platform & Tools Capabilities, Canara Bank is utilizing for their AI/ML Exercises?	Refer Technological stack
238	73			Data Lakeshouse	What is the Data Archival requirements for Canara Bank?	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank. Hence the proposed solution should have the architecture to support the same.
239	73			Data Lakeshouse	Is Canara Bank looking for a Data Mart or a Data Mesh approach for Data Lakehouse?	Bidder to propose and comply the RFP terms

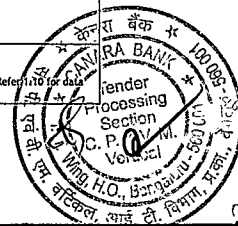


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
240	40	Section G : General Conditions		General	How many users will access directly and Indirectly to the system? Examples of direct users are BI users or data scientists that execute ad-hoc queries on the system. Examples of indirect users are business users that do not execute ad-hoc queries but access to reports which in turn receive the data in real time from the system.	The solution should be capable to integrate with existing reporting and visualisation tool.
241	40	Section G : General Conditions		General	If known, How many concurrent queries (on peak and on average) will be hitting the system? (Any guess will be welcome)	The solution should be capable to integrate with existing reporting and visualisation tool.
242	40	Section G : General Conditions		General	What is the distribution of queries according to their complexity (low, medium, high)? Examples of low complexity queries are queries that access a single data source and are completely pushed down to the source. Examples of medium complexity queries are queries that combine data from 2 or more sources with not complex transformations. Examples of high complexity queries are queries that combine data from multiple data sources, including complex transformations, subqueries, etc.	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
243	40	Section G : General Conditions		General	In addition to the complexity of the queries, it is important to consider the volume of data returned as a driver. If known, can you provide an estimation of the number of queries that return below 10K rows, below 1Million rows and more than 1Million rows.	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
244	40	Section G : General Conditions		General	Do you use any data catalog currently?	No
245	40	Section G : General Conditions		General	Where are source systems located (on-prem/cloud/hybrid)?	Kindly refer to Clause No.2.2 (Detailed Scope of Work) page No 67 of the RFP
246	40	Section G : General Conditions		General	If partner / consortium proposes alternative/ approach / Technologies to meet current canara bank's tech requirement and out comes is canara bank open to accept those alternate technology options / Can we get some insights to address	Bidder to comply as per RFP terms
247	112	Appendix F: Pre Contract Integrity Pact	8: Fall Clause	8.1: The BIDDER/SELLER/CONTRACTOR/SERVICE PROVIDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems/services at a price lower than that offered in the present bid to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law and if it is found at any stage that similar product/systems or sub systems/services was supplied by the BIDDER/SELLER/CONTRACTOR/SERVICE PROVIDER to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law, at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER/SELLER/CONTRACTOR/SERVICE PROVIDER to the BUYER, if the contract has already been concluded.	Bidder requests modification as below to make it prospective: The BIDDER/ SELLER/ CONTRACTOR/ SERVICE PROVIDER undertakes that it is not supplying similar product/ systems or subsystems/ services at a price lower than that offered in the present bid to any other Bank or PSU or Government Department or to any other organization/ entity whether or not constituted under any law and if it is found at any stage that similar product/ systems or sub systems/ services are supplied by the BIDDER/ SELLER/ CONTRACTOR/ SERVICE PROVIDER to any other Bank or PSU or Government Department or to any other organization/ entity whether or not constituted under any law, at a lower price, then that very price will be applicable to the present case and the difference in the cost would be refunded by the BIDDER/ SELLER/ CONTRACTOR/ SERVICE PROVIDER to the BUYER, if the contract has already been concluded.	Bidder to comply as per RFP terms
248	10	Section B: Introduction	5: Requirement Details	5.2: The term of contract will be for a period of 3 (three) years. However, Bank reserves the right to have an annual review on completion of 12 months the date of acceptance of purchase order. If the services are found to be unsatisfactory Bank reserves the right to discontinue the Services.	Bidder requests that such termination shall be done only for material breaches. Also, a reasonable cure period shall be given to the bidder before termination.	Bidder to comply as per RFP terms
249	12	Section B: Introduction	8: Scope of Work	8.3: During the course of the project, there might be related areas which Bank would like the selected Bidder to undertake which may not have envisaged earlier. Bank reserves the right to pause the work at any point of time and use the services for partial delivery of select modules of the Solution	Bidder suggests that CR shall be executed for any such changes and the scope and the revised charges shall be mutually agreed between the parties.	Bidder to comply as per RFP terms
250	15	Section C: Deliverable and Service Level Agreements	4: Acceptance	Bank will evaluate the offered solution implemented by the selected Bidder. If the solution experiences no failures and functions according to the requirements of the RFP as determined by the Bank during the implementation period, then the solution will be accepted by the Bank and the project will be considered as deemed signed-off.	Bidder requests for the below clarifications: 1. Acceptance/ sign off of licenses shall be given on supply, installation and Acceptance of Enterprise licenses in Week 8. Acceptance of use cases shall not be linked to the Acceptance/ sign off for licenses. 2. Acceptance/ rejection shall be communicated by the bank within 15 days, the deliverables shall be deemed as accepted in the event of no communication by the bank within such timelines	Bidder to comply as per RFP terms
251	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.6: If any act or failure by the selected Bidder under the agreement results in failure or inoperability of systems and if the Bank has to take corrective actions, to ensure functionality of its property, the Bank reserves the right to impose penalty, which may be equal to the cost it incurs or the loss it suffers for such failures.	Bidder requests to clarify that the bidder shall not be held liable for indirect damages.	Bidder to comply as per RFP terms
252	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.7: If the selected Bidder fails to complete the due performance of the contract as per RFP terms, it will be considered as breach of contract and Bank reserves the right to either cancel the order or to recover a suitable amount as deemed reasonable as Penalty / Liquidated Damage for non-performance or both.	Bidder requests deletion of this clause as it is very subjective. Bank can still charge penalties as specified under other specific clauses of the RFP.	Bidder to comply as per RFP terms
253	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.8: Any financial loss to the Bank on account of fraud taking place due to selected Bidder, its employee or their services provider's negligence shall be recoverable from the selected Bidder along with damages if any with regard to the Bank's reputation and goodwill.	Bidder requests to clarify that the bidder shall not be held liable for indirect damages.	Bidder to comply as per RFP terms
254	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	General	Bidder requests exemption from this clause if the Software provided by bidder is a COTS Software.	Bidder to comply as per RFP terms
255	17	Section C: Deliverable and Service Level Agreements	8: Payment Terms	8.1: Enterprise License cost for the 1st year (as per Table-A of Bill-of-Material) for each environment (DC, DRG & UAT)	Bidder requests for 100% payment of the 1st year license cost on acceptance in week 8. Bank will have the protection of PRG to protect its interest till completion of solution in week 52.	The clause should be included to ensure that the payment can be release against BG of equal amount
256	18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	General	Bidder requests clarity that the payment for other manpower services shall be done monthly in arrears based on actual usage.	Bidder to comply as per RFP terms
257	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.6: If any defect in the Solution is not rectified by the selected bidder before the end of the Warranty Period, the Warranty Period shall be extended until, in the opinion of the Bank: a) the defect has been corrected; and b) the Solution functions in accordance with the Contract for a reasonable period of time.	Bidder requests to define the reasonable period under sub-clause "b" as 30 days.	Bidder to comply RFP Terms and Conditions
258	38	Section F: Ownership and Awarding of Contract	12: Pricing & Payments	12.2: From the date of placing the order till the delivery of the systems, if any changes are brought in the duties such as excise/customs etc., by the Government resulting in reduction of the cost of the systems, the benefit arising out of such reduction shall be passed on to the Bank.	Bidder requests to clarify that along with the savings in cost, any increase in cost due to such changes shall also be passed on to the Bank.	Bidder to comply as per RFP terms



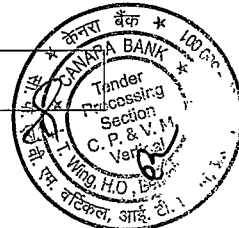
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply	
259	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract 13.1.The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions: 13.1.1.Delay in delivery of services in the specified period. 13.1.2.Serious discrepancies noted in the inspection. 13.1.3.Breaches in the terms and conditions of the Order. 13.2.The Bank reserves the right to cancel the contract placed on the selected Bidder and recover expenditure incurred by the Bank on the following circumstances: 13.2.1.Non submission of acceptance of order within 7 days of order. 13.2.2.Excessive delay in execution of order placed by the Bank. 13.2.3.The selected Bidder commits a breach of any of the terms and conditions of the bid.	General		Bidder requests the following: 1. A cure period of 30 days shall be given in the event of termination for cause. 2. Bidder shall not be responsible for any consequential or indirect damages. 3. A notice of 90 days shall be given for termination for convenience.	Bidder to comply as per RFP terms
260	30	Section E: Selection of Bidder	3: Evaluation of Bids	3.3: Techno Commercial Evaluation	Please confirm whether tax inclusive price will be considered for evaluation.	Bidder to comply as per RFP terms	
261	40	Section G: General Conditions	3: Responsibilities of the Selected Bidder	3.2: The Bank will call for Audited Balance Sheet of the selected Bidder at any point of time during contract period and the selected Bidder shall provide the same	Bidder requests clarity on purpose of this clause and reasons that can trigger this clause.	Bidder to comply as per RFP terms	
262	42	Section G: General Conditions	5: Responsibility for Completeness	5.3: The selected Bidder shall be responsible for any discrepancies, errors and omissions or other information submitted by him Irrespective of whether these have been approved, reviewed or otherwise accepted by the bank or not. The selected Bidder shall take all corrective measures arising out of discrepancies, error and omission other information as mentioned above within the time schedule and without extra cost to the bank.	Bidder requests to clarify that any discrepancies, errors in the solution shall be highlighted by the Bank during acceptance.	Bidder to comply as per RFP terms	
263	42	Section G: General Conditions	6: Inspection of Records	Bank at its discretion may verify the accounts and records or appoint third party for verification including an auditor for audit of accounts and records including Hardware, Software & other items provided to the Bank under this RFP and the selected Bidder shall extend all cooperation in this regard.	Bidder requests to clarify that the cost records shall be excluded from the purview of this clause.	Bidder to comply as per RFP terms	
264	77	Annexure 9(A): Hardware / Software requirement Specifications for the proposed	Annexure: 9(A)	General	1.Bidder requests to clarify whether the HW and SW to be listed under annexure 9A shall be provided by Bank or the bidder has to price for it. If yes, please provide placeholder in commercial template. 2. Please confirm if the cost of components under this annexure will be considered for commercial evaluation.	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9. Annexure-9)	
265	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Bank in India/ Financial Regulatory bodies /Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Bidder requests criterion to be modified as below. Reason for asking this change is that two of the last seven years were CoVid years and very few rollouts had happened during CoVid. There is no dilution of the criterion being asked. The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India/Financial Regulatory bodies/ Foreign Banks during the last 7 years, and the implementation should have a data size of not less than 200 TB.	Refer revised Technical Qualification Corrigendum for section	
266	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India/ Financial Regulatory bodies / Foreign Banks during the last 5 years.	Bidder requests criterion to be modified as below. Reason for asking this change is that two of the last seven years were CoVid years and very few rollouts had happened during CoVid. There is no dilution of the criteria being asked. The bidder should have implemented AI/ ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India/ Financial Regulatory bodies/ Foreign Banks during the last 7 years.	Refer revised Technical Qualification Corrigendum for section	
267	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc.,	Bidder suggests change that capture it that would be implemented in the source system database. The CDC agent would consume compute and RAM so bank requires to increase the capacity of the source database performance which may be impacted due to this. Is bank open to increase the source system capacity and agent implementation?	Bidder to propose and comply the RFP terms	
268	67	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc.,	Bidder requests clarification if bank is open to implement agents in the source systems.	Bidder to propose and comply the RFP terms	
269	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals	1: Bidder has to furnish documentary evidence purchase orders/Service level agreement/ Completion certificate duly mentioning the details in the last five (05) years to verify the same.	Bidder requests criterion to be modified as below. Reason for asking this change is that two of the last seven years were CoVid years and very few rollouts had happened during CoVid. There is no dilution of the criteria being asked. Bidder has to furnish documentary evidence purchase orders/ Service level agreement/ Completion certificate duly mentioning the details in the last seven (07) years to verify the same.	Refer revised Technical Qualification Corrigendum for section	
270	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.1.1: Data Warehouse	Bidder requests clarification whether the source integration document with mapping is available with bank. The question is to understand whether the data point available in the data warehouse or not. Based on this info, required effort will be estimated by the bidder.	Yes. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer clause 3.5.6 for data types. Refer clause 3.5.6 for data types. Refer clause 3.5.6 for data types. Refer clause 3.5.6 for data types.	



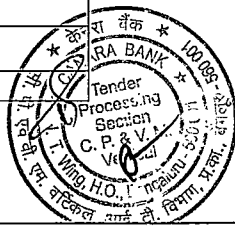
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
271	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Unstructured; 3.4.3.6: Social Media Data	Bidder requests clarification if bank has social media subscription available for extraction of data.	Proposed platform should have capability to integrate external/social media data. The subscription cost and other modality are out of scope for RFP
272	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Unstructured; 3.4.3.6: Social Media Data	Bidder requests clarification if bank has Facebook, Twitter subscription available for extraction of data.	Proposed platform should have capability to integrate external/social media data. The subscription cost and other modality are out of scope for RFP
273	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Unstructured; 3.4.3.6: Social Media Data	Bidder requests Bank to specify the social media platform subscription to be integrated and extracted.	Proposed platform should have capability to integrate external/social media data. The subscription cost and other modality are out of scope for RFP
274	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.7: Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as masking personally identifiable information or using canonical data representations, as well monitoring the inbound data flow for completeness, consistency and accuracy.	Data masking is a typical feature of data lakehouse solution. Bidder requests to clarify the requirement: "Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as masking personally identifiable information or using canonical data representations, as well monitoring the inbound data flow for completeness, consistency and accuracy."	Bidder to propose and comply the RFP terms
275	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	The bidder/ OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 7 years, and the implementation should have a data size of not less than 200 TB. Request this for maximum participation from OEM & SI perspective	Refer revised Technical Qualification Corrigendum for section
276	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India/ Financial Regulatory bodies / Foreign Banks during the last 5 years.	The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 7 years Request this for maximum participation from OEM & SI perspective	Refer revised Technical Qualification Corrigendum for section
277	78	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	3: The proposed solution should support hybrid architecture which enables flexibility to host the platform either on-premise or on public/ private/ hybrid cloud at any point of time as required by the Bank to leverage advanced infrastructure technologies like containerization, microservices, server less computing and data mesh capabilities. Bidder should provide option to switch over to cloud at any point of time within the existing license cost quoted with all the latest features. Bank can use cloud environment with the existing licenses whenever required. Also, for this migration (on-premise to cloud), the required resources shall be provided by the bidder at similar cost as proposed for on-premise setup.	Pls drop the part as their shall be a migration cost & can come as a change request - "Also, for this migration (on-premise to cloud), the required resources shall be provided by the bidder at similar cost as proposed for on-premise setup." The migration shall always have an additional cost from effort perspective & can be considered as a change request.	Refer Annexure 9 Scope of work sub-clause 2.3 Page no. 67
278	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	9: The proposed solution should have enhanced analytical capabilities through easy-to-use GUI-based business Intelligence tools to empower user departments and reduce TAT of data requests.	Would customer be wanted reporting & visualization tool or is going to be using existing tools for the same?	Refer Technological stack
279	81	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	32: The Ingestion tool should have a built-in query optimization feature.	The ingestion tool should have query optimization feature. The clause should be changed as In-built query optimization feature this is not available with opensource & is a proprietary solution.	Bidder to propose and comply the RFP terms
280	84	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	74: Support In-memory computing	Support In-memory computing	Bidder to propose and comply the RFP terms
281	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals	6: No. of use cases Implemented - - 20 or more: 5 marks - 10 to 20: 4 marks - 5 to 10: 3 marks - 5 or less: 2 marks	No. of use cases Implemented - - 12 or more: 5 marks - 11 to 8: 4 marks - 7 to 5: 3 marks - 4 or less: 2 marks Request this relaxation for maximum participation from OEM & SI perspective	Refer revised Technical Qualification Corrigendum for section
282				General Query	What are the existing technologies & version details being utilized presently at the bank from Data Analytics perspective.	Refer Technological stack
283	27, 54 and 93	Section D: Bid Process; Annexure 1: Bid Covering Letter; Annexure 14: Compliance Statement	Section D: Bid Process Annexure 1: Final Paragraph Annexure 14: Compliance Statement	Section D: Bid Process - Point 11 - The Bank would like to expressly state that any assumption, presumptions, modifications, terms, conditions, deviation etc., which the Bidder includes in any part of the Bidder's response to this RFP, will not be taken into account either for the purpose of evaluation or at a later stage, unless such assumptions, presumptions, modifications, terms, conditions deviations etc., have been accepted by the Bank and communicated to the Bidder in writing. The Bidder at a later date cannot make any plea of having specified any assumption, terms, conditions, deviation etc., in the Bidder's response to this RFP document. No offer can be modified or withdrawn by a Bidder after submission of Bid/s. Annexure 1: Final Paragraph - We confirm that we have noted the contents of the RFP and have ensured that there is no deviation in filing our response to the RFP and that the Bank will have the right to disqualify us in case of any such deviations. Annexure 14: Compliance Statement We understand that any deviations mentioned elsewhere in the bid will not be considered and evaluated by the Bank. We also agree that the Bank reserves its right to reject the bid, if the bid is not submitted in proper format as per subject RFP. Description (Yes / No) Remarks / Deviations Compliance to Terms and Conditions Compliance to Scope of Work of the subject RFP (If left blank it will be construed that there is no deviation from the specifications given above)	Section D - Point 11 and Annexure 1 - Final Paragraph indicate that Bank will not consider any assumptions or deviations submitted by the bidder, unless it is accepted by the Bank and communicated to the bidder in writing. The solution assumptions and modifications/deviation cannot be put forth in the pre-bid queries as many of them actually emerge only after the responses to pre-bid queries. However, for the queries that are answered as "The bidder has to comply to the RFP terms and conditions", there is no further recourse to any discussions/deliberations with the Bank during the course of submission and also post the submission in the evaluation phase. This necessarily means that all the assumptions that are made at the time of pre-bid queries, if not accepted by the Bank, remain as deviations - which the Bank would not be accepting. This becomes the scenario of almost a "no deviation" bid. Annexure 1 - final paragraph explicitly asks the bidder to declare that Bank will have the right to disqualify us in case of deviations - which also aims towards a "no-deviation" bid. However, in Annexure 14 - Compliance Statement - the Bank gives bidder the option to put deviations with the declaration that any other deviations mentioned elsewhere will not be considered. Means, the deviations (technical, commercial and legal compliance) put in the Annexure 14 will be considered by the Bank. This Annexure 14 is directly in contradiction with Section D - Point 11 and Annexure 1 - final paragraph. The question is: Which of these clauses take precedence over each other? Request you to answer with the name of the clause(s). The answer: Bidder to comply with the TEC of RFP may be a bit unsuitable over here, as all the contradicting clauses are the TECs of the RFP.	Bidder to comply with RFP Terms and Conditions.
284	66	Annexure 9: Scope of Work	1: Summary of Project	1.4: In case, Bank takes up for implementation of additional use cases which shall be through a Change Request, the Rate card as specified in Table-F of Annexure 17, Bill of Material submitted at the time of bid submission shall alone be considered.	Please limit this Change request with-in the period of contract	Bidder to comply as per RFP terms

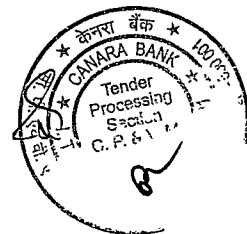


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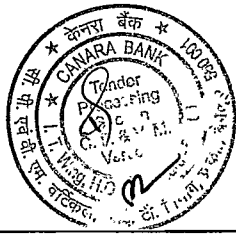
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
285	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.2: The proposed solution should be deployed on Bank's premises. However, the solution should be capable of seamless migration to cloud on demand. The solution components should have an on premise and on-cloud version, and a single unified governance and monitoring capability for both on-premises set-up as well as multi-cloud environment.	Can we submit quotes separately for on-cloud with all the licensing requirements.	Bidder to comply as per RFP terms
286	76	Annexure 9: Scope of Work	5: Resources for the Proposed Solution	5.5: Bidder has to submit a list of key professionals to be deployed for the project with details as per the table above. Bidder need to provide the Bio-data of each professional along with required certificate (confirming his / her education qualification, Identity and address) of those professionals who will be deployed for this project.	According to Bidder's policy the educational certificates, Identity proof and address details cannot be shared outside of organisation Kindy allow authorised signatory/CS declaration for the same	Bidder to comply as per RFP terms
287	55	Annexure 2: Pre-Qualification Criteria	8	Bidder to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder.	According to Bidder's policy the copies of certificate cannot be shared outside of organisation Kindy allow authorised signatory/CS declaration for the same	Refer revised Pre Qualification Corrigendum for section
288	55	Annexure 2: Pre-Qualification Criteria	8	Bidder to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder.	Please consider Bidder's Internal certification also.	Refer revised Pre Qualification Corrigendum for section
289	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	8: Project Team and their CVs: With Certification (Marks)	Please consider Bidder's Internal certification for this criteria.	Refer revised Pre Qualification Corrigendum for section
290	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Qualification Criteria Copies of Work order / PO and Completion certificate Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation	Due NDA signed with clients we will not be able to share the WO as a whole Kindy allow us to share Masked SOW with CS certificate stating the correctness of the same.	Refer revised Pre Qualification Corrigendum for section
291	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: Copies of Work order / PO and Completion / Sign off to be submitted for data lake/lake house implementation. PO / SOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.	Due NDA signed with clients we will not be able to share the WO as a whole Kindy allow us to share Masked SOW with CS certificate stating the correctness of the same.	Refer revised Pre Qualification Corrigendum for section
292	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The Bidder and OEH should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Please let us know if GSTN can be considered as "Financial Regulatory body"	No
293	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	1: Details of Institutions where the solution has been implemented - Sector: o Public Sector: 5 marks o Private Sector: 4 marks o Foreign: 2 marks	Please consider equal marks for all the solutions implemented	Refer revised Technical Qualification Corrigendum for section
294	62	Annexure 6: Non-Disclosure Agreement		WHEREAS, the Bidder understands that in the course of submission of the offer for the subject RFP and/or in the aftermath thereof, it may be necessary that the Bidder may perform certain jobs/duties on the Banks properties and/or have access to certain plans, documents, approvals or information of the BANK; NOW THEREFORE, in consideration of the foregoing, the Bidder agrees to all of the following conditions, in order to induce the BANK to grant the Bidder specific access to the BANK's property/information. The Bidder will not publish or disclose to others, nor, use in any services that the Bidder performs for others, any confidential or proprietary information belonging to the BANK, unless the Bidder has first obtained the BANK's written authorization to do so. The Bidder agrees that notes, specifications, designs, memoranda and other data shared by the BANK or, prepared or produced by the Bidder for the purpose of submitting the offer to the BANK for the said solution, will not be disclosed during or subsequent to submission of the offer to the BANK, to anyone outside the BANK	Please add the text high-lighted in Red: WHEREAS, the Bidder understands that in the course of submission of the offer for the subject RFP and/or in the aftermath thereof, it may be necessary that the Bidder may perform certain jobs/duties on the Banks properties and/or have access to certain plans, documents, approvals or information of the BANK; NOW THEREFORE, in consideration of the foregoing, the Bidder agrees to all of the following conditions, in order to induce the BANK to grant the Bidder specific access to the BANK's property/information. The Bidder will not publish or disclose to others, nor, use in any services that the Bidder performs for others, any confidential or proprietary information belonging to the BANK, unless the Bidder has first obtained the BANK's written authorization to do so. Information shall not be deemed Confidential Information if it is: (i) publicly available prior to this Contract or becomes publicly available without a breach by the Bidder; (ii) rightfully received by the Bidder from third parties without accompanying confidentiality obligations; (iii) already in the bidder's possession and was lawfully received from sources other than the Bank; (iv) independently developed by the Bidder; or (v) approved by the Bidder for release, in writing. Information disclosed under this Agreement will be subject to this Agreement for five years following the initial date of disclosure. The Bidder agrees that notes, specifications, designs, memoranda and other data shared by the BANK or, prepared or produced by the Bidder for the purpose of submitting the offer to the BANK for the said solution, will not be disclosed during or subsequent to submission of the offer to the BANK, to anyone outside the BANK	Bidder to comply as per RFP terms
295	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Can you please let us know the current technology stack and the version of the tools/ Softwares used in existing Datawarehouse platform	Refer Technological stack
296	65	Annexure 9: Scope of Work	1: Summary of Project	1.3: Establish consumption layer via API, microservices etc. for downstream consumption by applications and end users.	How many such APTs to be considered for Consumption of the data lake and how many should be considered for downstream system?	15-20 applications
297	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi directional flow of data	Our understanding is that the main source of the data lakehouse data ingestion will be from existing data warehouse. Wanted to understand what are the other systems that we have to ingest data from other than the system mentioned in this? Can we details of such sources and their volumetric details	Refer Annexure 9 : Scope of work
298	72	Annexure 9: Scope of Work	3: Analytics Layer	3.7.3: The proposed solution should be integrated to existing and future versions Business Intelligence tools like Power BI / OBIEE (Present Version of Power BI: 2.117.286.0, Present Version of OBIEE: 12.2.1.4).	What is the license agreement for Power BI currently the bank has? Is it user based license or core based license? What is the expected number of users using the Analytics Reports/Dashboards? Also, the concurrent login users expected?	Will be shared with the Selected Bidder based on requirement
299	112-113	Appendix F: Pre Contract Integrity Pact	8: Fall Clause	Fall Clause	Bidder will be chosen through commercial competitive process and hence, request you to kindly remove Fall Clause from the Integrity Pact	Bidder to comply as per RFP terms



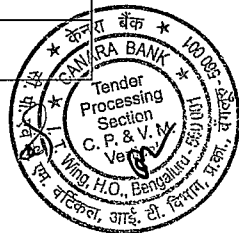
Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
300			eBPG: General Query		Request you to change the % of eBPG to 3% instead of current 10%	Bidder to comply as per RFP terms
301	17-18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	A. Enterprise License Cost for 1st year	Payment of 25% of Enterprise License Cost is marked to be dependent on implementation of use cases and its acceptance / sign off by the bank. Bidder will be procuring the Enterprise licenses on customer name and once it is procured, it is available for the bank for full usage. Hence, our request is not link Enterprise License cost payment with implementation of use cases and entire license cost to be paid on delivery and installation. Use case implementation should be linked with payment of implementation phase only	Bidder to comply as per RFP terms
302	18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	4: One-time Implementation cost of the Solution	Implementation cost payment is fully linked with UAT sign off, implementation in DC/DR and its sign off and go live. Implementation phase is planned to be approx 1 yr duration. So, most of the implementation phase payment will be happening towards the end of implementation phase and this will lead to major cashflow issue. Request you to split the payment for implementation phase as below 1. Requirement Sign off - 15% 2. Design Document submission - 10% 3. Unit Tested Code - 35% 4. System Tested Code - 10% 5. UAT sign off - 10% 6. Implementation in DC and DR - 15% 7. Go Live - 5%	Bidder to comply as per RFP terms
303	56	Annexure 2: Pre-Qualification Criteria	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks In India / Financial Regulatory bodies / Foreign Banks.	5: The bidder should submit Satisfactory performance certificate from clients/ copies of purchase order/work order/ reference letter from the clients to this effect.	Can you please give the complete clause, as current clause is not clear	Refer revised Pre Qualification Corrigendum for section
304	55	Annexure 2: Pre-Qualification Criteria	General Query		Please add a clause for bidder to have quality certificates like - "The bidder should have a valid ISO 9001:2015/27001:2013/CAWIL3 certification as on RFP date."	Refer revised Pre Qualification Corrigendum for section
305	56	Annexure 2: Pre-Qualification Criteria	6	6: The Bidder should have average annual turnover of Rs.100.00 Crores In the last three financial years (i.e., 2019-20, 2020-21 and 2021-22). This must be the individual company turnover and not of any group of companies	Request you to change the Annual Turnover Requirement from 100 Cr to at least 1000 Cr INR. This will ensure that, Canara Bank gets proposal from quality Tier 1 bidders.	Refer revised Pre Qualification Corrigendum for section
306	74	Annexure 9: Scope of Work	5: Resources for the Proposed Solution	5.1: Bidder should ensure that a bidder to OEM ratio of 70:30 resources for implementation of the project with a minimum of 30% from OEM who shall handle critical responsibilities of the implementation such as installation, configuration, platform administration etc	Since bidder is taking entire ownership of all SLA's, it is requested to allow bidder to select % of bidder resources and % of OEM resources that they want to deploy for the project, instead of pushing 70% - 30% distribution on the bidder.	Bidder to comply as per RFP terms
307	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.8: Any financial loss to the Bank on account of fraud taking place due to selected Bidder, its employee or their services provider's negligence shall be recoverable from the selected Bidder along with damages if any with regard to the Bank's reputation and goodwill	Bidder should not be held liable for indirect losses like risk to reputation and goodwill. Request you to remove this clause	Bidder to comply as per RFP terms
308	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.6: If any defect in the Solution is not rectified by the selected bidder before the end of the Warranty Period, the Warranty Period shall be extended until, in the opinion of the Bank: a) the defect has been corrected; and b) the Solution functions in accordance with the Contract for a reasonable period of time	Warranty period should be fixed and should not extend in any scenario, as there are cost implications due to it	b) for a period of 30 days from the date of rectification.
309	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Documentary evidence mentioned is - Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation. In case of NDA with customers, we cannot share some of these documents. Hence, request Bank to accept self certificate signed by Authorized Signatory / Company Secretary	Refer revised Pre Qualification Corrigendum for section
310	89	Annexure 10: Technical Evaluation Criteria	Terms & Conditions	Bank reserves the right to conduct interviews of the proposed team members.	Since bidder is taking entire ownership of all SLA's, it is requested to allow bidder to select the resources to be deployed in the project without any interviews.	Bidder to comply as per RFP terms
311	78	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	1: The proposed solution should have a unified, horizontally scalable, central, parallel processing Data Lakehouse for storage and processing.	Can you share the current architecture so that the proposed solution can leverage same?	Refer Annexure 9 : Scope of work
312	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	5: The proposed solution should bundle and offer all the features / technology components through a unified user interface with a single user login.	Is there any tool currently used for single sign on? If so, please suggest if we can leverage same.	The specification mentioned in the RFP Clause is to integrate into Bank's existing Single Sign On/Single Authentication System (SAS)/Microsoft AD/LDAP facility.
313	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Please confirm if there are any other integrating systems other than mentioned here. Any external or third party integrations (eg: CIBIL, UIDAI etc), please clarify.	Refer Annexure 9 : Scope of work. Platform should have ability to integrate Platform should have ability to integrate external party data
314	15	Section C: Deliverable and Service Level Agreements	5: Uptime	The selected bidder shall guarantee a 24x7x365 availability with monthly uptime of 99.90% for the solution as per Scope of Work (Annexure-9), during contract period, which shall be calculated on monthly basis.	Please update the clause to "The selected bidder shall guarantee ensure a 24x7x365 availability with monthly uptime of 99.90% for the solution as per Scope of Work (Annexure-9), during contract period, which shall be calculated on monthly basis"	Bidder to comply as per RFP terms



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
315	16	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.6: If any act or failure by the selected Bidder under the agreement results in failure or inoperability of systems and if the Bank has to take corrective actions, to ensure functionality of its property, the Bank reserves the right to impose penalty, which may be equal to the cost it incurs or the loss it suffers for such failures. 6.1.7: If the selected Bidder fails to complete the due performance of the contract as per RFP terms, it will be considered as breach of contract and Bank reserves the right to either cancel the order or to recover a suitable amount as deemed reasonable as Penalty / Liquidated Damage for non-performance or both. 6.1.8: Any financial loss to the Bank on account of fraud taking place due to selected Bidder, its employee or their services provider's negligence shall be recoverable from the selected Bidder along with damages if any with regard to the Bank's reputation and goodwill. 6.1.9: Bank may impose penalty to the extent of damage to its any equipment, if the damage was due to the actions directly attributable to the staff of the selected Bidder.	Kindly confirm on the below assumptions: 6.1.6 - If bank has taken a corrective measure, selected Bidder will bear the cost instead of penalty. 6.1.7 - Cannot agree to penalty to mere failure to comply with RFP terms. 6.1.8 - Cannot agree to penalty for indirect damages (damage to reputation or goodwill). 6.1.9 - Instead of penalty, selected Bidder can reimburse the amount of equipment.	Bidder to comply as per RFP terms
316	18	Section C: Deliverable and Service Level Agreements	6: Payment Terms	General query	Please include the below clause: Provision of interest on late fee at the rate of 1% per month should be added. If Customer fails pay any Invoice in accordance with Section 8 and remains in default not less than 7 days after being notified in writing to make such payment, then Bidder shall be entitled to : (i) suspend performance or reduce its rate of performance under any Statement of Work until such payment is made and Customer shall be liable for any costs of such suspension or reduction in rate of performance and Bidder shall be entitled to an extension of time; or (ii) terminate this Agreement with immediate effect.	Bidder to comply as per RFP terms
317	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.1: The selected Bidder warrants that the supplied tools will be free of defects in workmanship and materials for a period of time consistent with industry standards and the nature of the Hardware & Software ("Warranty Period").	Please consider that the Bidder can only warrant conformance with the specification or requirement set forth in the Scope of Work. Cannot warrant for other defects.	Bidder to comply as per RFP terms
318	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.2: The selected Bidder has to provide comprehensive On-site warranty of One (1) year for supplied solutions and tools including Software, OS, licenses etc.	Kindly update the clause to below: "The selected Bidder has to provide comprehensive On-site warranty of One (1) year 30 Days for supplied solutions and tools including Software, OS, licenses etc."	Bidder to comply as per RFP terms
319	20	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.7: Despite any other provision, the Bank, may return a defective Hardware/ Software to the selected bidder within Sixty (60) days of delivery of the Hardware/ Software and the selected bidder shall immediately provide full exchange or refund. For the purpose of this section, "defective Solution" includes, but is not limited to: a) broken seals; b) missing items; and c) Software that are not the most current version at the time of shipping.	Kindly consider that the Bank shall return the defective solution only if the bidder fails to remedy the defect u/s 9.4	Bidder to comply as per RFP terms
320	20	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.9: The selected bidder shall be fully responsible for the manufacturer's warranty in respect of proper design, quality and workmanship. The selected bidder must warrant all components, accessories, spare parts etc., against any manufacturing defects during the warranty period.	Bidder cannot take responsibility for manufacturer's warranty kindly remove this clause	Bidder to comply as per RFP terms
321	20	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	General query	Kindly include the below Exceptions to the warranty where Bidder will not be liable, like: a. act or omission of the bank; b. hardware, software or system failure not attributable to the Bidder; and c. a force majeure event.	Bidder to comply as per RFP terms
322	20	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	General query	Kindly include the Warranty Disclaimer - disclaiming all other implied, statutory or other warranties with respect to solution, including warranties of merchantability and fitness for purpose	Bidder to comply as per RFP terms
323	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.3: Any corruption in the software/license/media shall be rectified during the full period of the contract, at no extra cost to the Bank.	Kindly update the clause as below: "Any corruption in the software/license/media caused due to the proposed solution shall be rectified during the full period of the contract, at no extra cost to the Bank. For pre-existing defect or issues caused by code/License/media NOT deployed by the bidder will not be included in the cost"	Bidder to comply as per RFP terms
324	21	Section C: Deliverable and Service Level Agreements	16: Subcontracting	16.3: In case subcontracting is warranted in interest of the project, the selected bidder should take consent of the Bank before undertaking any such agreement. The selected bidder should further ensure subcontracting agreement is vetted by the Bank.	Kindly update the clause as below: "In case subcontracting is warranted in interest of the project, the selected bidder should take consent of the Bank before undertaking any such agreement. The selected bidder should further ensure subcontracting agreement is vetted by the Bank."	Bidder to comply as per RFP terms
325	22	Section C: Deliverable and Service Level Agreements	16: Subcontracting	16.5: The selected Bidder shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required of the selected Bidder under the contract without the prior written consent of the Bank. The selected Bidder should not sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority (refer: F/No.6/18/2019-PPD dated 23/07/2020 of Public Procurement Division, Department of Expenditure, Ministry of Finance). Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws	Kindly update the clause as below" The selected Bidder shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required of the selected Bidder under the contract without the prior written consent of the Bank. The selected Bidder should not sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority (refer: F/No.6/18/2019-PPD dated 23/07/2020 of Public Procurement Division, Department of Expenditure, Ministry of Finance). Any false declaration and non-compliance of the above would be a ground for immediate termination of the contract and further legal action in accordance with the laws	Bidder to comply as per RFP terms

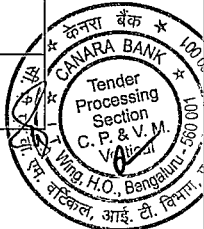


Replies to Pre Bid Queries to GeM Bid Ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
326	22	Section C: Deliverable and Service Level Agreements	17: Right to Audit	17.1: The selected Bidder (Service Provider) has to get itself annually audited by Internal/external empaneled Auditors appointed by the Bank/inspecting official from the Reserve Bank of India or any regulatory authority, covering the risk parameters finalized by the Bank/such auditors in the areas of products (IT hardware/software) and services etc., provided to the Bank and the Service Provider is required to submit such certification by such Auditors to the Bank. The Service Provider and or his/their outsourced agents/subcontractors (If allowed by the Bank) shall facilitate the same. The Bank can make its expert assessment on the efficiency and effectiveness of the security, control, risk management, governance system and process created by the Service Provider. The Service Provider shall, whenever required by the Auditors, furnish all relevant Information, records/data to them. All costs for such audit shall be borne by the Bank.	Kindly update the clause as below: "The selected Bidder (Service Provider) has to get itself annually audited during business hours by Internal/external empaneled Auditors, who are not direct competitor of the Bidder, appointed by the Bank/inspecting official from the Reserve Bank of India or any regulatory authority, covering the risk parameters finalized by the Bank/such auditors in the areas of products (IT hardware/software) and services etc., provided to the Bank and the Service Provider is required to submit such certification by such Auditors to the Bank. The Service Provider and or his/their outsourced agents/subcontractors (If allowed by the Bank) shall facilitate the same. The Bank can make its expert assessment on the efficiency and effectiveness of the security, control, risk management, governance system and process created by the Service Provider. The Service Provider shall, whenever required by the Auditors, furnish all relevant Information, records/data to them. All costs for such audit shall be borne by the Bank."	Bidder to comply as per RFP terms
327	22	Section C: Deliverable and Service Level Agreements	17: Right to Audit	17.3: The Service Provider shall, whenever required by the Bank, furnish all relevant Information, records/data to such auditors and/or inspecting officials of the Bank/Reserve Bank of India and or any regulatory authority. The Bank reserves the right to call and/or retain for any relevant material Information/reports including auditor review reports undertaken by the service provider (e.g., financial, internal control and security reviews) and findings made on Selected Bidder in conjunction with the services provided to the Bank.	Kindly confirm on below assumptions: The auditor should not require internal audit report (financial, internal control and security reviews). Further, the auditor should be specifically prohibited from installing software on system or remotely access system of the service provider.	Bidder to comply as per RFP terms
328	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.1: The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions: 13.1.1.Delay in delivery of services in the specified period. 13.1.2.Serious discrepancies noted in the inspection. 13.1.3.Breaches in the terms and conditions of the Order	Kindly consider the below points: 1. Bidder cannot agree to recovery to expenditure and liquidated damages. 2. Also, in grounds, the breach should be material one which has not been cured and delay should be excessive.	Bidder to comply as per RFP terms
329	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.2: The Bank reserves the right to cancel the contract placed on the selected Bidder and recover expenditure incurred by the Bank on the following circumstances: 13.2.1.Non submission of acceptance of order within 7 days of order. 13.2.2.Excessive delay in execution of order placed by the Bank. 13.2.3.The selected Bidder commits a breach of any of the terms and conditions of the bid. 13.2.4.The Bidder goes in to liquidation voluntarily or otherwise. 13.2.5.An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid. 13.2.6.The progress made by the selected Bidder is found to be unsatisfactory. 13.2.7.If deductions on account of liquidated Damages exceeds more than 10% of the total contract price. 13.2.8.If found blacklisted by any Govt. Department / PSU / other Banks / CERT-in, during the course of contracted period. 13.2.9.Non satisfactory performance of the Project in terms of affecting the Core Systems of the Bank or the Core Business of the Bank and the functioning of the Branches/Offices of the Bank.	For 13.2.3, kindly consider that the breach should be material ones which has not been cured. Further, cannot agree to grounds stated in clause 13.2.5 to 13.2.7.	Bidder to comply as per RFP terms
330	39	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.3: Bank shall serve the notice of termination to the Bidder at least 30 days prior, of its intention to terminate services without assigning any reasons.	Kindly consider the below points: 1. Notice for termination for convenience should be at least 90 days, and 2. Bank should also be liable to pay the termination fees.	Bidder to comply as per RFP terms
331	39	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.4: In case the selected bidder fails to conduct an event as per stipulated schedule, the Bank reserves the right to get it conducted by alternate sources at the risk, cost and responsibility of the selected bidder by giving 7 days prior notice to the bidder.	Kindly update the clause as below: In case the selected bidder fails to conduct an event as per stipulated schedule, the Bank reserves the right to get it conducted by alternate sources at the risk, cost and responsibility of the selected bidder by giving 7 days prior notice to the bidder. However, this can be exercised only for material breach of Contract.	Bidder to comply as per RFP terms
332	39	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.5: After the award of the contract, if the selected Bidder does not perform satisfactorily or delays execution of the contract, the Bank reserves the right to get the balance contract executed by another party of its choice by giving one-month notice for the same. In this event, the selected Bidder is bound to make good the additional expenditure, which the Bank may have to incur to carry out for the execution of the balance of the order/contract. Such additional expenditure shall be incurred by the bank within reasonable limits & at comparable price prevailing in the market. This clause is also applicable, if for any reason, the contract is cancelled.	Kindly consider the below assumptions: 1. Instead of a satisfactory performance, Bidder will commit to comply with specifications or requirements of the Bank set forth in Scope of Work. 2. Further, there will be step-in, only if there's a material failure, which Bidder fails to remedy. 3. Cost of step-in payable by Bidder should be limited to 10% of the fees payable to Bidder. 4. Bidder will not be liable to pay for affected service if later it is found that it was not Bidder's fault. 5. Bank should step-out if Bidder demonstrate its ability to re-commence or if 60 days of step-in are complete.	Bidder to comply as per RFP terms
333	39	Section F: Ownership and Awarding of Contract	13: Order Cancellation/ Termination of Contract	13.6: The Bank reserves the right to recover any dues payable by the selected Bidder from any amount outstanding to the credit of the selected Bidder, including the pending bills and security deposit, if any, under this contract.	Kindly consider the below: Bidder will issue credit note for any amount owed by Bidder to the Bank. Such credit note can be redeemed against Invoices. It's important for book-keeping purpose.	Bidder to comply as per RFP terms
334	41	Section G: General Conditions	4: Human Resource Requirement	4.3: In case the performance of the bidder/their CSP/agent/employees engaged in the project is not satisfactory or is detrimental to the interests of the Bank, the Bidder shall have to replace the said person within the time limits stipulated by the Bank. Where the bidder fails to comply with the Bank's request, the Bank may replace the said person or their agents/employees on its own.	Kindly update the clause as below: In case the performance of the bidder/their CSP/agent/employees engaged in the project is not satisfactory or is detrimental to the interests of the Bank, the Bidder shall have to replace the said person within the time limits stipulated by the Bank. Where the bidder fails to comply with the Bank's request, the Bank may replace the said person or their agents/employees on its own.	Bidder to comply as per RFP terms
335	42	Section G: General Conditions	6: Inspection of Records	6: Bank at its discretion may verify the accounts and records or appoint third party for verification including an auditor for audit of accounts and records including Hardware, Software & other Items provided to the Bank under this RFP and the 7: selected Bidder shall extend all cooperation in this regard.	Please confirm the below assumption: Such inspection will be subject to Section C (Deliverable and Service Level Agreements) Clause 18(Right to Audit).	Bidder to comply as per RFP terms

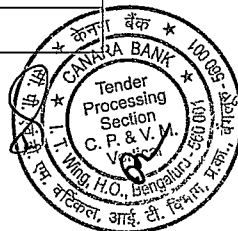


Replies to Pre Bid Queries to GeM Bid ref. no. GEW/2023/8/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
336	42	Section G: General Conditions	7: Negligence	7: In connection with the work or contravenes the provisions of General Terms, if the selected bidder neglects to execute the work with due diligence or expedition or refuses or neglects to comply with any reasonable order given to him in writing by the Bank, in such eventuality, the Bank may after giving notice in writing to the selected bidder calling upon him to make good the failure, neglect or contravention complained of, within such times as may be deemed reasonable and in default of the said notice, the Bank shall have the right to cancel the Contract holding the selected bidder liable for the damages that the Bank may sustain in this behalf. Thereafter, the Bank may make good the failure at the risk and cost of the selected bidder.	Any such neglect or refusal should be willful which actually results in a material breach. Further, Bank may cancel the contract only if Bidder fails to remedy such material breach a agreed period (but no less than 30 days).	Bidder to comply as per RFP terms
337	42	Section G: General Conditions	8: Assignment	8.1: The selected bidder shall not assign to any one, in whole or in part, its obligations to perform under the RFP/contract, except with the Bank's prior written consent.	Kindly make this clause mutual in all aspects.	Bidder to comply as per RFP terms
338	42	Section G: General Conditions	8: Assignment	General query	Kindly include Accounts Receivable Discounting clause: Customer hereby consents to Bidder assigning all or some of its Receivables under this Agreement to a third party ("Bank") and Bidder is hereby notifying Customer of such assignment. For the sake of clarity, the term "Receivables" is hereby defined as any amounts due from the Customer under an Invoice raised by the Bidder for Services delivered under this Agreement. Further, Customer acknowledges that Bidder may share limited excerpts of this Agreement and other details directly relating to the Receivables on a "need to know" basis with the Bank, subject to appropriate confidentiality undertakings by the Bank	Bidder to comply as per RFP terms
339	43	Section G: General Conditions	11: Guarantees	11: The bidder should guarantee that the hardware items delivered to the Bank are brand new, including all components. In the case of software, the bidder should guarantee that the software supplied to the Bank includes all patches, updates etc., and the same are licensed and legally obtained. All hardware and software must be supplied with their original and complete printed documentation.	Kindly update the clause as below: The bidder should guarantee ensure that the hardware items delivered to the Bank are brand new, including all components. In the case of software, the bidder should guarantee ensure that the software supplied to the Bank includes all patches, updates etc., and the same are licensed and legally obtained. All hardware and software must be supplied with their original and complete printed documentation.	Bidder to comply as per RFP terms
340	43	Section G: General Conditions	12: Intellectual Property Rights	12.1: The bidder should guarantee that the hardware items delivered to the Bank are brand new, including all components. In the case of software, the bidder should guarantee that the software supplied to the Bank includes all patches, updates etc., and the same are licensed and legally obtained. All hardware and software must be supplied with their original and complete printed documentation.	Instead of a warranty for IP infringement, Bidder will provide indemnity for the same kindly consider. Request to add the IP indemnity for third party IP infringement claim clauses as requested in the query list.	Bidder to comply as per RFP terms
341	43	Section G: General Conditions	12: Intellectual Property Rights	12.2.c: If the rights to use cannot be procured or the deliverables cannot be replaced or modified, accept the return of the deliverables and reimburse bank for any amounts paid to Bidder for such deliverables, along with the replacement costs incurred by Bank for procuring an equivalent equipment in addition to the penalties levied by Bank. However, Bank shall not bear any kind of expense, charge, fees or any kind of costs in this regard. Notwithstanding the remedies contained herein, the bidder shall be responsible for payment of penalties in case service levels are not met because of inability of the bank to use the proposed solution.	Kindly confirm the below assumptions: 1. the refund will be on a pro-rata basis (based on a five-year straight line depreciation commencing upon delivery). 2.If Bidder has refunded the amount, it will not be liable for any replacement cost or penalties.	Bidder to comply as per RFP terms
342	43	Section G: General Conditions	12: Intellectual Property Rights	General query	Please add the below clause: Exceptions to the indemnity against infringement claims. No liability of Bidder where the infringement results from customer's specifications; third-party software, where Bidder uses such software has been in accordance with relevant licensing terms; modification of Deliverables unless made by Bidder; use or incorporation of deliverable in a manner for which they were not designed.	Bidder to comply as per RFP terms
343	43	Section G: General Conditions	12: Intellectual Property Rights	General query	Please add the below clause: Bank's indemnity obligation for any claim of IPR infringement arising out of use of material provided by the Bank.	Bidder to comply as per RFP terms
344	43	Section G: General Conditions	12: Intellectual Property Rights	General query	Please add the below clause: Provision governing the use of Supplier's material if those are embedded in the Deliverable.	Bidder to comply as per RFP terms
345	44	Section G: General Conditions	13: Confidentiality and Non-Disclosure	13.1: The selected Bidder shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. The selected Bidder shall suitably defend, indemnify Bank for any loss/damage suffered by Bank on account of and to the extent of any disclosure of the confidential information. The selected Bidder shall furnish an undertaking as given in Annexure-6. 13.2.: No media release/public announcement or any other reference to the RFP or any program there under shall be made without the written consent of the Bank, by photographic, electronic or other means.	Kindly make the The confidentiality obligation mutual wherein confidentiality of data of both the Parties are to be ensured. Also requesting to include the below: Information shall not be deemed Confidential Information if it is: (i) publicly available prior to this Contract or becomes publicly available without a breach by the Bidder; (ii) rightfully received by the Bidder from third parties without accompanying confidentiality obligations; (iii) already in the bidder's possession and was lawfully received from sources other than the Bank; (iv) independently developed by the Bidder; or (v) approved by the Bidder for release, in writing. Information disclosed under this Agreement will be subject to this Agreement for five years following the initial date of disclosure.	Bidder to comply as per RFP terms
346	44	Section G: General Conditions	14: Indemnity	14.1: The Bidder shall keep and hold the Bank indemnified and harmless from time to time and at all times against all actions, proceedings, claims, suits, liabilities (including statutory liability), penalties, demands, charges, costs (including legal costs) and expenses, damages, losses and any other expenses which may be caused to or suffered by or made or taken against the Bank arising out of: 14.1.1.The breach, default or non-performance of undertakings, warranties, covenants or obligations by the Bidder; 14.1.2.Any contravention or Non-compliance with any applicable laws, regulations, rules, statutory or legal requirements by the Bidder;	Bidder does not provide Indemnity for Inter-se claims. These Indemnities are not acceptable	Bidder to comply as per RFP terms
347	44	Section G: General Conditions	14: Indemnity	14.2: The Bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of service provided by them.	Bidder does not provide Indemnity for Inter-se claims.	Bidder to comply as per RFP terms

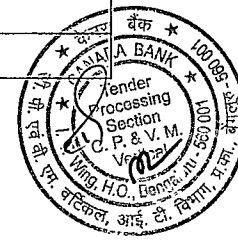


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
348	45	Section G: General Conditions	15: Force Majeure	15.2: For the purpose of this clause, "Force Majeure" shall mean an event beyond the control of the selected Bidder, due to or as a result of or caused by acts of God, wars, insurrections, riots, earth quake and fire, events not foreseeable but does not include any fault or negligence or carelessness on the part of the selected Bidder, resulting in such a situation.	Kindly make the definition more inclusive by adding terrorist activities, government sanctions, economic sanctions, trade sanctions, embargo and any actions or decrees of government bodies.	Bidder to comply as per RFP terms
349	45	Section G: General Conditions	15: Force Majeure	15	Please add the below clause: Remote working and covid clauses to be included as below:) In the event Bidder is subjected to a force majeure event(s) including but not limited to pandemic, government action or prohibition, curtailment or prohibition of transportation, affecting health and safety of employees, where Bidder is unable to provide services from the service location set out in the Statement of Work and/or Implement its business continuity plan ("Uncontrollable Event"), then Customer hereby agrees that (a) unless otherwise notified by the Bidder, such Uncontrollable Event shall not be construed as a Force Majeure Event as set out in (i); and (b) the Bidder shall be entitled to allow its employees to work and perform Services from an alternative location using hardware (laptop or desktop or thin client) provided by Bidder or the Customer or that is personal to the employee ("Remote Working"). In the event of an Uncontrollable Event leading to Remote Working, Bidder shall notify in writing or through electronic mail to Customer as soon as reasonably practicable of the Uncontrollable Event and Bidder implementing Remote Working. During the period Bidder provides Services in Remote Working mode: (1) Customer hereby acknowledges that Bidder will have limited control over the environment from where the Services are rendered and the Services may be interrupted; (2) Bidder shall make reasonable efforts to adhere to the obligations set out in the Agreement and/or the Statement of Work; (3) Bidder shall be excused from any deficiencies or operational gaps that may arise as a result of the Uncontrollable Event or Remote Working; (4) Parties may agree on any specific reasonable security measures that the Customer wishes Bidder to implement at Customer's costs, while Remote Working; (5) Parties shall conduct periodic reviews at reasonable intervals regarding the circumstances surrounding the Uncontrollable Event and Remote Working; and (6) Customer shall be responsible for the security measures of their remote access infrastructure and Customer assets provided to Bidder, in the event of Vendor's personnel resources connecting directly via Internet using a Customer provided/ personal asset.	Bidder to comply as per RFP terms
350	46	Section G: General Conditions	16: Responsibilities of the Bidder	16.5: The bidder represents and acknowledges to the Bank that it possesses necessary experience, expertise and ability to undertake and fulfill its obligations, under all phases involved in the performance of the provisions of this RFP. The bidder represents that all software and hardware to be supplied in response to this RFP shall meet the requirement of the solution/service proposed by the bidder. The bidder shall be required to independently arrive at a solution, which is suitable for the Bank, after taking into consideration the effort estimated for implementation of the same. If any services, functions or responsibilities not specifically described in this RFP are an inherent, necessary or customary part of the deliverables or services and are required for proper performance or provision of the deliverables or services in accordance with this RFP, they shall be deemed to be included within the scope of the deliverables or services, as if such services, functions or responsibilities were specifically required and described in this RFP and shall be provided by the bidder at no additional cost to the Bank. The bidder also acknowledges that the Bank relies on this statement of fact, therefore neither accepting responsibility for, nor relieving the bidder of responsibility for the performance of all provisions and terms and conditions of this RFP, the Bank expects the bidder to fulfill all the terms and conditions of this RFP	Kindly confirm the below assumption: bidder only commits to perform services which are included in the RFP, and no inherent or necessary services can be deemed to be part of RFP.	Bidder to comply as per RFP terms
351	47	Section G: General Conditions	17: Corrupt and Fraudulent Practices	17.4: Any effort/attempt by a bidder to influence the Bank in its decision on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid and/or blacklisting the Bidder. The Bidder agrees not to hire, solicit or accept solicitation either directly or through a third party from any of the employees of the Bank directly involved in this contract during the period of contract and one year thereafter, except as the parties may agree on the case to case basis.	Request you to make the non-solicitation obligation mutual and it will not be applicable to personnel who are hired in response to a bona-fide advertisement to a public at large.	Bidder to comply as per RFP terms
352	62	Annexure G: Non-Disclosure Agreement		General Query	Please add the below clause: Exceptions to the Confidential Information. To include: information shall not be deemed Confidential Information if it is: (i) publicly available prior to this Contract or becomes publicly available without a breach by the Bidder; (ii) rightfully received by the Bidder from third parties without accompanying confidentiality obligations; (iii) already in the bidder's possession and was lawfully received from sources other than the Bank; (iv) independently developed by the Bidder; or (v) approved by the Bidder for release, in writing. Information disclosed under this Agreement will be subject to this Agreement for five years following the initial date of disclosure.	Bidder to comply as per RFP terms
353	108	Appendix F: Pre Contract Integrity Pact	8: Fall Clause	8.1: The BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems/services at a price lower than that offered in the present bid to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law and if it is found at any stage that similar product/systems or sub systems/services was supplied by the BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law, at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER to the BUYER, if the contract has already been concluded.	Requesting to remove the Clause	Bidder to comply as per RFP terms
354	116	Appendix G: Draft Contract Agreement	1: Scope of Work	1: As per the requirement of the Bank.	Please consider that bidder can only agree the scope of work provided in the RFP and that as agreed under the Scope of Work entered into between the Parties	Bidder to comply as per RFP terms



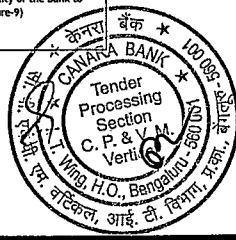
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
355	117	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.1: The Bank reserves its right to cancel the entire / unexecuted part of CONTRACT at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract, in the event of one or more of the following conditions: 8.1.1. Delay in delivery beyond the specified period for delivery. 8.1.2. Serious discrepancies noted in the items delivered. 8.1.3. Breaches in the terms and conditions of the Order.	Kindly consider that bidder cannot agree to recovery of expenditure and liquidated damages. Also, in grounds, the breach should be material one which has not been cured and delay should result in material breach.	Bidder to comply as per RFP terms
356	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.2: The Bank reserves the right to cancel the contract placed on the Vendor/Service Provider and recover expenditure incurred by the Bank on the following circumstances: 8.2.1. Non submission of acceptance of order within 7 days of order. 8.2.2. Excessive delay in execution of order placed by the Bank. 8.2.3. The Vendor/Service Provider commits a breach of any of the terms and conditions of the bid. 8.2.4. The Vendor/Service Provider goes in to liquidation voluntarily or otherwise. 8.2.5. An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid. 8.2.6. The progress made by the Vendor/Service Provider is found to be unsatisfactory. 8.2.7. If deductions on account of liquidated Damages exceeds more than 10% of the total contract price.	Kindly consider that For 8.2.3, the breach should be material ones which has not been cured within 30 days. Further, cannot agree to grounds stated in clauses 13.2.5 to 13.2.7.	Bidder to comply as per RFP terms
357	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.3: Bank shall serve the notice of termination to the Vendor/Service Provider at least 30 days prior, of its intention to terminate services without assigning any reasons.	Kindly consider the below points: 1. Notice for termination for convenience should be at least 90 days, and Bank 2. Bank should also be liable to pay the termination fees.	Bidder to comply as per RFP terms
358	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.5: After the award of the contract, if the Vendor/Service Provider does not perform satisfactorily or delays execution of the contract, the Bank reserves the right to get the balance contract executed by another party of its choice by giving one months' notice for the same. In this event, the Vendor/Service Provider is bound to make good the additional expenditure, which the Bank may have to incur for the execution of the balance of the order/contract. Such additional expenditure shall be incurred by the bank within reasonable limits & at comparable price prevailing in the market. This clause is also applicable, if for any reason, the contract is cancelled.	Kindly consider the below assumptions: 1. Instead of a satisfactory performance, Bidder will commit to comply with specifications or requirements of the Bank set forth in Scope of Work. 2. Further, there will be step-in, only if there's a material failure, which Bidder fails to remedy. 3. Cost of step-in payable by Bidder should be limited to 10% of the fees payable to the Bidder. 4. Bidder will not be liable to pay for affected service if later it is found that it was not Bidder's fault. 5. Bank should step-out if Bidder demonstrate its ability to re-commence or if 60 days of step-in are complete.	Bidder to comply as per RFP terms
359	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	8.6: The Bank reserves the right to recover any dues payable by the Vendor/Service Provider from any amount outstanding to the credit of the Vendor/Service Provider, including the pending bills and security deposit, if any, under this contract.	Instead Bidder will issue credit note for any amount owed by Bidder to the Bank. Such credit note can be redeemed against Invoices. It's important for book-keeping purpose.	Bidder to comply as per RFP terms
360	118	Appendix G: Draft Contract Agreement	8: Order Cancellation/ Termination of Contract	General Query	Please add the below clause: Bidder's right to cancel the Contract if Bank fails to pay the Invoices.	Bidder to comply as per RFP terms
361	120	Appendix G: Draft Contract Agreement	11: Indemnity	11: Same as clause 14 of Section G General Conditions	Bidder does not provide indemnity for inter-se claims. These indemnities are not acceptable	Bidder to comply as per RFP terms
362	120	Appendix G: Draft Contract Agreement	12: Confidentiality and Non-Disclosure	12.1: VENDOR/ SERVICE PROVIDER shall take all necessary precautions to ensure that all confidential information is treated as confidential and not disclosed or used other than for the purpose of project execution. VENDOR/ SERVICE PROVIDER shall suitably defend, indemnify BANK for any loss/damage suffered by BANK on account of and to the extent of any disclosure of the confidential information. VENDOR/ SERVICE PROVIDER shall furnish an undertaking in the prescribed format.	1. The confidentiality obligation should be mutual, and 2. Indemnity obligation with respect to confidentiality should be mutual and shall be limited to third party claims only.	Bidder to comply as per RFP terms
363	121	Appendix G: Draft Contract Agreement	12: Confidentiality and Non-Disclosure	12.3: Provided that the Confidentiality Clause may not be applied to the data or information which: a) Was available in the public domain at the time of such disclosure through no wrongful act on the part of VENDOR/ SERVICE PROVIDER. b) Is received by VENDOR/ SERVICE PROVIDER without the breach of this Agreement. c) Is required by law or regulatory compliance to disclose to any third person. d) Is explicitly approved for release by written authorization of the Bank. THESE CONFIDENTIALITY OBLIGATIONS SHALL SURVIVE THE TERMINATION OF THIS CONTRACT AND THE VENDOR/ SERVICE PROVIDER SHALL BE BOUND BY THE SAID OBLIGATIONS.	Kindly Include One more exception as "e) Independently developed by the receiving party." Further, bidder cannot agree to perpetual confidentiality obligation. It shall survive for the period of 5 years from the date of disclosure.	Bidder to comply as per RFP terms
364	120	Appendix G: Draft Contract Agreement	General Query	General Query	Please add the below clause: Clear definition of Confidential Information. To include : "Confidential and Proprietary Information" as used in this Agreement shall mean any and all technical and non-technical information, including but not limited to business plans, business forecasts, research, financial information, procurement requirements, purchasing requirements, manufacturing, customer lists, vendors, sales and merchandising efforts, marketing plans, experimental work, development, design details, specifications, engineering, patents, copyrights, trade secrets, proprietary information, methodologies, techniques, sketches, drawings, models, inventions, know-how, processes, apparatus, equipment, algorithms, software programs, software source documents, and formulae, in any way related to the current, future and proposed business, products and services of either of the parties.	Bidder to comply as per RFP terms
365	120	Appendix G: Draft Contract Agreement	General Query	General Query	Please add the below clause: Bidder should have right to share the confidential information with its affiliates, consultants, subcontractors on need-to-know basis.	Bidder to comply as per RFP terms
366	121	Appendix G: Draft Contract Agreement	13: Force Majeure	13: Same as clause 15 of Section G General Conditions	Requesting you to make this clause more inclusive by adding terrorist activities, government sanctions, economic sanctions, trade sanctions, embargo and any actions or decrees of government bodies.	Bidder to comply as per RFP terms



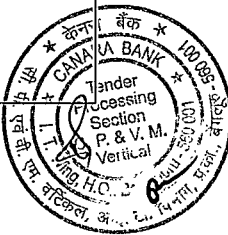
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
367				General Query	Please add the below clause: Limitation of liability clause. Proposed Clause to be included as below : THE TOTAL, CUMULATIVE LIABILITY OF VENDOR AND ITS AFFILIATES UNDER THIS AGREEMENT AND ANY DELIVERY SCHEDULE, WHETHER IN CONTRACT, TORT OR OTHERWISE, SHALL BE LIMITED TO THE AVERAGE AMOUNTS PAID BY PURCHASER TO VENDOR UNDER THE APPLICABLE DELIVERY SCHEDULE DURING EACH CONSECUTIVE TWELVE (12) MONTHS FOLLOWING THE EFFECTIVE DATE. IN NO EVENT SHALL EITHER PARTY BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES OR BUSINESS INTERRUPTION, LOSS OF ANTICIPATED SAVINGS, LOSS OF GOODWILL OR REPUTATION OR LOSS OF PROFITS, HOWSOEVER CAUSED, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT AND WHETHER OR NOT THE PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.	Bidder to comply as per RFP terms
368				General Query	Please add the below clause: Acceptance Testing clause. To include the below : 22.1 Unless otherwise set forth in the applicable delivery schedule, Purchaser shall have thirty (30) business days following the date on which deliverables are delivered to it by Vendor to complete testing of the deliverables (the "Acceptance Period") to provide written notice of acceptance or material non-compliance with the acceptance criteria. 22.2 If no written notification of acceptance or material non-compliance with the acceptance criteria is received by Vendor within the Acceptance Period or if the deliverables are utilized for purposes other than testing by Purchaser, the deliverables shall be deemed accepted by Purchaser. 22.3 If Purchaser notifies Vendor in writing of any material non-conformance in the deliverables in accordance with clause 22.1, then the Vendor shall, within fifteen (15) days (or within such other time as agreed to in the delivery schedule) of such notice, modify the deliverables in a reasonable effort to make them materially conform to the acceptance criteria. The acceptance testing process shall be repeated in such cases. If the Vendor is unable to remedy any such material non-conformance despite three (3) attempts to do so, Purchaser's sole and exclusive remedy shall be to reject the defective and non-conforming deliverable and to recover from Vendor the amount paid in advance by Purchaser to Vendor for the defective and non-conforming deliverable.	Bidder to comply as per RFP terms
369				General Query	Please add the below clause: Non-solicitation clause : Neither party should directly or indirectly employ any personnel of the other party who have been directly involved in the provision or receipt of the services during the term of their involvement and for a minimum of 12 months thereafter. This restriction does not apply to personnel who are hired by a party in response to a bona fide advertisement to the public at large, so long as the personnel was not directed to the advertisement or was otherwise invited to apply.	Bidder to comply as per RFP terms
370				General Query	Please add the below clause: Compliance with Law (including Change in Law provision) clause. 19.1 Each Party shall comply with all laws and regulations specifically applicable to their respective business activities ("Applicable Laws"). 19.2 Notwithstanding anything to the contrary stated in this Agreement, prior to the execution of the applicable delivery schedule, Purchaser shall be responsible for notification to Vendor of all laws, regulations, government or regulatory approved codes of practice or orders, license conditions, and all similar or analogous requirements that are applicable to the business of Purchaser in any jurisdiction where services are performed or received and which Purchaser wishes Vendor to comply with in the performance of services or the creation of specific deliverables. Promptly upon becoming aware of any changes or proposed changes to such laws, Purchaser shall promptly inform Vendor of the same. 19.3 In the event that there are any changes in law or regulations, applicable to this Agreement, including but not limited to changes in Applicable Laws, which adversely affect Vendor's ability to render the services and deliverables under any delivery schedule, the Parties shall upon mutual agreement amend the applicable delivery schedule (using the Change Order mechanism) in order to enable Vendor to render the required services and deliverables in accordance with the laws and regulations as amended at no additional cost to Vendor, or to compensate Vendor for any reasonable additional costs which it would have to incur in order to comply with the changes to such laws or regulations.	Bidder to comply as per RFP terms
371	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CRM, Non-CRM applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bidirectional flow of data	Need existing architecture integration details with Datawarehouse , Downstream applications and the following details on Datasources 1.Data Source Name 2. Description 3. Source Data Type (Database / JSON/ CSV/ Excel/Word/ etc) 4. Current Data Ingestion (ETL / DBLink/ SFile,etc 5. Ingestion Frequency (Daily / weekly / Monthly / Real time) 6. Daily Incremental Volume (in TB) 7. Total Volume (in TB) Data Integration - Category	Refer Annexure 9 : Scope of work
372	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	We understand that bidder to propose the required Infrastructure sizing Internets of compute and storage for environments mentioned in the RFP Dev, UAT, DC, DR. Pls confirm to bidder to propose the Infrastructure including Hosting, servers, storage, Network and security components, links and bandwidth etc. If bidder to propose the Infrastructure, please specify the technical specifications and components required.Also, Pls clarify the scope of bidder to supply and implement of these Infrastructure components.	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9, Annexure-9)

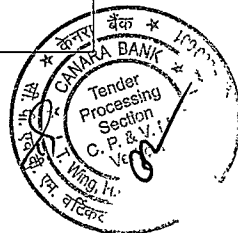


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
373	73	Annexure 9: Scope of Work	3.9: Model Deployment	3.9.5: Seamless movement of model from UAT, DEV, Production based on model performance	Please specify is ant sizing criteria to be followed by bidder to size the Dev, UAT and DR environment Ec: Dev 10% of DC	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9. Annexure-9)
374	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.1: The selected Bidder should inform Bank about all release/version change of patches/ upgrades/ updates of software/ OS/ middleware etc., as and when released by the selected Bidder /OSD.	We understand that , Bidder can bring and deploy the Patch Management tool for Operating system to the proposed solution to meet this RFP Requirement , Pls Confirm .	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9. Annexure-9). As the OS is being provided by Bank , the patch management for OS will be ensured by Bank
375	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc.	We understand that , Bank is looking for the Call Center based Solution as part of this RFP . As per the Requirement Bidder have to deploy below solution components to meet the requirements 1) Call Center Solution 2) ITSM Tool to be deployed 3) Dedicated Toll free numbers to be procure and configured Please confirm the understanding .	This facility is required for support from successful bidder
376	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc.	Kindly share the below data to design the Call Center Setup 1) Call Volumes per month 2) Target Audience who will use this Call Center Support 3) Is Basic IVR Setup will work for your Requirements 4) Is Voice Recording needed , If yes then how many days recording to be maintained 5) Is Screen Recording needed	This facility is required for support from successful bidder
377	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc.	Kindly share the below data to design the ITSM Setup 1) Ticket Volumes per month 2) How many users will use this ITSM Tool to log a complaints , as this is needed to factor the user license	This facility is required for support from successful bidder
378	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc.	Is Bank looking for any specific dashboard or the default dashboards which will be available with ITSM tool will be sufficient as per the requirements , Please confirm.	This facility is required for support from successful bidder
379	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.7: Partial or Incomplete or damaged delivery of materials will not be considered as delivered of all the ordered materials. Date of delivery shall be treated as date of last material delivered to the ordered locations if materials are not damaged. In case materials are delivered with damage, Date of delivery shall be treated as date of replacement of damaged material with new one. Delivery payment shall be paid against completion of delivery of all the ordered materials without any damage and proof of delivery duly certified by Bank's Officials, along with delivery payment claim letter.	This clause applicable only when bidder supply the Infrastructure components	This facility is required for support from successful bidder
380	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.5: Supply, Installation of Licenses/Softwares/OS/DB/Other Items and Implementation of the proposed solution in DC, DRC & UAT (dev/test) setup of the Bank should be completed within Eight (8) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness of the respective environment (DC / DRC / UAT) by the Bank whichever is later. The selected bidder has to complete the implementation of all the functionalities defined elsewhere in the RFP.	We understand Bank/its partner will install and configure(Firmwares, Patches & device hardening, etc..) of Hardware Infrastructure components including servers, storage, network & security devices. However, bidder to install, configure & manage the OS, applications and DB. Any thing related to hardware components will be owned by bank. Pls clarify	Bidder to comply as per RFP terms
381	18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	8.1:	Kindly add the payment terms for Year 2 and 3 other than License cost	Bidder to refer Revised Corrigendum
382	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.1: The selected Bidder warrants that the supplied tools will be free of defects in workmanship and materials for a period of time consistent with industry standards and the nature of the Hardware & Software ("Warranty Period").	The total contract period is mentioned as 3 years and warranty support period is mentioned as 1 year. Please clarify the scope for the 3rd year.	Bidder to refer Revised Corrigendum
383	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.2: The selected Bidder has to provide comprehensive On-site warranty of One (1) year for supplied solutions and tools including Software, OS, licenses etc	The clause mentions onsite support during 1 year warranty period, please confirm if this means that the support resources need to deployed Onsite (client location) during this period	Bidder to comply as per RFP terms
384	21	Section C: Deliverable and Service Level Agreements	11: Local Support	11.3: The Bidder will be responsible for attending complaints during all hours on 24x7x365 basis during contract period.	Please confirm if we need to deploy L1, L2 teams for warranty support, for 24x7 coverage. Also, please clarify the mode/ medium of raising complaints, if there is any tool for same.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
385	21	Section C: Deliverable and Service Level Agreements	11: Local Support	11.4: Support has to cover /solve day-to-day issue while using the supplied tools in our environment like resolving the issues related to incident, security threat, signature updates, daily updates, product related issues and any other issues to the Bank as per SOW/SLA at no extra cost.	Our understanding is that the scope of work for software in warranty support period will be fixing the defects and issues in the solution. Any new use case implementation or enhancements will be taken through CR route during the warranty period. Please confirm.	Yes
386	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.5.: Supply, Installation of Licenses/Softwares/OS/DB/Other Items and Implementation of the proposed solution in DC, DRC & UAT (dev/test) setup of the Bank should be completed within Eight (8) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness of the respective environment (DC / DRC / UAT) by the Bank whichever is later. The selected bidder has to complete the implementation of all the functionalities defined elsewhere in the RFP.	After implementation of all 7 use cases in 52 weeks, how many minimum resources are needed onsite for the next two years support phase? Please mention the role as well.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
387	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	Considering only a few Scheduled Commercial Banks and PSBs have successfully implemented similar BI and Advanced AI ML use cases, we suggest to amend the clause to allow similar work experience from government and PSUs as well. Please amend the clause as below: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks/ Government sector/ Public Sector Undertakings.	Refer revised Technical Qualification Corrigendum for section

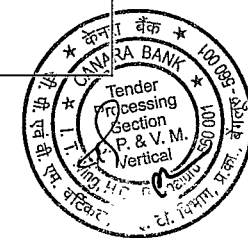


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
388	56	Annexure 2: Pre-Qualification Criteria	8	8: The bidder should have at least 50 SME resources on their rolls who are experienced across areas like Analytics, Data Sciences and Data Warehouse / Data Lakehouse implementation to deliver and support the proposed solution. Documents to be submitted in compliance with Qualification Criteria: Bidder to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder.	Submitting profiles, details and certification details of 50 SME will not be practical. Request you to amend the "Documents to be submitted" clause as below: Bidder to submit an undertaking on company's letter head from Company Secretary/ HR Head confirming at least 50 SME relevant to this project are on payroll of the bidder.	Refer revised Pre Qualification Corrigendum for section
389	56	Annexure 2: Pre-Qualification Criteria	6	6: The Bidder should have average annual turnover of Rs.100.00 Crores In the last three financial years (i.e., 2019-20, 2020-21 and 2021-22). This must be the individual company turnover and not of any group of companies.	Considering the complexity and criticality of such projects, we suggest to allow participation only from the well-established bidders with proven track record of maintaining at least 500 crores INR as yearly turnover. This will allow participation from high quality and stable SI. Request to amend the clause as below: The Bidder should have average annual turnover of at least Rs.500.00 Crores In the last three financial years (i.e., 2019-20, 2020-21 and 2021-22). This must be the individual company turnover and not of any group of companies.	Refer revised Pre Qualification Corrigendum for section
390	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks In India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Since only a few public sector banks have been able to successfully implement the entire scope related to DL and adv. Analytical use cases, we request to relax this clause. Currently, this is restricting bidders' participation as there are present multiple excellent products in the market relevant to the defined SOW but these products and solutions may not have been necessarily implemented by the same bidder. Likewise, a bidder may have implemented this SOW but with a different OEM/solution stack (use case basis). Also, not many banks have successfully implemented such solutions but the solution stack may be same for other industries like PSU/government sector etc. Hence, request to relax the clause to allow participation from bidders and OEMs, as below: The bidder or OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks In India /Financial Regulatory bodies / Foreign Banks/ Government/PSUs during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Refer revised Pre Qualification Corrigendum for section
391	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks In India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Considering the recently increased adoption and implementation of such solutions in the last few years in banks, we request to allow similar work references from Government and PSUs as well, given that similar solution is implemented. Please amend the clause as below: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks In India / Financial Regulatory bodies / Foreign Banks/ PSB/PSU/Government during the last 5 years.	Refer revised Pre Qualification Corrigendum for section
392	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Our understanding is "Proposed solution should be installed" within 2 months, while the implementation of entire solution is to be done in 52 weeks. Kindly confirm.	The clause has to be read along with Section C clause 1.4 to 1.6 also.
393		General query/suggestion		Inclusion of CMMI level 5 clause for eligibility	Based on our experience of implementing such critical and complex solutions which involve data integration, data quality, data lake and implementation of such advanced analytics use-cases, we suggest to allow participation only from CMMI Level 5 bidders. CMMI 5 provided proven track record of bidders who implement such complex and advanced solutions with high level of accuracy and quality services.	Refer revised Pre Qualification Corrigendum for section
394	GeM Document		Bid End Date/Time	Bid End Date/Time/बिड बंद होने का तारिख/समय 09-08-2023 15:00:00	Considering the complexity to stitch an efficient and optimized solution, we'll need around 2-3 weeks post corrigendum/pre-bid queries response. Kindly extend the End date and time from 09-08-2023 15:00:00 to 30-08-2023 15:00:00	Refer Corrigendum 1
395	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Evaluation Criteria: Details of Institutions where the solution has been implemented Sector: oPublic Sector: 5 marks oPrivate Sector: 4 marks oForeign: 2 marks	Kindly elaborate the criterion: "Details of institutions where the solution has been implemented". Our understanding is the bank wants to know "similar implementations" as same SOW can be achieved through multiple products/OEMs. Also, kindly confirm if "Public Sector" will cover similar work experience from "PSU and Government sector" as well.	Refer revised Pre Qualification Corrigendum for section
396	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	3: Size of Implementation - o1 Petabyte (PB) or more: 5 marks o500 TB to 1 PB: 4 marks o200 TB to 500 TB: 2 marks	Our understanding is similar work experience will include reference from PSU and government as well along with banks. Kindly confirm.	Refer revised Pre Qualification Corrigendum for section

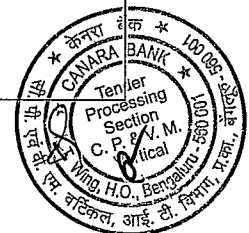


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
397	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	4: No. of use cases Implemented - +20 or more: 5 marks +10 to 20: 4 marks +5 to 10: 3 marks +5 or less: 2 marks	Two project references for similar work experience with 20+ use cases will be very difficult, and is very specific. Request to amend the marks as below: No. of use cases Implemented - +10 or more: 5 marks +6 to 9: 4 marks +3 to 5: 3 marks +2 or less: 2 marks	Refer revised Pre Qualification Corrigendum for section
398	74	Annexure 9: Scope of Work	5: Resources for the Proposed Solution.	5.1. Bidder should ensure that a bidder to O&M ratio of 70:30 resources for implementation of the project with a minimum of 30% from O&M who shall handle critical responsibilities of the implementation such as installation, configuration, platform administration etc.,	Our understanding is bank wants only qualified and experienced resources with hands-on experience on the proposed solution. Also, implementation manpower is supplied by the Bidders unless O&M is bidding directly. Hence we suggest to amend the clause to allow qualified and O&M certified resources from Bidder's payroll. Also, for platform level issues/bugs/enhancement/upgrades, O&M RED team, SME and L4 resources should be available whenever approached. Hence, we suggest to amend the clause as below: 5.1. Bidder should ensure that only O&M certified resources should be deployed for implementation of the project who can handle critical responsibilities of the implementation such as installation, configuration, platform administration etc., Additionally, for platform level issues/bugs/enhancement/upgrades, O&M RED team, SME and L4 resources should be available whenever approached through mutually agreed mechanism like tickets/calls/emails etc.	Bidder to comply with RFP
399	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14: proposed solution should have integrated data management, metadata-driven data governance and security framework.	Kindly elaborate the requirement?	Refer Annexure 9 : Scope of work
400	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.1: The proposed solution should cover below scope of activities (indicative) 3.8.1.1. Descriptive Analytics 3.8.1.2. Predictive Analytics 3.8.1.3. Prescriptive Analytics 3.8.1.4. Forecasting 3.8.1.5. Web / Streaming Analytics 3.8.1.6. Geospatial Analysis 3.8.1.7. Optimization Algorithms	What kind of use cases Bank is looking at for the below: 3.8.1.5. Web / Streaming Analytics 3.8.1.6. Geospatial Analysis	Will be shared with successful bidder
401	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.9: The proposed solution should support - 3.8.9.1. Scalable architecture 3.8.9.2. In-memory computing 3.8.9.3. GPUs, if required basis use cases 3.8.9.4. Multiple versions of runtime	Kindly give an example for better understanding for "Multiple versions of runtime"	Platform should have the capability to allow use of models developed in different version of same tool
402	73	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.11: The proposed solution should offer built-in package management for the open-source packages / libraries (e.g. Python libraries).	Kindly elaborate the requirement?	Refer Annexure 9 : Scope of work
403	73	Annexure 9: Scope of Work	3.9: Model Deployment	3.9.4. Platform should have capability to convert piece of code into a job and ability to schedule, manage and monitor the job.	Kindly confirm if it means "job scheduler should be integral part of the proposed platform"	Yes
404	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.5: Only licensed copies of software shall be supplied. The selected Bidder shall grant an irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.	Please confirm our understanding that bank requires Subscription License	Yes
405	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	The Bidder or O&M should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	Refer revised Pre Qualification Corrigendum for section
406	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.6: The proposed solution should support analysis / modelling activity based on various skill level of users (Business users, Data Analyst, Data Scientist etc.).	What is the total number of data scientists to be considered for platform sizing?	Bidder to decide based on scope of work, timelines and solution offered
407	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and O&M should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	The Bidder or O&M should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Refer revised Pre Qualification Corrigendum for section
408	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
409	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	The Bidder or O&M should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Refer revised Pre Qualification Corrigendum for section
410	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: Copies of Work order / PO and Completion / Sign off to be submitted for data lake / lake house implementation. PO / SOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
411	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to let us know if the existing datawarehouse model and solution diagram available. If yes, request the bank to share	Refer Technological stack

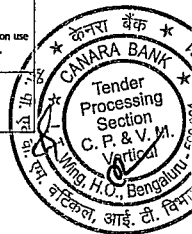


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
412	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to share facts table, dimension tables information in the current environment	Will be shared with successful bidder
413	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to share a list of all source systems with table counts that are expected to be ingested to lakehouse other than the existing data warehouse	Refer Annexure 9 : Scope of work
414	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	As per RFP document, expected size In 2023 is 60TB. Request bank to clarify if this number indicates current DW sizing or is an approximation of size after ingesting new sources that currently are not getting loaded to current DW. Request clarity from the bank on this point	The proposed data lake solution is expected to reach the size of 60TB from all sources including DW
415	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if bank's existing ETL tools can be used for loading and transformation purpose	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
416	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is current database environment, request the bank to share Inventory details such as number of tables, views, procedures, functions, triggers.	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional data source identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
417	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide clarity on the replication mechanism between DC and DR	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank
418	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide details on data size and data type for movement from various data sources (DWH, CBS, etc.) to lakehouse	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth
419	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if UAT environment will be considered as Dev environment	Yes
420	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm the volume of data archived every year	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
421	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm the capacity considered of UAT environment? (as % of DC)	30% Capacity of live environment
422	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm on number of ETL Jobs, BI Reporting Jobs, Data migration Jobs	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
423	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request bank to confirm the number of downstream applications accessing the Data Lakehouse in the future	15-20 applications



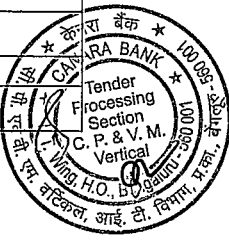
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
424	65	Annexure 9: Scope of Work	1: Summary of Project	1.11 Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is the frequency, Type(Batch/ Stream/ API Access etc) and volume of data on a days basis for below data sources: Structured 3.4.1.1. Data Warehouse 3.4.1.2. Business Systems (CBS, Credit Card, Digital channels etc.) 3.4.1.3. Non-CBS Systems 3.4.2.1. Emails 3.4.2.2. Application logs 3.4.2.3. Credit Information Companies' data 3.4.2.4. Clickstream data from various customer touch points 3.4.2.5. Loan Application Processing System Unstructured 3.4.3.1. Non-CBS Systems 3.4.3.2. Call Centre Data 3.4.3.3. Customer Complaints data 3.4.3.4. Document Management System 3.4.3.5. CCTV recordings 3.4.3.6. Social Media Data 3.4.3.7. News & Annual Reports 3.4.3.8. Geo-location data 3.4.3.9. Logs data 3.4.3.10. Any other external data	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
425	100	Annexure 18: Manufacturer Authorization Form	Annexure 18: Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) hereby extend our full guarantee and warranty as per terms and conditions of the GeM bid and the contract for the solution, products/equipment and services offered against this invitation for GeM bid offer by the above firm and will extend technical support and updates and ensure availability of spares including processors for our products for contract period from the date of Installation.	While the Bidder will be able to offer 'full guarantee and warranty' for the solution and services offered. OEM will only be able to confirm that the SI is authorized to resell Products and that when such products are resold by the bidder, the products will be governed by the standard end user licensing terms and conditions. Please confirm if the understanding is correct.	Bidder to comply as per RFP terms
426	100	Annexure 18: Manufacturer Authorization Form	Annexure 18: Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) also confirm that we will ensure all product updates (including management software updates and new product feature releases) are provided by M/s for all the products quoted for and supplied to the bank during the Contract period. In case this is not considered while quoting and in the event M/s fall in their obligations to provide the updates within 30 days of release/announcement, we hereby confirm that we will provide the same to the bank at no additional cost to the bank and we will directly install the updates and any new Operating Software releases at the bank's premises.	Subject to the terms of a valid and subsisting S&S order that is placed on OEM by the bidder, OEM will provide updates and releases that are covered under OEM's standard S&S program through the bidder for the contract period. OEM will not be able to provide any direct services to the Bank including installation.	Bidder to comply as per RFP terms
427	100	Annexure 18: Manufacturer Authorization Form	Annexure 18: Manufacturer Authorization Form	We also confirm that the proposed solution offered by the bidder to the Bank are correct, viable, technically feasible for implementation and the solution will work without any hassles in all the locations. We also confirm that all the equipment offered are not "End of Life" during the next One Year and "End of Support" for total Contract Period.	OEM will not be able to provide any confirmation in re the solution to be provided by the bidder. However, we can confirm on the end of life/end of support period for our proprietary products in our capacity as the OEM.	Bidder to comply as per RFP terms
428	100	Annexure 18: Manufacturer Authorization Form	Annexure 18: Manufacturer Authorization Form	We hereby commit to the GeM bid terms and conditions and will not withdraw our commitments during the process and/or during the period of contract.	GEM terms should not be applicable to the OEM. Standard COTS products shall be supplied subject to standard end user licensing terms and conditions.	Bidder to comply as per RFP terms
429	87	Annexure 10: Technical Evaluation Criteria	Section C - Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	8: Project Team and their CVs	Our understanding is minimum 10 manpower resources are needed on-site during implementation period of 12 months. Kindly confirm.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
430			General query		Kindly share the business hours for manpower.	Will be shared with successful bidder
431			General query		Please confirm if manpower to be deployed onsite 24x7x365 for three years.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
432			General query		How many users will access directly and indirectly to the system? Examples of direct users are BI users or data scientists that execute ad-hoc queries on the system. Examples of indirect users are business users that do not execute ad-hoc queries but access to reports which in turn receive the data in real time from the system.	The solution should be capable to integrate with existing reporting and visualisation tool.
433			General query		If known, How many concurrent queries (on peak and on average) will be hitting the system? (Any guess will be welcome)	The solution should be capable to integrate with existing reporting and visualisation tool.
434			General query		How many queries will be hitting the system (daily/monthly/weekly)? (Estimation)	Will be shared with successful bidder
435			General query		What is the distribution of queries according to their complexity (low, medium, high)? Examples of low complexity queries are queries that access a single data source and are completely pushed down to the source. Examples of medium complexity queries are queries that combine data from 2 or more sources with not complex transformations. Examples of high complexity queries are queries that combine data from multiple data sources, including complex transformations, subqueries, etc.	Refer Annexure 9 : Scope of work
436			General query		In addition to the complexity of the queries, it is important to consider the volume of data returned as a driver. If known, can you provide an estimation of the number of queries that return below 10K rows, below 1Million rows and more than 1Million rows.	Refer Annexure 9 : Scope of work
437			General query		Do you use any data catalog currently?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
438			General query		Please confirm if all the data sources are on-premise.	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
439	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	General Query	As an System Integrator, basis our experience of working with multiple OEMs, there's always a pushback from them for ESCROW accounts. Request the bank to exclude Escrow arrangement.	Bidder to comply as per RFP terms



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
457	66	Annexure 9: Scope of Work	1: Summary of Project	1.7: Provide qualified and experienced professional resources to work on-site / remote during the contract period.	What is onsite location for resources to work in case required to work from Bank premises?	Bengaluru
458	66	Annexure 9: Scope of Work	1: Summary of Project	1.7: Provide qualified and experienced professional resources to work on-site / remote during the contract period.	Are all resources to be deployed on-site for implementation of AI/ML use cases for fulfillment of business requirements?	Yes. Resources to be deployed on-site for implementation.
459	66	Annexure 9: Scope of Work	1: Summary of Project	1.8: Prepare all necessary project documentation	What are the typical SDLC artifacts used by Canara Bank and are there sample templates provided or the Implementation partner should suggest required artifacts and templates of project documentation.	Bidder to propose and comply the RFP terms
460	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank as its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	What approx. concurrent users access the APIs for down stream consumption	From the perspective of developer community , anticipated users will be approx. 75 .For the consumption by down stream application , the system should have capability to scale up as per the requirement
461	66	Annexure 9: Scope of Work	1: Summary of Project	1.10: Expected data growth rate for Data Lakehouse is indicated below. Bidder may use this as a reference to estimate hardware sizing.	Anticipated data growth provided is raw source data or it included curated and enriched data also.	Anticipated data growth comprises of both Raw as well as curated and enriched data.
462	66	Annexure 9: Scope of Work	1: Summary of Project	1.10: Expected data growth rate for Data Lakehouse is indicated below. Bidder may use this as a reference to estimate hardware sizing.	Data sizing provided doesn't consider the backup sources , Please confirm.	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
463	66	Annexure 9: Scope of Work	1: Summary of Project	1.11: Proposed solution should be set up by end-to-end integration and testing, and should meet the desired performance benchmarks specified by the Bank.	What are the performance benchmarks defined by the bank? Are there explicit NFR defined?	Will be shared with successful bidder
464	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. " This consideration is for basic platform setup not including all data sources ingestion.	Refer Section C : Deliverable and service level agreement
465	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Does programs expects that , the Initial 2 months to setup planform and preform all data source ingestion?	Refer Section C : Deliverable and service level agreement
466	66	Annexure 9: Scope of Work	1: Summary of Project	1.12: Proposed solution should be implemented within two (2) months from the date of Hardware readiness by the Bank / from the date of acceptance of the Purchase Order whichever is later. The proposed use cases should be implemented within ten (10) subsequent months. The entire project should be completed within one year.	Can the period of base platform setup extended for 3 months ?	Bidder to comply the RFP terms
467	67	Annexure 9: Scope of Work	1: Summary of Project	1.13: Arrange structured training and hands-on session to Bank resources since commencement of the project till completion in a phased manner to operate the proposed solution / platform. The training should also include sessions directly from OEM for a team size of 25+, ranging from 3 to 7 days in 3 phases like beginner, Intermediate and advanced.	Training session considered is for one batch for each of beginner, intermediate and advanced cohort of users.	Will be shared with successful bidder
468	67	Annexure 9: Scope of Work	1: Summary of Project	1.13: Arrange structured training and hands-on session to Bank resources since commencement of the project till completion in a phased manner to operate the proposed solution / platform. The training should also include sessions directly from OEM for a team size of 25+, ranging from 3 to 7 days in 3 phases like beginner, Intermediate and advanced.	What is approximate total count of users undergoing training?	Will be shared with successful bidder
469	67	Annexure 9: Scope of Work	1: Summary of Project	1.13: Arrange structured training and hands-on session to Bank resources since commencement of the project till completion in a phased manner to operate the proposed solution / platform. The training should also include sessions directly from OEM for a team size of 25+, ranging from 3 to 7 days in 3 phases like beginner, Intermediate and advanced.	Does training material also needs to be created for all types users	Will be shared with successful bidder
470	67	Annexure 9: Scope of Work	1: Summary of Project	1.13: Arrange structured training and hands-on session to Bank resources since commencement of the project till completion in a phased manner to operate the proposed solution / platform. The training should also include sessions directly from OEM for a team size of 25+, ranging from 3 to 7 days in 3 phases like beginner, Intermediate and advanced.	For structured training and hands-on session to Bank resources, are the resources/user are from IT teams/ Bank Operational Users.	Primarily ,IT resources
471	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16: The proposed solution should comply to all Information and cyber security governance guidelines of the Bank as well as regulatory bodies	Please share, what are Information and cyber security governance guidelines to adhere?	Will be shared with successful bidder
472	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16: The proposed solution should comply to all Information and cyber security governance guidelines of the Bank as well as regulatory bodies	Does bank has any Internal security validation process/ agency to certify the platforms?	Yes Bank has Internal security validation process.
473	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank	Please suggest the tools that supports DC / DR, backup and archival are to be suggested and implemented as scope or working or new solution needs to integrate existing solutions	The Bank Intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
474	73	Annexure 9: Scope of Work	3.9: Model Deployment	3.9.5: Seamless movement of model from UAT, DEV, Production based on model performance	Solution setup hardware suggestion should include UAT, DEV, Production or only for production	Hardware sizing solution are to be provided for all 3 are required
475	74	Annexure 9: Scope of Work	5: Resources for the Proposed Solution.	5.1: Bidder should ensure that a bidder to OEM ratio of 70:30 resources for implementation of the project with a minimum of 30% from OEM who shall handle critical responsibilities of the implementation such as Installation, configuration, platform administration etc.	In case of open source driven solution, Can OEM resources ratio can be less than 30%	Bidder to propose and comply the RFP terms
476	74	Annexure 9: Scope of Work	5: Resources for the Proposed Solution.	5.4: The Indicative job roles and the resources should have requisite experience / qualifications as mentioned	Is platform support expected to be 24/7 including L1, L2 & L3	Bidder to comply as per RFP terms
477	78	Annexure 10: Technical Evaluation Criteria		General Query	Can the qualification criteria for implementation of the proposed solution include other industries also with similar data volume, uses cases, and users of the platform?	Refer revised Pre Qualification Corrigendum for section
478	78	Annexure 10: Technical Evaluation Criteria		General Query	Can the qualification criteria for implementation of the proposed solution include any AI/ML use case or specific 7 use cases identified at similar scale?	Refer revised Technical Qualification Corrigendum for section
479	78	Annexure 10: Technical Evaluation Criteria		General Query	Can the qualification criteria for implementation of the proposed solution include bidder/OEM also with similar data volume, uses cases, and users of the platform?	Refer revised Technical Qualification Corrigendum for section

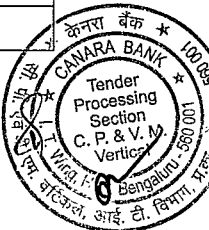


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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
480				General Query	Has the Bank procured any Hardware ?	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer Clause 1.9, Annexure-9)
481				General Query	Does bank use hypervisor solution for IT landscape? If yes which platform.	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
482	86	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	99: Should support bi-directional flow of data from Operational CRM/downstream application to Analytical CRM.	"Should support bi-directional flow of data from Operational CRM/downstream application to Analytical CRM." Is bidirectional dataflow anticipated only for above CRM or it is for all systems?	It will be decided on case to case basis
483	80	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	15: The proposed solution should have integrated data management, metadata driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Kindly elaborate the requirement?	Refer Annexure 9 : Scope of work
484	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.1.6. Geospatial Analysis	What kind of use cases Bank is looking at ?	Will be shared with successful bidder
485	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.1.5. Web / Streaming Analytics	What kind of use cases Bank is looking at ?	Will be shared with successful bidder
486	72	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.9.4. Multiple versions of runtime	Kindly give an example for better understanding	Platform should have the capability to allow use of models developed in different version of same tool
487	73	Annexure 9: Scope of Work	3.8: Data Science Platform with AI/ML Capabilities	3.8.11: The proposed solution should offer built-in package management for the open-source packages / libraries (e.g. Python libraries)	Kindly elaborate the requirement?	Refer Annexure 9 : Scope of work
488	73	Annexure 9: Scope of Work	3.9: Model Deployment	3.9.4: Platform should have capability to convert piece of code into a job and ability to schedule, manage and monitor the job.	Kindly confirm if it means "job scheduler should be integral part of the proposed platform"	Yes
489	17	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.11 : All the above LDs are independent of each other and are applicable separately and cumulatively	Request Bank to limit the total penalty to 5% of the total cost .	Bidder to comply with RFP Terms
490	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract	<p>13. Order Cancellation/Termination of Contract</p> <p>13.1. The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract in the event of one or more of the following conditions:</p> <p>13.1.1. Delay in delivery of services in the specified period. 11.1.2. Serious discrepancies noted in the inspection.</p> <p>11.1.3. Breaches in the terms and conditions of the Order.</p> <p>13.2. The Bank reserves the right to cancel the contract placed on the selected bidder and recover expenditure incurred by the Bank on the following circumstances:</p> <p>13.2.1. In submission of acceptance of order within 7 days of order. 11.2.2. Excessive delay in execution of order placed by the Bank.</p> <p>13.2.3. The selected bidder commits a breach of any of the terms and conditions of the bid.</p> <p>13.2.4. The bidder goes in to liquidation voluntarily or otherwise.</p> <p>13.2.5. An attachment is levied or continues to be levied for a period of 7 days upon the effects of the bid.</p> <p>13.2.6. The progress made by the selected bidder is found to be unsatisfactory. 11.2.7. If deductions on account of liquidated damages exceeds more than 10% of the total contract price.</p> <p>13.2.8. If found blacklisted by any Govt. Department / PSU / other Banks / CERT-In.</p>	<p>Kyndryl recommends the following language for termination for cause: Either party may terminate this Contract if the other materially breaches this Contract; provided that the party that is non-compliant is given a written notice by the other party and thirty (30) days' notice period to remedy such non-compliance, and the Contract shall then be terminated when the defaulting party fails to remedy such non-compliance within such notice period. In the event of such termination of this Contract, Client shall pay Kyndryl for all the Services Kyndryl delivers through the effective date of termination in addition to payment for, applicable wind-down charges and expenses incurred by Kyndryl.</p> <p>Secondly, in specific response to this Section 12, please note that Section 12.1.1, Section 12.1.2 and Section 12.1.3 are widely worded and can be bracketed in one category of termination of cause where Bidder has committed or materially breaches its obligations under the contract. Section 12.2 again can be bracketed as a termination for material breach for example if there is a material delay in the execution leading to a material breach of the terms of the contract. Further Section 12.2.1 is fairly stringent as any order form will be discussed by both parties and agreed upon and unilateral termination right related to a stipulated time period may diminish the transactional requirements. Section 12.2.2 shall be applicable only where the contract has been discussed and mutually concluded by both the Parties and not accepted by CB. We would also like to discuss the notice period associated with termination in the event of a party's assets being attached or where a party goes into involuntary liquidation, Section 12.2.7 is the same as Section 12.2.2 and will be fine if the materiality of a breach is the criterion for the termination right. Section 12.2.7, we would like to discuss this with you as any LDs paid or payable may not have an impact on the overall provision of services. Section 12.3 This notice period shall not be sufficient for any termination for convenience. Section 12.4, in the event of any damages caused due to a material breach, we shall be liable for any direct damages to the extent to agreed to in the contract. Section 12.6 5, 12.7, we would</p>	Bidder to comply with RFP Terms
491	120	Appendix G: Draft Contract Agreement	11: Indemnity	<p>11.1: VENDOR/ SERVICE PROVIDER shall keep and hold the Bank indemnified and harmless from time to time and at all times against all actions, proceedings, claims, suits, liabilities (including statutory liability), penalties, demands, charges, costs (including legal costs) and expenses, damages, losses and any other expenses which may be caused to or suffered by or made or taken against the Bank arising out of:</p> <p>11.1.1. The breach, default or non-performance of undertakings, warranties, covenants or obligations by VENDOR/ SERVICE PROVIDER;</p> <p>11.1.2. Any contravention or Non-compliance with any applicable laws, regulations, rules, statutory or legal requirements by VENDOR/ SERVICE PROVIDER;</p> <p>11.2. VENDOR/ SERVICE PROVIDER shall indemnify, protect, and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of Solution supplied by them.</p> <p>11.2.1. All indemnities shall survive notwithstanding expiry or termination of the contract and Bidder shall continue to be liable under the indemnities.</p> <p>11.2.2. The limits specified in above clause shall not apply to claims made by the Bank/ third parties in case of infringement of intellectual property rights or for claims relating to the loss or damage to real property and tangible personal property and for bodily injury or death and in these cases the liability will be unlimited.</p> <p>11.2.3. All Employees engaged by VENDOR/ SERVICE PROVIDER shall be in sole employment of VENDOR/ SERVICE PROVIDER and the VENDOR/ SERVICE PROVIDER shall be solely responsible for their salaries, wages, statutory payments etc. That under no circumstances shall the Bank be liable for any payment or claim or compensation (including but not limited to compensation on account of injury / death / termination) of any nature to the employees and personnel of the Bidder.</p>	<p>Indemnification: Bidder will indemnify CB for third party claims for only any breach of IPR violations by the Bidder on material if any supplied by Bidder from the use of unaltered Company manufactured products, provided the CB gives the Company prompt notice of any such claim and Bidder is allowed to take sole defense and control of any such claim. For clarity, this does not apply to any third party Products or Software supplied by Bidder. Further, Bidder shall not indemnify CB for any Inter se claims or for any general indemnity related to any breaches under contract as Indemnification is for specific requirements under the contract.</p> <p>Limitation of Liability: Bidder submits the following language to be included in the contract. Bidder's entire liability for all claims related to the agreement will not exceed the aggregate amount of any actual direct damages incurred by up to the amounts paid (if recurring charges, up to 12 months' charges apply) by CB for the product or service that is the subject of the claim, regardless of the basis of the claim. This limit applies collectively to Bidder, its subsidiaries, contractors, and suppliers. Bidder will not be liable for special, incidental, exemplary, indirect, or economic consequential damages, or lost profits, business, value, revenue, goodwill, anticipated savings, reputation, data and third party claims, even if Bidder has been advised of possibility of such damages. The Bidder seeks deletion of the exceptions to the liability cap.</p>	Bidder to comply with RFP Terms

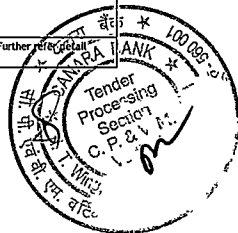


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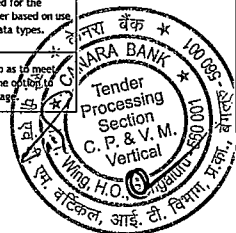
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
492	49	Section G: General Conditions	24: Legal Disputes and Jurisdiction of the court	24.1: The Bank Clarifies that the Bank shall be entitled to an Injunction, restraining order, right for recovery, specific performance or such other equitable relief as a court of competent jurisdiction may deem necessary or appropriate to restrain Bidder /prospective Bidder from committing any violation or enforce the performance of the covenants, obligations and representations contained in this RFP. These injunctive remedies are cumulative and are in addition to any other rights and remedies the Bank may have at law or in equity, including without limitation a right for recovery of any amounts and related costs and a right for damages. 24.2.All disputes and controversies between Bank and selected Bidder shall be subject to the exclusive jurisdiction of the courts in Bengaluru and the parties agree to submit themselves to the jurisdiction of such court as this RFP/Contract agreement shall be governed by the laws of India	We would request that the Disputes should also be the subject matter of the Arbitration and Conciliation Act, 1996.	Bidder to comply with RFP Terms
493	42	Section G: General Conditions	6: Inspection of Records	6: Bank at Its discretion may verify the accounts and records or appoint third party for verification including an auditor for audit of accounts and records including Hardware, Software & other Items provided to the Bank under this RFP and the selected Bidder shall extend all cooperation in this regard	Kyndryl proposes that any audit by the Bank shall be done with prior written notice of not less than 14 days and without causing any disruption to the day -to-day activities of Kyndryl. Further internal cost records of the Kyndryl shall be outside the purview of this audit.	Bidder to comply with RFP Terms
494	112	Appendix F: Pre Contract Integrity Pact	8: Fall Clause	8.1: The BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems/services at a price lower than that offered in the present bid to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law and if it is found at any stage that similar product/systems or sub systems/services was supplied by the BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER to any other Bank or PSU or Government Department or to any other organization/entity whether or not constituted under any law, at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the BIDDER /SELLER/CONTRACTOR/SERVICE PROVIDER to the BUYER, if the contract has already been concluded.	The fall clause is widely worded enough to even apply to private entities and also doesn't limit itself to services at hand and leaves Bidder with very little wriggle room to define any form business propositions to other client. We would like to discuss this with you.	Bidder to comply with RFP Terms
495		GeM	Bid Document	Bid End Date/Time:09-08-2023 15:00:00	Considering the complexity of the requirement , we request Bank to extend the Bid submission date by 3 Weeks from the date of Prebid Clarification publication .	Bidder to comply RFP Terms and Conditions
496	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Request rephrasing to "The bidder or OEM should have implemented or is implementing or managing the proposed solution in one or more scheduled commercial banks in India / Financial Regulatory bodies / Foreign Banks / Non Banking organizations during the last 5 years, and the implementation should have a data size of not less than 200 TB "	Refer revised Technical Qualification Corrigendum for section
497	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Request rephrasing to "The bidder or OEM should have implemented or is implementing AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks / Non Banking organizations during the last 5 years."	Refer revised Technical Qualification Corrigendum for section
498	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	Request rephrasing to "The Bidder or OEM should have successfully implemented / is implementing / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks / Non Banking Organization."	Refer revised Technical Qualification Corrigendum for section
499	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability Including proven relevant experience and capabilities of Identified professionals for the project	Section C: Bidder's capability Including proven relevant experience and capabilities of Identified professionals for the project	Request rephrasing to "Section B - Bidder and OEM capability including proven relevant experience and capabilities of Identified professionals for the project" is given below"	Refer revised Technical Qualification Corrigendum for section
500	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability Including proven relevant experience and capabilities of Identified professionals for the project	1: Details of institutions where the solution has been implemented - +Sector: oPublic Sector: 5 marks oPrivate Sector: 4 marks oForeign: 2 marks +Location: oIndia: 5 marks oOther Asian Countries: 3 marks oOther Countries: 2 marks +No. of branches (In case of Banks) o5000 or more branches: 3 marks o1000 to 5000 branches: 2 marks oless than 1000 branches: 1 mark oimplemented in regulatory body: 3 marks	Request scoring to be modified as following Details of institutions where the solution has been implemented - +Sector: oPublic Sector: 4 marks oPrivate Sector: 4 marks oForeign: 3 marks +Location: oIndia: 4 marks oOther Asian Countries: 2 marks oOther Countries: 4 marks +No. of branches (In case of Banks) o5000 or more branches: 3 marks o1000 to 5000 branches: 2 marks oless than 1000 branches: 1 mark oimplemented in regulatory body: 3 marks	Refer revised Technical Qualification Corrigendum for section
501	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability Including proven relevant experience and capabilities of Identified professionals for the project	2: Stage of implementation - +Completed: 10 marks +Under Implementation: 5 marks	Request scoring to be modified as following Stage of Implementation - +Completed: 8 marks +Under Implementation: 7 marks	Refer revised Technical Qualification Corrigendum for section
502	10	Section B: Introduction	4: Objective	4.3: The platform should have the capability of comprehensive data management, data lineage, meta data creation, security and governance.	Whether the solution can involve 3rd party tools along with proposed data platform?	Bidder to propose and comply the RFP terms
503	10	Section B: Introduction	4: Objective	4.4: A Data Lakehouse which complements the existing Data Warehouse and should support data ingestion, storage and processing of high volume, velocity, variety and veracity.	Any preference in choosing On-Prem data lake versus hybrid based solution.	Bidder to propose and comply the RFP terms



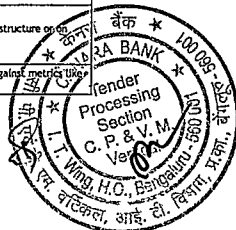
Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3780893 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
504	65	Annexure 9: Scope of Work	1: Summary of Project	1.1.Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	1) What is the existing technical environment architecture which includes Source systems, Data model, Datawarehouse, analytical tools, ETL/ELT, Scheduling, data governance, data quality monitoring, Security, Authentication mechanism, etc.. 2) What is the business use case to have Data lake house which is not resolved by existing system? 3) Define the data granularity required for each of the usecase. For ex: A report may be monthly wise and another report may be Intra-day report which needs the source data to be organized granularly. 4) Any data modelling requirements 5) Any refactoring/decommissioning effort Involved as we migrate 6) How many existing tables/Views/Materialized View/Stored Procs/Functions 7) How many environments exists. Dev/Test/Preprod/Prod ? 8) Volume of data in each environment. Both batch and streaming. 9) Any painpoints in existing systems to be addressed. 10) How are the current user access or roles maintained. Any LDAP exists.	Refer Technological stack Bidder to propose and comply the RFP terms Additional Information will be shared with successful bidder
505	65	Annexure 9: Scope of Work	1: Summary of Project	1.3. Establish consumption layer via API, microservices etc, for downstream consumption by applications and end users.	1) List of downstream application that uses API/Microservices	15-20 applications
506	66	Annexure 9: Scope of Work	1: Summary of Project	1.10. Expected data growth rate for Data Lakehouse is indicated below. Bidder may use this as a reference to estimate hardware sizing.	1) For 2023 ,we have 60TB of data. What is the daily incremental volume of data. Is there any streaming data being ingested. 2) What is the frequency of data availability w.r.t to source system 3) how soon it should be available within data lakehouse. Do you need real time ingestion of all the data or batch scheduling	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1, 10 for data size/growth.
507	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14. The proposed solution should have integrated data management, metadata-driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Please elaborate on Open data Initiatives and community innovation	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
508	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16. The proposed solution should comply to all information and cyber security governance guidelines of the Bank as well as regulatory bodies.	1) What are all the compliances/Security guidelines existing in the current system and any additional compliances required. 2) Any audit report needs to be generated from the bank to the regulatory bodies.	Will be shared with successful bidder
509	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17. The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	1) For DR, can we think of a hybrid solution to backup the data on cloud so it will be useful when we move to cloud solution at later point? 2) Any Data archival policies already exists? Please list.	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
510	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.1. Structured	1) Any lookup/Static data /flat files , or reference files being used?	Refer clause 3.5.6 for data types
511	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.5. It should have ability to perform intelligent aggregation on clickstream data before ingesting to data lake house.	Any specific tool been currently used to capture clickstream data?	Bidder to propose and comply the RFP terms
512	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.7. Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as masking personally identifiable information or using canonical data representations, as well monitoring the inbound data flow for completeness, consistency and accuracy.	1) Whether the solution can involve 3rd party tools along with proposed data platform? 2) Any existing Data reconciliation reports and what type of validation?	Bidder to propose and comply the RFP terms
513	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.9. Trigger mechanisms in identifying schema changes at source and packaging data in formats for quick retrieval should be available in the solution.	What does the "packaging data in formats" mean to? If its an data export requirement, what is the format required?	Bidder to propose and comply the RFP terms
514	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.1.8. Robust to handle multiple concurrent access by processing engines / end users.	1) How many end users also how many concurrent users can log on at a time. 2) How much of concurrent queries expected	Will be shared with the Selected Bidder based on requirement
515	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.1.6. Compatible to perform processing operations on whole dataset as well as individual records or individual groups.	1) As part of transformation process, Do we have any existing ETL Transformation and what type of transformation it is? 2) Do we have CDC requirements to maintain History?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
516	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.2. The proposed solution should ensure the following data quality aspects-	1) Any existing DQ tool available in technology stack?	Refer Technological stack
517	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.3.4. Provide a robust change management framework to track versioning, change history with date and user information, track migration of code from development to production, security.	Does the bank uses any existing change management tool, CICD solution?	Refer Technological stack
518	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.3.6. Industry standard metadata management is required on Data Lakehouse to prevent it from becoming a data swamp.	Any requirement of HDH solutioning? Any existing Data governance tool been used?	Refer Technological stack. The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
519	65	Annexure 9: Scope of Work	1: Summary of Project	Use cases	1. What line of business does Canara bank want to focus for the mentioned use cases? eg. Customer attrition, personalization, Default prediction. 2. Which line of business in canara bank is more customer centric? 3. Are there any ML models deployed in Canara bank? If yes what kind of problem solving capabilities the models have? 4. Are the mentioned ML use cases pertaining to specific LoB/Customers or its for all the customers of Canara Bank? Are there specific products within the LOBs where these use cases might be applicable? 5. If applicable across, can you please provide a prioritisation roadmap? 6. What is the current AI/ML framework or Architecture used? 7. What is the current business process to handle the use cases? Is there a rule based system or this is handled manually? 8. Please provide the overall view of LOBs and products that Canara Bank currently has. 9. What is its online and offline transactional customer base? 10. Provide the breakup of number of branches and avg customer base across each of the banks or type of branch.	Will be shared with successful bidder
520	74	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.11: Data Consumption Layer: Downstream applications	1. Which of the use cases- outputs will be passed to downstream applications? What are those applications - please give examples	All use cases - outputs will be passed to downstream application. Further refer to scope of work as per annexure 9



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
521	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer: Shared service analytics	Provide a estimated breakdown of the number of users a) who will be accessing the business intelligence layer for development b) accessing the business intelligence layer for viewing the Insights only ? What are their personas ?	a. Around 10-15 b. Field users around 15000
522	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer: Shared service analytics	How many such teams do you envision that will be using the analytics platform ? Please provide by a breakdown by the following - 1)Business Intelligence 2) Model Development and Deployment	3-4 Teams
523	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer: Model Development	Provide a estimated breakdown of the number of users a) who will be accessing the Model Development (ModelOps) layer for development and deployment	Around 10-15
524	17	Section C: Deliverable and Service Level Agreements	8: Payment Terms	8.1: Enterprise License cost for the 1st year (as per Table-A of Bill-of-Material) for each environment (DC, DRC & UAT)	Since the license cost has to be given upfront to OEM, we request you to kindly release License cost 100% advance on yearly basis	Refer Corrigendum 2
525	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	we request you to consider the bidder's experience in Government sector along with other industries defined in the clause as below The Bidder should have successfully implemented / supporting/ maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks/ Government Organisation	Refer Corrigendum 2
526	56	Annexure 2: Pre-Qualification Criteria	5	5: The bidder should submit Satisfactory performance certificate from clients/ copies of purchase order/work order/ reference letter from the clients to this effect.	Some of our projects are global and binded by a strong NDA thus request you to also accept bidder self declaration letter signed by the authorised representative of the Bidder as a documentary proof for criteria mentioned in Prequalification & Technical evaluation criteria	Refer revised Pre Qualification Corrigendum for section
527	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB	We request you to consider either Bidder or OEMs experience for the said clause. The revised clause to be read as The bidder OR OEM should have implemented / Support the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks / Government Organisation during the last 5 years, and the implementation should have a data size of not less than 100 TB.	Refer revised Technical Qualification Corrigendum for section
528	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	We request you to also consider either Bidders or OEMs experience also for the said clause. The revised clause to be read as The bidder OR OEM should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks/ Government organisation during the last 5 years.	Refer revised Technical Qualification Corrigendum for section
529	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Details of Institutions where the solution has been Implemented - •Sector: oPublic Sector: 5 marks oPrivate Sector: 4 marks oForeign: 2 marks •Location: oIndia: 5 marks oOther Asian Countries: 3 marks oOther Countries: 2 marks •No. of branches (in case of Banks) o5000 or more branches: 3 marks o1000 to 5000 branches: 2 marks oless than 1000 branches: 1 mark oimplemented in regulatory body: 3 marks	We request you to accept implementation experience of the bidder in Government sector for all the clauses mentioned in the Annexure 10 - Technical Evaluation Criteria Section B - Bidder's capability. Thus the revised clause to be read as following Details of Institutions where the solution has been Implemented - • Sector: oGovernment Sector: 5 marks oPublic Sector: 4 marks oPrivate Sector: 3 marks oForeign: 2 marks • Location: oIndia: 5 marks oOther Asian Countries: 3 marks oOther Countries: 2 marks • No. of Branches / User Base o5000 Users and more: 3 marks o1000 to 5000 users: 2 marks oless than 1000 Users: 1 mark There are not many regulatory bodies which are also banks thus requesting you to remove this point	Refer revised Pre Qualification Corrigendum for section
530	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14.The proposed solution should have integrated data management, metadata-driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Please elaborate on Open data initiatives and community innovation	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
531	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16.The proposed solution should comply to all Information and cyber security governance guidelines of the Bank as well as regulatory bodies.	1) What are all the compliances/Security guidelines existing in the current system and any additional compliances required. 2) Any audit report needs to be generated from the bank to the regulatory bodies.	Will be shared with successful bidder
532	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17.The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	1) For DR, can we think of a hybrid solution to backup the data on cloud so it will be useful when we move to cloud solution at later point? 2) Any Data archival policies already exists? Please list.	The Bank Intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
533	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.4.1.Structured	1) Any lookup/Static data /flat files , or reference files being used?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
534	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.5.5.It should have ability to perform intelligent aggregation on clickstream data before ingesting to data lake house.	Any specific tool been currently used to capture clickstream data?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.

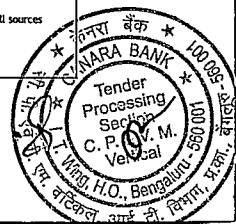


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
535	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.5.7.Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as masking personally identifiable information or using canonical data representations, as well as monitoring the inbound data flow for completeness, consistency and accuracy.	1) Whether the solution can involve 3rd party tools along with proposed data platform. 2) Any existing Data reconciliation reports and what type of validation?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
536	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.5.9. Trigger mechanisms in identifying schema changes at source and packaging data in formats for quick retrieval should be available in the solution.	What does the "packaging data in formats" mean to? If its an data export requirement, what is the format required?	Bidder to propose and comply the RFP terms
537	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.6.1.8.Robust to handle multiple concurrent access by processing engines / end users.	1) How many end users also how many concurrent users can log on at a time. 2) How much of concurrent queries expected	The solution should be capable to Integrate with existing reporting and visualisation tool.
538	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.6.1.6.Compatible to perform processing operations on whole dataset as well as individual records or individual groups.	1) As part of transformation process, Do we have any existing ETL Transformation and what type of transformation it is? 2) Do we have CDC requirements to maintain History?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined.Further refer detail scope of work as per annexure 9
539	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.6.2.The proposed solution should ensure the following data quality aspects-	1) Any existing DQ tool available in technology stack?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
540	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.6.3.4.Provide a robust change management framework to track versioning, change history with date and user information, track migration of code from development to production, security.	Does the bank uses any existing change management tool, CICD solution?. If Yes, please share the details	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
541	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.6.3.6.Industry standard metadata management is required on Data Lakehouse to prevent it from becoming a data swamp.	Any requirement of MDM solutioning? Any existing Data governance tool been used?. Kindly share	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
542	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.8: Data Science Platform with AI/ML Capabilities 3.8.5 -3.8.7	Is there a preference for a low code/no code platform?	Refer Annexure 9 : Scope of work
543	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.8: Data Science Platform with AI/ML Capabilities 3.8.1	Is there a preference for a Data Science/AI/ML technology stack (preferred AI/ML platform)?	Bidder to propose and comply the RFP terms
544	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.4: Data Warehouse will act as one of the sources of structured data. In scenarios where certain data that is required for Analytics is not available in Data Warehouse, the data may be directly ingested into the platform from the respective source system.	Can you please let us know which are the sources currently integrated with Data Warehouse?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
545	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.4: Data Sources Layer	Can you please share the list of sources to be sourced directly which are currently not integrated with the Datawarehouse?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
546	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements Point no 3.4. Data Sources Layer	3.4: Data Sources Layer	Are external sources to be considered as a source to the Datalakehouse? If yes, is their integration in scope of the vendor?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
547	65	Annexure 9: Scope of Work	1: Summary of Project	1.3: Establish consumption layer via API, microservices etc. for downstream consumption by applications and end users.	Is API development for downstream consumption in scope of the vendor? If yes, indicatively how many APIs are to be developed? How many applications / users will be consuming this data?	15-20 applications
548	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development.	Can you please provide details on the current Datawarehouse: 1. Technology leveraged 2. Number of data domains/ subject areas created	Refer Technological stack
549	14	Section C: Deliverable and Service Level Agreements	3: Security	3.4: The selected Bidder has to do necessary changes in the configuration directed by security team of the Bank after security audits like VAPT, Code Audit etc., without disturbing the production and existing backed up copies and at no additional cost to the Bank.	We are assuming that execution of VAPT, Security audits are not in scope of the vendor. Please confirm.	Bidder to comply as per RFP terms
550	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	Is setting up of the DR in scope of the vendor?	Refer Annexure 9 : Scope of work
551	5	Annexure 9: Scope of Work	Unstructured data	CCTV recordings	Can you please provide more details on usage of video data for the use cases?	Refer Annexure 9 : Scope of work
552	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: List of Use cases	Is there a requirement for voice/speech to text conversion and language translation for any of the use cases?	Refer Annexure 9 : Scope of work
553	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: List of Use cases	Since the use cases provided are Indicative, can you please provide details if OCR, Computer Vision are needed to be implemented for any use cases?	Refer Annexure 9 : Scope of work
554	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: List of Use cases	Since the use cases provided are Indicative, can you please provide details if any of the use cases require Generative AI?	Refer Annexure 9 : Scope of work
555	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Can you please provide the current state landscape outlining the data flows and the underlying technology stack covering the sources, integrations, data warehouse, reporting/analytics, consumption?	Refer Technological stack
556	73	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.10: Model Management, Governance & Security	As we understand, there are 3 environments to be setup - DEV, UAT and PRDD. Please confirm.	1. DC 2. DR 3. Dev/Test (UAT)
557	74	Annexure 9: Scope of Work	5: Resources for the Proposed Solution	5.1: Bidder should ensure that a bidder to OEM ratio of 70:30 resources for implementation of the project with a minimum of 30% from OEM who shall handle critical responsibilities of the implementation such as installation, configuration, platform administration etc.,	Can we assume that loading the 30% of OEM resources are mandated only for platform setup and configuration activities? This ratio is not mandated for the entire project duration of 3 years. Please advise.	Bidder to comply as per RFP terms
558	32	Section E: Selection of Bidder	3.5.Bidders Presentation /Site Visits / Product Demonstration/POC	3.5.2.The Bank at its discretion call for providing of Proof of Concept (POC) of proposed solution at the location which is identified by the Bank. Hence, Bidder is required to arrange the required software in prior and need to submit the pre-requisites document in order to complete the POC within 10 days.	Can you please elaborate on the POC expectations and give details on the use cases which may need to be implemented for the POC? Indicatively when will the POC be taken up? Any inputs on above will be helpful.	Bidder to demonstrate capabilities by POC, If required, on bidder's infrastructure on cloud infrastructure arranged by the bidder.
559	66	Annexure 9: Scope of Work	1: Summary of Project	1.11 Proposed solution should be set up by end-to-end integration and testing, and should meet the desired performance benchmarks specified by the Bank.	Please provide details on the performance benchmarks which are to be adhered to.	Desired to be on par or better than industry performance benchmarks against metrics like Scalability, Failure Proofing, Load testing, throughput, latency etc.



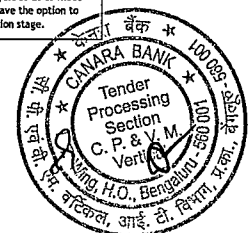
Replies to Pre Bid Queries to GeM Bid Ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
581	44	Section G: General Conditions	14: Indemnity	<p>14.1: The Bidder shall keep and hold the Bank indemnified and harmless from time to time and at all times against all actions, proceedings, claims, suits, liabilities (including statutory liability), penalties, demands, charges, costs (including legal costs) and expenses, damages, losses and any other expenses which may be caused to or suffered by or made or taken against the Bank arising out of:</p> <p>14.1.1. The breach, default or non-performance of undertakings, warranties, covenants or obligations by the Bidder;</p> <p>14.1.2. Any contravention or Non-compliance with any applicable laws, regulations, rules, statutory or legal requirements by the Bidder;</p> <p>14.2. The Bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of service provided by them.</p> <p>14.2.1. All Indemnities shall survive notwithstanding expiry or termination of the contract and Bidder shall continue to be liable under the Indemnities.</p> <p>14.2.2. The limits specified in above clause shall not apply to claims made by the Bank/third parties in case of infringement of intellectual property rights or for claims relating to the loss or damage to real property and tangible personal property and for bodily injury or death and in these cases the liability will be unlimited.</p> <p>14.2.3. All Employees engaged by the Bidder shall be in sole employment of the Bidder and the Bidder shall be solely responsible for their salaries, wages, statutory payments etc. That under no circumstances shall the Bank be liable for any payment or claim or compensation (including but not limited to compensation on account of injury / death / termination) of any nature to the employees and personnel of the Bidder.</p>	<p>Request to kindly amend the clause where SI shall be liable only for direct costs/ direct losses so as to ensure the clarity of clause</p> <p>Request to kindly remove and amend clause 14.2.1 as Indemnification clause can not survive post termination as it will be huge cost liability for SI organisation</p>	Bidder to comply as per RFP terms
582	45	Section G: General Conditions	15: Force Majeure	<p>15.3: In the event of any such intervening Force Majeure, the selected Bidder shall notify the Bank in writing of such circumstances and the cause thereof immediately within five calendar days. Unless otherwise directed by the Bank, the selected Bidder shall continue to perform / render / discharge other obligations as far as they can reasonably be attended / fulfilled and shall seek all reasonable alternative means for performance affected by the Event of Force Majeure.</p>	<p>In view of the said clause, successful bidder should have sufficient turn around time to take decisions in scenario of occurrence of FM event and hence request 15 calendar days instead of five</p> <p>Also we request to modify the clause in order to seek extension in event of FM, requested Amendment is as under: In occurrence of such events Bank shall extend all the reasonable support in extension of contract timelines.</p>	Bidder to comply as per RFP terms
583	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	<p>10.5: Only licensed copies of software shall be supplied. The selected Bidder shall grant an irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.</p>	<p>Please confirm our understanding that bank requires Subscription License</p>	Bidder to propose and comply the RFP terms
584	56	Annexure 2: Pre-Qualification Criteria	5	<p>5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.</p>	<p>The Bidder or OEM should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.</p>	Refer revised Pre Qualification Corrigendum for section
585	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	<p>3.8.6: The proposed solution should support analysis / modelling activity based on various skill level of users (Business users, Data Analyst, Data Scientist etc.).</p>	<p>What is the total number of data scientists to be considered for platform sizing?</p>	The bidder has to decide the requirement to maintain the solution as per the accepted SLA.
586	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	<p>1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.</p>	<p>The Bidder or OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.</p>	Refer revised Technical Qualification Corrigendum for section
587	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	<p>1: Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.</p>	<p>Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations</p>	Refer revised Pre Qualification Corrigendum for section
588	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	<p>2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.</p>	<p>The Bidder or OEM should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.</p>	Refer revised Technical Qualification Corrigendum for section
589	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	<p>2: Copies of Work order / PO and Completion / Sign off to be submitted for data lake / lake house implementation, PO / SOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.</p>	<p>Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations</p>	Refer revised Pre Qualification Corrigendum for section
590	65	Annexure 9: Scope of Work	1: Summary of Project	<p>1.1. Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.</p>	<p>Request the bank to let us know if the existing datawarehouse model and solution diagram available. If yes, request the bank to share</p>	Refer Technological stack
591	65	Annexure 9: Scope of Work	1: Summary of Project	<p>1.1. Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.</p>	<p>Request the bank to share facts table, dimension tables information in the current environment</p>	Will be shared with successful bidder
592	65	Annexure 9: Scope of Work	1: Summary of Project	<p>1.1. Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.</p>	<p>Request the bank to share a list of all source systems with table counts that are expected to be ingested to lakehouse other than the existing data warehouse</p>	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
593	65	Annexure 9: Scope of Work	1: Summary of Project	<p>1.1. Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.</p>	<p>As per RFP document, expected size in 2023 is 60TB. Request bank to clarify if this number indicates current DW sizing or is an approximation of size after ingesting new sources that currently are not getting loaded to current DW. Request clarity from the bank on this point</p>	The proposed data lake solution is expected to reach the size of 60TB from all sources including DW

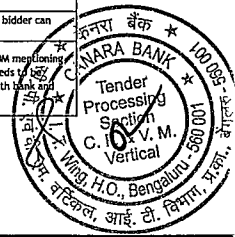


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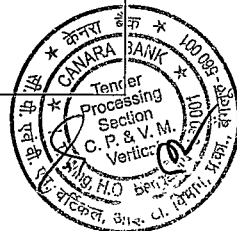
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
604	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) hereby extend our full guarantee and warranty as per terms and conditions of the GeM bid and the contract for the solution, products/equipment and services offered against this invitation for GeM bid offer by the above firm and will extend technical support and updates and ensure availability of spares including processors for our products for contract period from the date of installation.	While the Bidder will be able to offer "full guarantee and warranty" for the solution and services offered. OEM will only be able to confirm that the SI is authorized to resell Products and that when such products are resold by the bidder, the products will be governed by the standard end user licensing terms and conditions. Please confirm if the understanding is correct.	Bidder to comply as per RFP terms
605	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) also confirm that we will ensure all product updates (including management software updates and new product feature releases) are provided by M/s for all the products quoted for and supplied to the bank during the Contract period. In case this is not considered while quoting and in the event M/s fail in their obligations to provide the updates within 30 days of release/announcement, we hereby confirm that we will provide the same to the bank at no additional cost to the bank and we will directly install the updates and any new Operating Software releases at the bank's premises.	Subject to the terms of a valid and subsisting S&S order that is placed on OEM by the bidder, OEM will provide updates and releases that are covered under OEM's standard S&S program through the bidder for the contract period. OEM will not be able to provide any direct services to the Bank including installation.	Bidder to comply as per RFP terms
606	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We also confirm that the proposed solution offered by the bidder to the Bank are correct, viable, technically feasible for implementation and the solution will work without any hassles in all the locations. We also confirm that all the equipment offered are not "End of Life" during the next One Year and "End of Support" for total Contract Period.	OEM will not be able to provide any confirmation in re the solution to be provided by the bidder. However, we can confirm on the end of life/end of support period for our proprietary products in our capacity as the OEM.	Bidder to comply as per RFP terms
607	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We hereby commit to the GeM bid terms and conditions and will not withdraw our commitments during the process and or during the period of contract.	GeM terms should not be applicable to the OEM. Standard COTS products shall be supplied subject to standard end user licensing terms and conditions.	Bidder to comply as per RFP terms
608	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases	Are the USE cases today consumed from the defined DWH & BI layer today In any form today? If so provide details?	Refer Technological stack
609	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications.	Has bank already procured the hardware required for this project / Initiative? Is Bank open to H/W being proposed as part of this project? If so can we cost this into BOM / commercials? What is current capacity of the hardware for the DWH server? we understand this is exadata h/w. What are the configurations of the deployed exadata h/w for DWH? What is the current utilization for the deployed h/w in terms of compute & storage?	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9, Annexure-9)
610	66	Annexure 9: Scope of Work	1: Summary of Project	1.10: Expected data growth rate for Data Lakehouse is indicated below. Bidder may use this as a reference to estimate hardware sizing	Does the table refer to the growth rate of all data components?(Structured data, Semi Structured and unstructured data) or is this just semi and unstructured data? Please provide a break up of the growth rate for each of the applicable data components in terms of Hourly, Daily, Weekly, Monthly, Quarterly etc. If applicable	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
611	66	Annexure 9: Scope of Work	1: Summary of Project	1.11: Proposed solution should be set up by end-to-end integration and testing, and should meet the desired performance benchmarks specified by the Bank.	How are you considering query performance as a benchmark for DW performance? Could you please share or quantify the benchmarks/requirements?	Desired to be on par or better than industry performance benchmarks against metrics like Scalability, Failure Proofing, Load testing, throughput, latency etc.
612	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.2: The solution components should have an on-premise and on-cloud version, and a single unified governance and monitoring capability for both on-premises set-up as well as multi-cloud environment.	Please share details as how Bank is currently governing and monitoring its DWH set up today?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
613	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.3: The proposed solution should support hybrid architecture which enables flexibility to host the platform either on-premise or on public/ private/ hybrid cloud at any point of time as required by the Bank to leverage advanced infrastructure technologies like containerization, microservices, serverless computing and data mesh capabilities.	Is the Bank's strategy to migrate the entire DWH, semi-structure and unstructure or just the new platform for unstructure & semistructured? Can we get details on Bank's strategy?	Refer Annexure 9 : Scope of work
614	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.5: The proposed solution should bundle and offer all the features / technology components through a unified user interface with a single user login.	Is the requirement to propose Single Sign-On and Identity access management solution?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
615	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems	Can Bank provide more details on the listed requirement in terms of How is data being integrated today from Bank's existing source systems into DWH? Has Bank currently deployed ETL tool to address its Batch integration & real time integration needs? Please provide details. What are batch integration needs of each of these systems? What is the current batch data Load Size & Frequency (Hourly, Daily etc.)? What are the real time integration needs of these systems? Frequency of data pipeline to be executed for different source systems? Do you foresee any seasonality for access/use of system, which needs auto-scaling of services? Kind specify details, if applicable	Refer Technological stack
616	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc., with no manual intervention.	What is the expected frequency and potential data flow rate for the data pipeline to be executed for the defined source systems?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
617	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.11: The proposed solution should provide CI/CD/CT (Continuous Integration, Continuous Delivery & Continuous Training) for the models. It should have capability for robust feedback process from business applications to continually train and improve the models in place.	Can you please provide details of these capabilities for existing DWH in play at Bank?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.



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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
618	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	How does Bank currently ensure backup, recoverability of all its current databases? What is the RTO & RPO? What are the data archival requirements? How long should the data in archive to be stored? what are the data retention/purge policies? Kindly share details	The Bank Intends to Integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
619	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4: Data Sources Layer - This layer would consist of the various sources from which structured, semi-structured and unstructured data will be ingested into the platform.	Request Bank to please provide Source system Info in desired format in spreadsheet "Source Data Information"	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
620	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.1: Data should be ingested from source layer to the Data Lakehouse using industry standard tools / utilities.	How is Data currently being ingested into DWH from various sources? What is the periodicity for each of these data loads? Does Bank use any ETL tool of choice? If so can we get more details	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
621	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.1.1: Store reliably, efficiently and optimally irrespective of the data type (structured data, flat files, extracts, logs, xml / JSON / BSON type data, text, images, audio, video, sensor data, GIS data etc.).	What are the current data type(s) of data currently being ingested into DWH other than structured data? If so how are they being ingested today?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
622	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.2: The proposed solution should ensure the following data quality aspects-	What is Bank's current DQ strategy? Is there any automated / DQ tool/process currently being used at Bank? If so can we get more details Does Bank have any data profiling, cleansing, Data De-dupe handling capacity in any form?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
623	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.3: The proposed solution should have the following data transformation features -	Does Bank use any data transformation tool of choice? If so can we get more details	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
624	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7.3: The proposed solution should be integrated to existing and future versions Business intelligence tools like Power BI / OBIEE	Is Bank licensed in capacity for consumption for the listed BI tools? What if an additional capacity for these tools is required as part of this project? Should this be accounted into BOM/commercial?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
625	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	The timelines for implementation of use case as under	Given the overall engagement duration is of 3 years and implementation of proposed solution for 1 year, Annual Technical Support for the proposed solution is not mentioned in the requirement. Pls clarify whether annual technical support for implemented usecases will be required. If yes, Please specify the kind of support required, i.e. L1, L2 ??	Refer corrigendum 2
626	65	Annexure 9: Scope of Work	1: Summary of Project	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank.	Given the varied characteristics of multiple product offerings, usecases like Cross Sell/Up sell, Default Prediction, Personalization, etc will have to be considered separately for each type of products. Request you to please validate our understanding of the requirement.	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
627	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Please specify total no. of business & non CBS systems which will be required for Data Lakehouse solution?	Refer Technological stack
628	65	Annexure 9: Scope of Work	1: Summary of Project	1.3: Establish consumption layer via API, microservices etc. for downstream consumption by applications and end users	Is there an existing Software, Bank is leveraging for publishing APIs/microservices? a) If Yes, please share the software and sizing details. b) Also, please share, if external applications are the consumers of these APIs c) Please share the rough number of APIs bank expects to be published	Bank has a API solution and more than 100+ APIs for various purpose for different applications. The platform should be capable to consume the API wherever required from the published source.
629	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Refer "make use of existing hardware available with the Bank"	Please share the make of the hardware that may use for the project implementation. This will help check the compliance of the proposed software	Bidder should be in a position to provide the platform which should not be dependent on hardware make and only the sizing of the hardware should be as required by the successful bidder
630	67	Annexure 9: Scope of Work	1: Summary of Project	1.13: None	The training to be provided, will it be at multiple locations or only at Bangalore location.	Bangaluru.
631	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.3: None	Please share if Bank has shortlisted any specific public cloud for future migration requirement	Will be shared with successful bidder
632	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.5: None	Please share if the bank has already implemented SSO Login? Please also share what is the authentication/authorization mechanism Bank is today using	The specification mentioned in the RFP Clause is to integrate into Bank's existing Single Sign On/Single Authentication System (SAS)/Microsoft AD/LDAP facility.
633	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.7: Refer "Grievance Redressal systems, Call Centre etc."	Are these systems, currently able to generate real-time responses? Please share a complete list of such system and what platforms have been used to build these. This will help us size our efforts.	Yes. Refer Technological stack
634	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.9:	We are assuming this clause refers to the self service capability for different users. Please let us know if there is any other execution from this capability	Bidder to comply as per RFP scope
635	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.12: Refer "The proposed solution should serve the models as batch, message queuing as well as real-time endpoints in the form of APIs"	Please further elaborate what is expected in this with example. Is this about consumption of the published models or feeding data to the models.	It is about machine learning model serving capability
636	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14:	Please share the numbers of users expected to be onboarded for the open data initiatives. Is this data expected to be published on to any external platform?	Platform should be capable to publish data on external platform, sharing will be decided based on the complexity of the model
637	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: Refer "The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank"	We are assuming that HA has been missed and needs to be considered.	The Bank Intends to Integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
638				General Query	Can the team be deployed as combination of resources working from Bank premises and other PwC locations?	The bidder is expected to provide support for platform as per the SLA. The bidder can recommend the same along with breakup
639	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.6: Refer "It should support data ingestion via CDC, ETL, Message Broker,"	Is the bank currently leveraging any CDC (Change Data Capture) tool? If yes please share the software being used If not, is the Bank expecting any tool based software to be proposed?	The bidders are expected to submit the complete solution with detailed BOM mentioning the tool they propose to use at each layer. While bidding no assumption needs to be made. Bank has the option to leverage any existing technology available with bank and same will be discussed with the successful bidder.

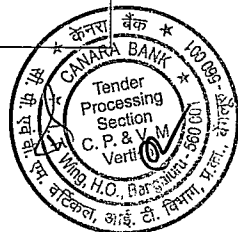


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
640	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3.5: Refer "Provide a unified interface to ensure seamless data access to the users and reports between Data Warehouse and Data Lakehouse."	1. How many total number of users are expected to use the Data Lake . a. For self service b. Visualization using the BI layer Z. How many concurrent users are expected to use the Lake house platform	From the prospective of developer community , anticipated users will be approx. 75 .For the consumption by down stream application , the system should have capability to scale up as per the requirement
641	74	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.11.4: Refer "Should support bi-directional flow of data from Operational CRM/downstream application to Analytical CRM."	Please further clarify this requirement.	Bi-directional means there will be some data sources which will have 2 way communication with proposed solution. A single application can act as source as well as consumer
642				General Query	Considering the nature of the RFP and quantum of worked Involved , we would request the Bank to extend the RFP submission by 2 weeks please . This will help in qualitative response.	Refer Corrigendum 1
643	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Is supporting the existing Datawarehouse platform in scope of this engagement?	No
644	66	Annexure 9: Scope of Work	1: Summary of Project	1.11: Proposed solution should be set up by end-to-end integration and testing, and should meet the desired performance benchmarks specified by the Bank.	What is the expected performance or SLA? There would be different performance benchmarks depending on use cases and technologies.	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
645	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16: The proposed solution should comply to all information and cyber security governance guidelines of the Bank as well as regulatory bodies.	Does the bank have specific encryption/masking requirements defined for handling sensitive/PII data?	No
646	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Data Sources Layer - Unstructured	Only ingestion of unstructured data is expected. Converting unstructured data like images, audio, video to structured form is not part of scope. Please confirm.	Bidder to propose and comply the RFP terms
647	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4: Data Sources Layer	Please confirm the number of Internal and external data sources (DBs, manual files, APIs, real time) expected to be integrated	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
648	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.13: The proposed solution should be an excellent Digital Data Platform with real time data processing and transfer to data layers and then to app/ consumption layers.	Please specify number of downstream applications to be integrated with Data lake platform. Also if available share the expected number of APIs and real time streams to be exposed.	15-20 applications
649	66	Annexure 9: Scope of Work	1: Summary of Project	1.5: An Indicative list of use cases is listed in the below table.	Has the bank developed and utilizing any of these seven predictive models earlier? If yes, are there any shortcomings?	Bidder to propose and comply the RFP terms
650	66	Annexure 9: Scope of Work	1: Summary of Project	1.5: An Indicative list of use cases is listed in the below table.	Is the bank open to explore Gen AI related use cases?	Bidder to propose and comply the RFP terms
651	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Unstructured	Does the bank store loan underwriter notes? Can this be utilized for building analytics models?	Bidder to propose and comply the RFP terms
652	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4.3: Unstructured	What are the external third party data sources that bank has access to?	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
653	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6.3.7: Provide metadata-driven Data governance, security, administration and access management.	Has the bank defined the data governance, metadata policy and process? If yes please specify the name & description of such policy and process. Has the bank defined the data governance roles such as data owner and data steward ?	Bidder to propose and comply the RFP terms
654	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14: The proposed solution should have integrated data management, metadata-driven data governance and security framework.	Does the bank has any data governance/data catalog tool? Or dose the bank expects the vendor to provide the metadata management solution?	Bidder to propose and comply the RFP terms
655	17, 18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	8.1.5: Cost of Implementation of use cases as per clause 1.5 of Annexure-9 (Scope of Work)	Please change the payment term to: 20% - On finalization of the requirements 40% - After Successful Implementation of two use case as defined by the Bank and acceptance / signoff by the bank. 30% - After Successful Implementation of next three use case as defined by the Bank and acceptance / signoff by the bank. 10% - After Successful Implementation of remaining two use case as defined by the Bank and acceptance / signoff by the bank.	Bidder to comply with RFP Terms and Conditions.
656	20	Section C: Deliverable and Service Level Agreements	11: Local Support	11.3: The Bidder will be responsible for attending complaints during all hours on 24x7x365 basis during contract period	Please validate the understanding: 1. L1 support will be 24x7x365 only 2. We will leverage on existing ITSM and helpdesk solution 3. Canara bank will provide the support infrastructure and tools (monitoring etc.)	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
657	31	Section E: Selection of Bidder	3: Evaluation of Bids	3.3.11: Sample evaluation process is shown below:	Please change evaluation from 70:30 to 80:20	Bidder to comply with RFP Terms and Conditions.
658				General Query	How much data will be archived every year, if any?(Percentage of Total Data Size)	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
659				General Query	Is it good to assume capacity of UAT environment as 30% of the Production	30% Capacity of live environment
660				General Query	What is the size of current DWH in Oracle Exadata.	Refer Technological stack
661				General Query	Please share the Data Science team members expected to join this journey	Bidder should decide based on the scope of work and maintaining the SLA
662				General Query	Can we assume 4 environments for the purpose of the sizing i.e. Test, UAT, DC, DR	There are three environments DC / DR and UAT which will be used initially as development environment.UAT and Dev/Test is one environment
663				General Query	Please share which ETL tool is being used current and If it has support for Bigdata connector	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
664	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Please Refer "The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB."	We request the bank to reduce the Data size requirement to 50 TB . Here is the re-drafted requirement for reference "The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 50 TB."	Refer revised Technical Qualification Corrigendum for section
665	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Refer "Details of institutions where the solution has been implemented - o Sector: o Public Sector: 5 marks o Private Sector: 4 marks o Foreign: 2 marks"	We request the bank to change the following clause to "Details of institutions where the solution has been implemented - o Sector: o Commercial Bank: 5 marks o NBFC: 4 marks o Foreign Banks 2 marks	Refer revised Technical Qualification Corrigendum for section



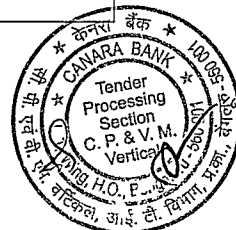
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Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
666	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	1: Refer" o 5000 or more branches: 3 marks o 1000 to 5000 branches: 2 marks o Less than 1000 branches: 1 mark	We request the bank to change the criteria to * No. of branches (In case of Bank) o 2000 or more branches: 3 marks o 1000 to 2000 branches: 2 marks o Less than 1000 branches: 1 mark o Implemented in regulatory body: 3 marks"	Refer revised Technical Qualification Corrigendum for section
667	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	1: Refer "o Location: o India: 5 marks o Other Asian Countries: 3 marks o Other Countries: 2 marks"	We Request you to re-consider not having location constraints as the evaluation criteria	Refer revised Technical Qualification Corrigendum for section
668	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	3: Please refer "Size of Implementation - o 1 Petabyte (PB) or more: 5 marks o 500 TB to 1 PB: 4 marks o 200 TB to 500 TB: 2 marks"	We request this should considered for both BFSI and NON BFSI	Refer revised Technical Qualification Corrigendum for section
669	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of Identified professionals for the project	6: Please refer "No. of use cases Implemented - o 20 or more: 5 marks o 10 to 20: 4 marks o 5 to 10: 3 marks o 5 or less: 2 marks"	Please consider changing this to "No. of use cases Implemented - o 10 to 20: 5 marks o 5 to 10: 4 marks o 5 or less: 3 marks"	Refer revised Technical Qualification Corrigendum for section
670	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.7: The proposed solution should have capability to ingest data in real-time from systems like Grievance Redressal systems, Call Centre etc., with no manual intervention.	What are the underlying data bases for these systems? What is the approx daily data volume?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth
671	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	Can you share the Annexure-9(A)	It is part of bid document uploaded in GeM portal. In case any issue in downloading the same can be taken up with bank.
672	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.3: The proposed solution should support hybrid architecture which enables flexibility to host the platform either on-premise or on public/ private/ hybrid cloud at any point of time as required by the Bank to leverage advanced Infrastructure technologies like containerization, microservices, serverless computing and data mesh capabilities. Bidder should provide option to switch over to cloud at any point of time within the existing license cost quoted with, all the latest features. Bank can use cloud environment with the existing licenses whenever required. Also, for this migration (on-premise to cloud), the required resources shall be provided by the bidder as per the price quoted in rate card as specified in Table-F of Annexure-17 (Bill of Material).	1. In a hybrid architecture where the workload may need to be moved between on-premise and cloud and a multi-cloud environment, it is important to have a seamless execution of this and also ensure that the underlying platform is same and can easily scale and downscale across environments in a multi cloud set-up. Containers are an easy and accomplished way of achieving this across a multi cloud environment. 2. Can you share the Annexure-17	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
673	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.3: The proposed solution should support hybrid architecture which enables flexibility to host the platform either on-premise or on public/ private/ hybrid cloud at any point of time as required by the Bank to leverage advanced Infrastructure technologies like containerization, microservices, serverless computing and data mesh capabilities. Bidder should provide option to switch over to cloud at any point of time within the existing license cost quoted with, all the latest features. Bank can use cloud environment with the existing licenses whenever required. Also, for this migration (on-premise to cloud), the required resources shall be provided by the bidder as per the price quoted in rate card as specified in Table-F of Annexure-17 (Bill of Material).	We welcome the vision of the Bank on Containerization, Microservices, Serverless Architecture and Data Mesh capabilities in a Hybrid Cloud Environment. The Bank already has Red Hat Openshift Container engine, which is an Enterprise Supported Open Source Kubernetes platform which address all the bank needs for this point. Is it fair to assume that the bidders can propose all their solution components on top of Red Hat Openshift Container Platform? This would help the bank with the compliance to Hybrid Cloud vision, Cost Optimization, Maintenance, Support, Time to realise the solution etc etc.	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
674	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.4: The proposed solution should support open source software frameworks and components.	Please rephrase this requirement "The proposed solution to should support, Enterprise grade/supported OEM open source software framework and components ". we are recommending this change due to following: Open Source community and unsupported versions of softwares downloaded from their internet could contain Vulnerabilities/Bugs which are unidentified and may hamper the project progress. It is requested that Open Source Software Supported by OEM shall be made a preference whereby security patches, upgrades and 24x7 support is possible as part of solution deployment.	Bidder to propose and comply the RFP terms



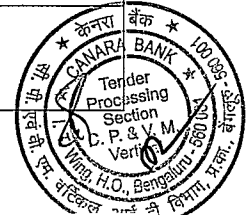
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675	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.12: The proposed solution should serve the models as batch, message queuing as well as real-time endpoints in the form of APIs / microservices that can be consumed for automated provisioning, rescaling, tracking and management. It should allow integration with DevOps/ MLOps / ModelOps tools and SDK automation with existing BI tools.	<p>1. Is it a fair understanding that the end to end MLOps Pipelines should be built using Microservices and Containers as the key technologies and exposed as secure APIs.</p> <p>2. The Bank already has a Enterprise Supported Open Source Kubernetes engine -Red Hat OpenShift Container Engine running in production. Could bidders leverage the same to run their proposed solution components against the RFP thus leading to optimization of cost, faster realization of the solution and secure operations.</p> <p>3. The RFP asks for components related to Data Processing. The Bank would also need a MLOps engine for the Data Science part of the AML solution. We request inclusion of MLOps guidelines both in Annexure 9 and 10, and also in overall BOM required.</p>	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
676	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14: The proposed solution should have integrated data management, metadata driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Can you elaborate more on community based Open Data initiatives and Platform	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
677	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.15: The proposed solution should comply to all information and cyber security governance guidelines of the Bank as well as regulatory bodies.	Any specific cyber security governance please specify	Bidder to propose and comply the RFP terms
678	68	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.1: The proposed solution should be built on on-premises hardware, taking into account not only the Bank's current data and processing needs but also the Bank's growing number of sources, semi-structured data and unstructured data.	Can we know the how many source of data and the growth	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
679	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.6: It should support data ingestion via CDC, ETL, Message Broker, SFTP/INFT, Web API, etc. There should be no limitation on the type, format and size of data ingested. Data may include flat files, excel, log, feeds, audio, video, image, RDBMS, all datatypes supported by RDBMS, unstructured text data, etc. from file servers / file transfer APIs.	As bank already has an existing Data Warehouse and Business Intelligence tools, would it fair to assume that Bank would have tools in the space of data ingestion, ETL etc that can be leveraged, thus giving a cost effective solution response to the RFP. Please share the list of existing tooling under the category of CDC, ETL, Message Broker, SFTP/INFT and Web API etc	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
680	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.3: It should support ingestion of data in batches, incremental additions, streaming (like Kafka/Spark etc.) and real-time feeds.	Does the Bank have subscription to technologies such as Kafka that can leveraged as part of the RFP. Similarly does Bank have API Management solution which are used as a best practice to create secure Interface to ML Models	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
681	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.8: The proposed solution should support the following open-source run times/ languages/ ML/DL/NLP packages but not limited to: R, Python, Scala, Spark, PySpark, SparkR, Keras, Tensorflow, PyTorch, Scikit-learn.	Please elaborate more on this, would it be complete open source or open source with enterprise support?	Bidder to propose and comply the RFP terms
682	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB	As per RFP the solution is expected to be based on open source framework. The qualification criteria mentions OEM solution references. The OEM solution would be proprietary in nature as it would have very OEM specific solution components and features. You are humbly requested to change this to a platform based approach which is based on Open Source Technologies and Open Source framework with OEM support.	Bidder to propose and comply the RFP terms
683	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.9.3: GPUs, if required basis use cases	GPU support is an important element of a Data Lakehouse project with an objective of developing AI/ML solutions. Certification to run GPU workloads is an important architectural requirement. Request thus for this point to be modified as: "The proposed solution should also support NVIDIA GPUs and must be certified to run with NVIDIA cards/DGX boxes. The underneath platform should be able to collect GPU parameters for the purpose of monitoring. Administrators should have control to configure resources such as CPU, Memory, storage, GPU depending upon the compute required for various workloads to effectively manage the resources."	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
684	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.4: The proposed solution should offer MLOps and ModelOps capabilities.	<p>We request inclusion of MLOps Specifications separately as a section in Annexure 10 and also in BOM table so that the same is offered as part of the solution. We also request inclusion of compliance points w.r.t to a MLOps platform.</p> <p>1. The MLOps solution should provide a common platform to bring IT, data science, and app dev teams together thereby making it simpler to collaborate.</p> <p>2. The solution should provide enterprise supported Jupyter notebooks to ensure that the notebooks are automatically optimized with the required tools and libraries needed for model development. Notebook types such as Tensorflow, PyTorch, CUDA, Minimal Python (including packages such as Pandas, Matplotlib, Kafka-Python, NumPy, SciPy, Scikit-learn, Boto3, Minimal Python).</p> <p>3. It should automatically upgrade the supported versions for software bundles periodically to ensure users are working with updated releases.</p> <p>4. The MLOps solution shall provide supported version for the service which automatically upgrade the supported versions for software bundles periodically to ensure users are working with updated releases. When a new version of a notebook image is released, the previous version will remain available and supported on the cluster, allowing time for workloads to be migrated to the latest versions of available packages.</p> <p>5. The solution should support S3 Integration for users to be able to access data for model development.</p> <p>6. The MLOps solution should let users to connect Jupyter notebooks to a Git repository to allows users to pull files into the service from Git or push files modified in the service to a Git repository from the notebooks itself.</p> <p>7. The solution should allow integration with supported third party services to address additional needs for data science projects.</p> <p>8. The MLOps solution should support hybrid deployment i.e. it can be deployed on private/public cloud as well as on-premises.</p>	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.

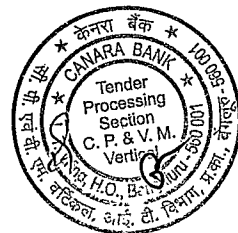


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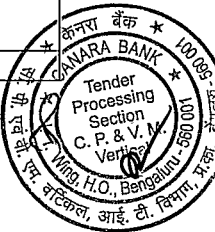
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
685	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.3: The proposed solution should support end to end model lifecycle (Build, Deploy, Manage, Govern) of AI / ML use cases on a single platform.	Kubernetes and containers are now the key technologies to build end to end AI/ML models. The RFP talks about Microservices, Containers etc in various sections. Request this point to be rephrased so that the Bank is able to get consistent responses aligned on the Industry Best practices for AI/ML projects. Requesting you to rephrase it "The proposed solution should support end to end model lifecycle (Build, Deploy, Manage, Govern) of AI / ML use cases on a single Kubernetes platform."	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
686	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14: The proposed solution should have integrated data management, metadata driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Kindly elaborate the requirement?	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
687	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8: Data Science Platform with AI/ML Capabilities 3.8.1.6. Geospatial Analysis	What kind of use cases Bank is looking at ?	Refer Annexure 9 : Scope of work
688	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8: Data Science Platform with AI/ML Capabilities 3.8.1.5: Web / Streaming Analytics	What kind of use cases Bank is looking at ?	Refer Annexure 9 : Scope of work
689	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8: Data Science Platform with AI/ML Capabilities 3.8.9.4: Multiple versions of runtime	Kindly give an example for better understanding	Eg. One environment running on Python V3.8 and another one running on Python v3.10 without interference/conflict.
690	73	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.11: The proposed solution should offer built-in package management for the open-source packages / libraries (e.g. Python libraries)	Kindly elaborate the requirement?	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
691	73	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.9.4: Platform should have capability to convert piece of code into a job and ability to schedule, manage and monitor the job.	Kindly confirm if it means "job scheduler should be integral part of the proposed platform"	Yes
692	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Is there any qualification criteria for the Analytics Platform? Please confirm	Refer revised Technical Qualification Corrigendum for section
693	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	Escrow arrangement	This is not acceptable to OEM and to us since company policy doesn't permit for such arrangement hence we request you to remove this clause from the RFP	Bidder to comply as per RFP terms
694	18	Section C: Deliverable and Service Level Agreements	6: Payment Terms	A: Enterprise License Cost 1: 75% On delivery, installation and on acceptance / signoff by the bank. 10% After implementing two (2) use cases (out of listed seven use cases) and on acceptance / signoff by the bank. 10% After implementing three (3) more use cases (out of listed seven use cases) and on acceptance / signoff by the bank. 5% After implementing rest two (2) use cases (out of listed seven use cases) and on acceptance / signoff by the bank	We request Bank to pay 90% against delivery of the licenses and 10% against PBG to release for below reason: 1. As bidder to make 100% payment to OEM upfront against the supply of license 2. The use case implementation is spread across for more than one year, the payment cannot be linked to the implementation since this will create a stock audit issue to the bidder organization for which management will not approve to participate for this tender.	Refer Corrigendum 2
695	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.5: Only licensed copies of software shall be supplied. The selected Bidder shall grant an irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.	Please confirm our understanding that bank requires Subscription License	Refer Corrigendum 2
696	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8: Data Science Platform with AI/ML Capabilities 3.8.6: The proposed solution should support analysis / modelling activity based on various skill level of users (Business users, Data Analyst, Data Scientist etc.).	What is the total number of data scientists to be considered for platform sizing?	Bidder to decide based on scope of work , timelines and solution offered
697	78	Annexure 10: Technical Evaluation Criteria	Technical Evaluation Criteria	1. The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Request the Bank to change the clause as below: The Bidder or OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Refer revised Technical Qualification Corrigendum for section
698	78	Annexure 10: Technical Evaluation Criteria	Technical Evaluation Criteria	Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
699	78	Annexure 10: Technical Evaluation Criteria	Technical Evaluation Criteria	2. The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Request the Bank to change the clause as below: The Bidder or OEM should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Refer revised Technical Qualification Corrigendum for section
700	78	Annexure 10: Technical Evaluation Criteria	Technical Evaluation Criteria	Copies of Work order / PO and Completion / Sign off to be submitted for data lake / lake house implementation. PO / SOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.	Request bank to consider reference letter and contact details from the clients as sufficient documentation due to NDA obligations	Refer revised Pre Qualification Corrigendum for section
701	86	Annexure 10: Technical Evaluation Criteria	Section B - Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	All Points under Section B	Request the Bank to change the clause as below: Bidder or OEM capability including proven relevant experience and capabilities of identified professionals for the project	Refer revised Pre Qualification Corrigendum for section
702	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Request the bank to let us know if the existing datawarehouse model and solution diagram available. If yes, request the bank to share	Refer Technological stack
703	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Request the bank to share facts table, dimension tables information in the current environment.	Will be shared with successful bidder



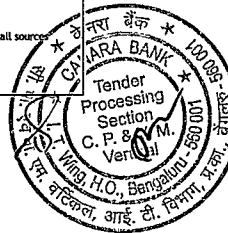
Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
704	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to share a list of all source systems with table counts that are expected to be ingested to lakehouse other than the existing data warehouse	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
705	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	As per RFP document, expected size in 2023 is 60TB. Request bank to clarify if this number indicates current DW sizing or is an approximation of size after ingesting new sources that currently are not getting loaded to current DW. Request clarity from the bank on this point	The proposed data lake solution is expected to reach the size of 60TB from all sources including DW
706	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if bank's existing ETL tools can be used for loading and transformation purpose	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
707	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is current database environment, request the bank to share inventory details such as number of tables, views, procedures, functions, triggers.	Will be shared with successful bidder
708	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide clarity on the replication mechanism between DC and DR	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
709	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to provide details on data size and data type for movement from various data sources (DWH, CBS, etc.) to lakehouse	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
710	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm if UAT environment will be considered as Dev environment	Yes
711	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm the capacity considered of UAT environment? (as % of DC)	30% Capacity of live environment
712	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request the bank to confirm on number of ETL Jobs, BI Reporting Jobs, Data migration Jobs	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
713	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Request bank to confirm the number of downstream applications accessing the Data Lakehouse in the future	15-20 applications



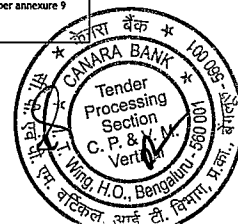
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
714	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4: Data Sources Layer - This layer would consist of the various sources from which structured, semi-structured and unstructured data will be ingested into the platform. Data Warehouse will act as one of the sources of structured data. In scenarios where certain data that is required for Analytics is not available in Data Warehouse, the data may be directly ingested into the platform from the respective source system. Possible sources of data are listed below:	What is the frequency, Type(Batch/ Stream/ API Access etc) and volume of data on a days basis for below data sources: 3.4.1 Structured 3.4.1.1. Data Warehouse 3.4.1.2. Business Systems (CBS, Credit Card, Digital channels etc.) 3.4.1.3. Non-CBS Systems 3.4.2 Semi-Structured 3.4.2.1. Emails 3.4.2.2. Application logs 3.4.2.3. Credit Information Companies' data 3.4.2.4. Clickstream data from various customer touch points 3.4.2.5. Loan Application Processing System Unstructured 3.4.3.1. Non-CBS Systems 3.4.3.2. Call Centre Data 3.4.3.3. Customer Complaints data 3.4.3.4. Document Management System 3.4.3.5. CCTV recordings 3.4.3.6. Social Media Data 3.4.3.7. News & Annual Reports 3.4.3.8. Geo-location data 3.4.3.9. Logs data 3.4.3.10. Any other external data	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
715	100	Annexure 18: Manufacturer Authorization Form	18: Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) hereby extend our full guarantee and warranty as per terms and conditions of the GeM bid and the contract for the solution, products/equipment and services offered against this invitation for GeM bid offer by the above firm and will extend technical support and updates and ensure availability of spares including processors for our products for contract period from the date of installation.	While the Bidder will be able to offer 'full guarantee and warranty' for the solution and services offered. OEM will only be able to confirm that the SI is authorized to resell Products and that when such products are resold by the bidder, the products will be governed by the standard end user licensing terms and conditions. Please confirm if the understanding is correct.	Bidder to comply as per RFP terms
716	100	Annexure 18: Manufacturer Authorization Form	18: Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) also confirm that we will ensure all product updates (including management software updates and new product feature releases) are provided by M/s _____ for all the products quoted for and supplied to the bank during the Contract period. In case this is not considered while quoting and in the event M/s _____ fail in their obligations to provide the updates within 30 days of release/announcement, we hereby confirm that we will provide the same to the bank at no additional cost to the bank and we will directly install the updates and any new Operating Software releases at the bank's premises.	Subject to the terms of a valid and subsisting S&S order that is placed on OEM by the bidder, OEM will provide updates and releases that are covered under OEM's standard S&S program through the bidder for the contract period. OEM will not be able to provide any direct services to the Bank including installation.	Bidder to comply as per RFP terms
717	100	Annexure 18: Manufacturer Authorization Form	18: Manufacturer Authorization Form	We also confirm that the proposed solution offered by the bidder to the Bank are correct, viable, technically feasible for implementation and the solution will work without any hassles in all the locations. We also confirm that all the equipment offered are not "End of Life" during the next One Year and "End of Support" for total Contract Period.	OEM will not be able to provide any confirmation in re the solution to be provided by the bidder. However, we can confirm on the end of life/end of support period for our proprietary products in our capacity as the OEM.	Bidder to comply as per RFP terms
718	100	Annexure 18: Manufacturer Authorization Form	18: Manufacturer Authorization Form	We hereby commit to the GeM bid terms and conditions and will not withdraw our commitments during the process and or during the period of contract.	GeM terms should not be applicable to the OEM. Standard COTS products shall be supplied subject to standard end user licensing terms and conditions.	Bidder to comply as per RFP terms
719	9	Section B: Introduction	3: About RFP	3.2: The selected Bidder has to provide the services/ solution in India and the tools/ solution provided by the selected Bidder should work in overseas branches also	Validation Criteria for Overseas Working	The solution should be capable to provide role based access to all the offices of the Bank irrespective of the location
720	10	Section B: Introduction	4: Objective	4.2: The Bidders satisfying the Qualification Criteria as per the RFP and having experience in Implementation of Data Lakehouse & End-to-End Analytics Solution in any Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years may respond.	Change required is as follows 4.2. The Bidders/OEM satisfying the Qualification Criteria as per the RFP and having experience in Implementation of Data Lakehouse & End-to-End Analytics Solution in any Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years may respond.	Refer revised Technical Qualification Corrigendum for section
721	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.5: Supply, installation of Licenses/Softwares/OS/DB/Other items and Implementation of the proposed solution in DC, DRC & UAT (dev/test) setup of the Bank should be completed within Eight (8) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness of the respective environment (DC / DRC / UAT) by the Bank whichever is later. The selected bidder has to complete the Implementation of all the functionalities defined elsewhere in the RFP.	What will be the size of DR (IN PERCENTAGE) from the Data Lakehouse Perspective?	DC and DR are identical
722	14	Section C: Deliverable and Service Level Agreements	2: Integration & Interfaces	2.1: The selected Bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period	Could you please specify the number (or an Estimation) of applications to be included?	15-20 applications
723	15	Section C: Deliverable and Service Level Agreements	5: Uptime	5.3: The selected bidder should consider high-availability (active-passive) at DC & DR with RPO of 15 minutes and RTO of 120 minutes.	Please Note that the RPO is influenced by the following factors, and it relies significantly on a stable network between the requested sites: Data change rate (DCR): The frequency at which data is modified or updated in the production environment. Higher data change rates may necessitate more frequent backups to meet the RPO. Network bandwidth (NB): The available network capacity between the production site and the disaster recovery site impacts the speed of data replication. Therefore, kindly provide us with the necessary information for the mentioned factors (DCR and NB) between the sites. And Below	Bidder to comply as per RFP terms
724	15	Section C: Deliverable and Service Level Agreements	5: Uptime	5.3: The selected bidder should consider high-availability (active-passive) at DC & DR with RPO of 15 minutes and RTO of 120 minutes.	Details required from bank: distance between two sites, bandwidth available, type of replication, change data rate, etc.	This will be shared with selected bidder



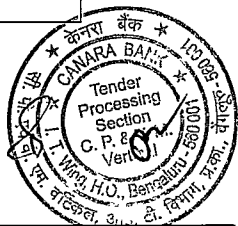
Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
725	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	7.2: The selected Bidder will place the Source Code (and the procedures necessary to build the source into executable form) along with flow diagrams and technical write up for the Software, within Thirty (30) days of implementation in escrow with a reputable agency acceptable to both the parties. The modalities of the versions to be kept etc., can be finalized at the time of lodging the software for escrow.	List of Bank approved escrow agency to be mentioned	This will be shared with selected bidder
726	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.5: Only licensed copies of software shall be supplied. The selected Bidder shall grant an irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.	Please include Subscription Licences too	corrigendum
727	20	Section C: Deliverable and Service Level Agreements	11: Local Support	11.1: The Support should be for an unlimited number of Incidents reported to the selected Bidder and they have to provide a practical solution to resolve the issue. The support should be provided over phone, E mail web based, in person, if required. All escalations will be attended / responded promptly not later than 30 minutes of reporting.	Would the OEM Support suffice here?	Refer Technological stack
728	20	Section C: Deliverable and Service Level Agreements	11: Local Support	11.1: The Support should be for an unlimited number of Incidents reported to the selected Bidder and they have to provide a practical solution to resolve the issue. The support should be provided over phone, E mail web based, in person, if required. All escalations will be attended / responded promptly not later than 30 minutes of reporting.	Should the Bidder Resources to be Involved all throughout the 3 Years of Contract?	Bidder to propose and comply the RFP terms
729	20	Section C: Deliverable and Service Level Agreements	11: Local Support	11.1: The Support should be for an unlimited number of Incidents reported to the selected Bidder and they have to provide a practical solution to resolve the issue. The support should be provided over phone, E mail web based, in person, if required. All escalations will be attended / responded promptly not later than 30 minutes of reporting.	Would the support be required from On-Prmises?	Preferably on premises. Bank to permit ofsite support if necessary.
730	20	Section C: Deliverable and Service Level Agreements	11: Local Support	11.2: The Bidder is responsible for providing incident Management for offered solution. Bidder is responsible for providing practical solution for resolution of the issues and implementation of the same to resolve the issue.	Would the support be required from On-Prmises?	Preferably on premises. Bank to permit ofsite support if necessary.
731	56	Annexure 2: Pre-Qualification Criteria	8	8: Bidder to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder.	Given that the Bank's Request for Proposal (RFP) specifies a requirement of 10 resources for the project execution, Shall we produce all 10 Technical Relevant Certificates of Involved Engineers? Please help us with details	Bidder to propose and comply the RFP terms
732	56	Annexure 2: Pre-Qualification Criteria	8	8: Bidder to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder	Change required is as follows Bidder/OEM to submit the details along with copies of the certificates mentioned along with the profile of the professionals and letter from Company Secretary stating that they are on payroll of the bidder	Refer revised Technical Qualification Corrigendum for section
733	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Please help us with technical details on the existing Data Warehouse, including Solution diagram.	Refer Technological stack
734	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	What are Bank's existing Analytical Tools?	Refer Technological stack
735	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Requesting the bank to confirm if bank's existing ETL tools can be used for loading and transformation purpose	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
736	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Please provide a comprehensive list of all source systems, along with their respective table counts, that are intended to be ingested into the lakehouse, excluding the existing data warehouse.	Refer Clause 3.4 of Annexure 9 - Scope of Work.
737	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	What is current database environment, request the bank to share inventory details such as number of tables, views, procedures, functions, triggers.	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
738	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	Requesting the bank to share facts table, dimension tables information in the current environment	Will be shared with succesful bidder
739	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the investments made on existing analytical tools.	According to the RFP document, the expected size in 2023 is 60TB. We kindly request the bank to clarify whether this figure represents the current data warehouse sizing or if it's an approximation that includes the size after ingesting new sources that are currently not being loaded into the current data warehouse. Seeking clarity on this point will help us better understand the requirements for the project.	The proposed data lake solution is expected to reach the size of 60TB from all sources including DW



Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
740	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could you please provide clarity on the replication mechanism used between the Data Center (DC) and the Disaster Recovery (DR) site? Specifically, we would like to understand Currently, how data is synchronized and replicated between these two locations to ensure data availability and continuity in case of any unexpected events.	Will be shared with successful bidder
741	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could you please provide detailed information on the data size and data type for the movement of data from various sources (such as Data Warehouse - DWH, Core Banking System - CBS, etc.) to the lakehouse? This will help us in effectively planning and executing the data migration process.	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
742	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could you please confirm whether the UAT (User Acceptance Testing) environment will be considered as part of the Development (Dev) environment?	Yes
743	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could the bank please confirm the annual volume of data that is archived each year? This information will be helpful in understanding the data management and storage requirements for the project.	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
744	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could the bank kindly confirm the capacity that is considered for the UAT (User Acceptance Testing) environment as a percentage of the Data Center's capacity?	10% Capacity of live environment
745	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	Could you please confirm the number of downstream applications that are planned to access the Data Lakehouse in the future?	15-20 applications
746	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefers to retain the Data Warehouse and the Investments made on existing analytical tools.	What is the frequency, Type(Batch/ Stream/ API Access etc) and volume of data on a days basis for below data sources: Structured 3.4.1.1. Data Warehouse 3.4.1.2. Business Systems (CBS, Credit Card, Digital channels etc.) 3.4.1.3. Non-CBS Systems 3.4.2.1. Emails 3.4.2.2. Application logs 3.4.2.3. Credit Information Companies' data 3.4.2.4. Clickstream data from various customer touch points 3.4.2.5. Loan Application Processing System Unstructured 3.4.3.1. Non-CBS Systems 3.4.3.2. Call Centre Data 3.4.3.3. Customer Complaints data 3.4.3.4. Document Management System 3.4.3.5. CCTV recordings 3.4.3.6. Social Media Data 3.4.3.7. News & Annual Reports 3.4.3.8. Geo-location data 3.4.3.9. Logs data 3.4.3.10. Any other external data"	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
747	66	Annexure 9: Scope of Work	1: Summary of Project	1.11: Proposed solution should be set up by end-to-end integration and testing, and should meet the desired performance benchmarks specified by the Bank.	Please Help us with desired performance benchmarks for the Sites and Environments Required e.g. DC, DR, Prod, UAT, Dev, Test etc. For Example of Details like Data Ingestion Layer required throughput in DC, DR and in Prod, DR, Dev, Test	Bidder to propose and comply the RFP Terms
748	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	The determination of the requested hardware and software sizing relies on each other and specific parameters of workload listed below. Henceforth Please aid in addressing the below workload-related questions, And kindly provide details regarding the planned workload for 3 years too, as it will guide us in the hardware sizing process.	Refer to Clause 1.5 of Annexure 9 - Scope of Work and arrive at the figures accordingly
749	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many ETL (Extract, Transform, Load) Jobs does the bank plan to run, and how does the bank rate the nature of these jobs in terms of complexity, categorizing them as Complex, Medium, or Simple?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9

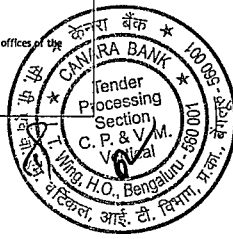


Replies to Pre Bid Queries to GeM Bid ref. no. GEW/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query'	Bank's Reply
750	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many BI Reporting Jobs does the bank plan to run, and how does the bank rate the nature of these jobs in terms of complexity, categorizing them as Complex, Medium, or Simple?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
751	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many Data Migration Jobs does the bank plan to run, and how does the bank rate the nature of these jobs in terms of complexity, categorizing them as Complex, Medium, or Simple?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
752	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many Machine Learning Jobs does the bank plan to run, and how does the bank rate the nature of these jobs in terms of complexity, categorizing them as Complex, Medium, or Simple?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
753	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How Frequently does the bank plan to run these Machine Learning Jobs?	It will be decided on case to case basis
754	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many Total Concurrency or Parallel Tasks of (ETL, BI or Data Migration) Jobs does the Bank Plans to run?	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
755	66	Annexure 9: Scope of Work	1: Summary of Project	1.9: Bidder has to recommend the hardware sizing required for setting up the solution as per Annexure-9(A) Hardware / Software requirement Specifications. The platform should support multiple hardware vendors. However, Bank at its discretion, will procure the hardware from the bidder or from the market, or make use of existing hardware available with the Bank. Bidder shall deploy the proposed solution on the hardware supplied by the Bank.	How many Application Access to Data Lake does the bank need?	15-20 applications
756	66	Annexure 9: Scope of Work	1: Summary of Project	1.10: Expected data growth rate for Data Lakehouse is indicated below. Bidder may use this as a reference to estimate hardware sizing.	The contract for this RFP, "Data Lakehouse," is set for 3 years. However, the data growth projection spans 5 years. Please clarify whether the hardware should be sized to accommodate 3 or 5 years of data growth along with Workload as indicated in the point above.	corrigendum
757	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	Could you provide a list of Bank's Specific Existing Data resources? Though there is a General list in the RFP Available.	Will be shared with successful bidder
758	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.6: The proposed solution should seamlessly integrate with Bank's existing source systems like Data Warehouse, CBS, Non-CBS applications etc. The solution should also seamlessly integrate with Bank's business applications such as, but not limited to, Operational CRM, Analytical CRM, Digital Lending Platform, Lead Management System, Loan Origination System etc. with provision for bi-directional flow of data.	What are the current data ingestion tools in use, and can our solution reuse any of them?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
759	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	Could you assist us by providing the relevant policies of the Bank, as they can have an impact on hardware and software sizing decisions?	Will be shared with successful bidder
760	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8.6: The proposed solution should support analysis / modelling activity based on various skill level of users (Business users, Data Analyst, Data Scientist etc.).	What is the workload to be expected so that we can avail the correct number of data scientists for platform sizing?	Bidder to decide based on scope of work, timelines and solution offered
761	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Change required is as follows The Bidder/OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Refer revised Technical Qualification Corrigendum for section
762	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.	Could we request the bank to accept reference letters and client contact details as adequate documentation, considering the obligations under our signed Non-Disclosure Agreement (NDA) with our reference customer?	Refer revised Pre Qualification Corrigendum for section
763	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Change required is as follows The Bidder/OEM should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Refer revised Technical Qualification Corrigendum for section
764	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: Copies of Work order / PO and Completion / Sign off to be submitted for data lake / lake house implementation. PO / SOW / Certificate of completion / Go-live to be shared to substantiate Machine Learning/AI based use case implementation.	Could we request the bank to accept reference letters and client contact details as adequate documentation, considering the obligations under our signed Non-Disclosure Agreement (NDA) with our reference customer?	Refer revised Pre Qualification Corrigendum for section
765	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Bidder has to furnish documentary evidence purchase orders/Service level agreement/ Completion certificate duly mentioning the details in the last five (05) years to verify the same.	Change required is as follows Bidder/OEM has to furnish reference letters and client contact details.	Refer revised Technical Qualification Corrigendum for section

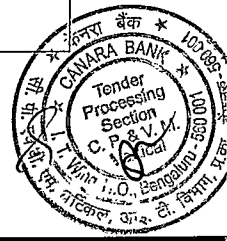


Replies to Pre Bid Queries to GeM Bid ref. no. GEM/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
766	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) hereby extend our full guarantee and warranty as per terms and conditions of the GeM bid and the contract for the solution, products/updates and services offered against this invitation for GeM bid offer by the above firm and will extend technical support and updates and ensure availability of spares including processors for our products for contract period from the date of installation.	OEM will only be able to extend the 'full guarantee and warranty' for the solution and services to Canara Bank in accordance with the end-user agreement signed between Canara Bank and OEM. Please confirm if the understanding is correct.	Bidder to comply as per RFP terms
767	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We (Manufacturer/Original Software Owner/Developer) also confirm that we will ensure all product updates (including management software updates and new product feature releases) are provided by M/S _____ for all the products quoted for and supplied to the bank during the Contract period. In case this is not considered while quoting and in the event M/S _____ fail in their obligations to provide the updates within 30 days of release/announcement, we hereby confirm that we will provide the same to the bank at no additional cost to the bank and we will directly install the updates and any new Operating Software releases at the bank's premises.	Subject to the terms of a valid and subsisting SES order that is placed on the bidder by Canara Bank, OEM will provide updates and releases that are covered under OEM's standard SES program through the bidder for the contract period. OEM will not be able to provide any direct services to the Bank including installation.	Bidder to comply as per RFP terms
768	100	Annexure 18: Manufacturer Authorization Form	Manufacturer Authorization Form	We also confirm that the proposed solution offered by the bidder to the Bank are correct, viable, technically feasible for implementation and the solution will work without any hassles in all the locations. We also confirm that all the equipment offered are not "End of Life" during the next One Year and "End of Support" for total Contract Period.	OEM will not be able to provide any confirmation in regards the solution to be provided by the bidder if there are changes made in OEM's solution by the bidder without OEM's consent. We can confirm on the end of life/end of support period for our proprietary products in our capacity as the OEM.	Bidder to comply as per RFP terms
769	10	Section B: Introduction	5: Requirement Details	5.1: Bank invites offers ("Technical Proposal" and "Commercial Bid") for "Implementation of Data Lakehouse & End-to-End Analytics Solution for 3 (three) years in Canara Bank" as per terms & conditions and Scope of Work & technical specifications/requirements described elsewhere in this document.	After 12 Months Or Completion of the Project/SCOW and Proper Documentation Handover, Will Official OEM Support Sufficient? Please add more Clarity Here, Since RFP does not ask for any resources/engineers from the bidder for second and third year of the contract	Bidder to comply as per RFP terms
770	15	Section C: Deliverable and Service Level Agreements	5: Uptime	5.4: If the selected bidder is not able to attend the troubleshooting calls on solution working due to closure of the office/non-availability of access to the solution, the response time/uptime will be taken from the opening of the office for the purpose of uptime calculation. The selected bidder shall provide the Monthly uptime reports during the warranty period and ATS period, if contracted	After 12 Months Or Completion of the Project/SCOW and Proper Documentation Handover, Will Official OEM Support Sufficient? Please add more Clarity Here, Since RFP does not ask for any resources/engineers from the bidder for second and third year of the contract	Refer Corrigendum 2
771	32	Section E: Selection of Bidder	3: Evaluation of Bids	3.5.2: The Bank at its discretion call for providing of Proof of Concept (PoC) of proposed solution at the location which is identified by the Bank. Hence, Bidder is required to arrange the required software in prior and need to submit the pre-requisites document in order to complete the PoC within 10 Days.	Given the limited timeframe of only 10 days, will a live demonstration be sufficient to showcase the desired capabilities effectively?	Bidder to demonstrate capabilities by PoC, if required, on bidder's infrastructure or on cloud infrastructure arranged by the bidder.
772	9	Section B: Introduction	1: About Canara Bank	1.2: The Bank is having pan India presence of more than 9714 branches, 24 Circle offices and 176 Regional Offices situated across the States. The Bank also has offices abroad in London, Dubai and New York.	Please confirm if users from outside of India (London, Dubai, New York) will be accessing the data lakehouse through Power BI, OBIEE or otherwise?	The solution should be capable to provide role based access to all the offices of the Bank irrespective of the location
773	10	Section B: Introduction	4: Objective	4.2: The Bidders satisfying the Qualification Criteria as per the RFP and having experience in Implementation of Data Lakehouse & End-to-End Analytics Solution in any Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years may respond.	Please modify the term as - The Bidders satisfying the Qualification Criteria as per the RFP and having experience in Implementation/support of Data Lakehouse & End-to-End Analytics Solution in any Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years may respond.	Bidder to comply the RFP terms
774	10	Section B: Introduction	4: Objective	4.8: In view of the above, Bank Intends to engage Bidder having experience and expertise in Implementation of Data Lakehouse & End-to-End Analytics Solution for three years.	Please confirm if experience criteria should be three years or five years?	Corrigendum " Bank Intends to engage Bidder having experience and expertise in Implementation of Data Lakehouse & End-to-End Analytics Solution atleast for three years."
775	11	Section B: Introduction	6: Participation methodology	6.4: In the event of the bidder being not able to perform the obligations as per the provisions of the contract, the OEM/OSD/principal should assume complete responsibility on behalf of the bidder for providing end-to-end solution i.e., technology, personnel, financial and any other infrastructure that would be required to meet intent of this RFP at no additional cost to the bank	Kindly remove this clause as OEM cannot take ownership of personnel, financial or any other item on behalf of an SI for project delivery.	Bidder to comply as per the RFP terms
776	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.4: The selected bidder should supply, install, integrate and implement the proposed Data Lakehouse & End-to-End Implementation of Analytics Solution as per RFP within Fifty Two (52) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness by the Bank whichever is later.	It is assumed that software installation expected from SI is only about analytics softwares. Hardware provided will be with appropriate OS installed and connected to Bank DC/DR network.	The Bank shall supply the necessary hardware as per the specification of the Bidder and it is the responsibility of the bidder to install, integrate and implement the proposed Data Lakehouse & End-to-End Implementation of Analytics Solution including appropriate OS and connecting to the Bank DC/DR network.
777	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.5: Supply, installation of Licenses/Softwares/OS/DB/Other items and implementation of the proposed solution in DC, DR & UAT (dev/test) setup of the Bank should be completed within Eight (8) weeks from the date of acceptance of the Purchase Order / from the date of Hardware readiness of the respective environment (DC / DR / UAT) by the Bank whichever is later. The selected bidder has to complete the implementation of all the functionalities defined elsewhere in the RFP.	Kindly revisit the clause and remove the timeline restriction. Removing the clause will enable SI to optimize the efforts and ensure environments are ready before a specific milestone, rather than killing from the start.	Bidder to comply as per RFP terms
778	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.6: The timelines for implementation of use case as under:	Please provide use case details and source systems providing the data.in order to estimate the use case as per timeline requirement.	The details on use case are as per Annexure-9 clause 1.5. Any data structured data required from bank system the single source is already available from datawarehouse. Other source system will be part of use case design documentation to be prepared as part of use case development
779	13	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.7: Partial or incomplete or damaged delivery of materials will not be considered as delivered of all the ordered materials. Date of delivery shall be treated as date of last material delivered to the ordered locations if materials are not damaged. In case materials are delivered with damage, Date of delivery shall be treated as date of replacement of damaged material with new one. Delivery payment shall be paid against completion of delivery of all the ordered materials without any damage and proof of delivery duly certified by Bank's Officials, along with delivery payment claim letter.	Kindly elaborate on phase "damaged delivery" with reference to current project which is essentially delivery and implementation of software.	Bidder to comply as per RFP terms
780	14	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.8: Bank reserves the right to change/modify locations for supply of the items. In the event of any change/modification in the locations where the hardware items are to be delivered, the bidder in such cases shall deliver, install and commission at the modified locations at no extra cost to the Bank. However, if the hardware items are already delivered, and if the modifications in locations are made after delivery, the bidder shall carry out installation and commissioning at the modified locations and the Bank in such cases shall bear the shifting charges/arrange shifting. The Warranty should be applicable to the altered locations also.	It is assumed that all the hardware (made available to SI) will be integrated to Banks network and can be accessed from any of the offices on bank.Kindly confirm.	Yes we confirm that all the hardware can be accessed from any of the offices of the Bank, Need based access will be provided. Based on the merits.

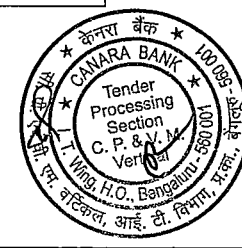


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781	14	Section C: Deliverable and Service Level Agreements	1: Project Timelines	1.10: The Bank will not arrange for any Road Permit / Sales Tax clearance for delivery of hardware to different locations and the selected bidder is required to make the arrangements for delivery of hardware to the locations as per the list of locations /Items provided from time to time by the Bank. However, the Bank will provide letters / certificate / authority to the selected bidder, if required.	Kindly confirm if SI has to provide the Hardware for the project.	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the hardware sizing it will be responsibility of the bank to provide the hardware for accepted bidder. (Refer clause 1.9, Annexure-9)
782	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	7.2: The selected Bidder will place the Source Code (and the procedures necessary to build the source into executable form) along-with flow diagrams and technical write up for the Software, within Thirty (30) days of Implementation in escrow with a reputable agency acceptable to both the parties. The modalities of the versions to be kept etc., can be finalized at the time of lodging the software for escrow.	It is understood that the given clause is applicable only solution developed. The clause is not applicable on the source code of core OEM products.	Yes. This clause is applicable to deployment which has been customized for the Bank.
783	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.3: The warranty of proposed Solution including Hardware, Software, OS, licenses etc., will start from the date of acceptance of delivery and installation of the Solution as mentioned in Clause 1.5 of Section-C.	Kindly revisit the clause. Warranty of Hardware and OSD product will start from the date of delivery of respective Item.	The clause is applicable as per the delivery and requirement. Bidder to comply
784	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.5: Only licensed copies of software shall be supplied. The selected Bidder shall grant an Irrevocable perpetual license to the Bank to use the software. Further, all software supplied shall be of latest version.	Kindly allow softwares with annual subscription model as well.	Refer Corrigendum 2
785	21	Section C: Deliverable and Service Level Agreements	11: Local Support	11.3: The Bidder will be responsible for attending complaints during all hours on 24x7x365 basis during contract period.	Kindly rephrase	To be decided by the bidder to maintain the SLA for maintenance of platform as per RFP
786	21	Section C: Deliverable and Service Level Agreements	12: Mean Time Between Failures (MTBF)	If during the warranty period, any software Items fails on three or more occasions in a quarter, such Items shall be replaced by equivalent / superior new software Items by the bidder at no additional cost to the Bank.	Please define "software Item fails...". Once a software undergoes UAT and signed off for deployment, then you may have bugs or incidents during day to day runs. They need to be fixed. What exactly is meant by "...such Items shall be replaced by equivalent / superior new software Items...?"	Bidder to comply with RFP term and condition
787	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development	Could you kindly share the Current Architecture diagram within Data and Analytics layer with components covering each area such as 1)ETL 2)Storage - Datawarehouse/ Enterprise Warehouse EDW 3)Reporting(Dashboarding, self service, canned report)	The Bank is proposing to build Data & Analytics layer in the proposed Data Lakehouse. Bidder to submit proposed architecture diagram.
788	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development	As per the RFP, you have a data warehouse in place, please provide the technological stack and number of Tables it have?	The Bank Intends to setup a Data Lakehouse and Data Warehouse is one of the source apart from other semistructured and unstructured sources.
789	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4: Data Sources Layer	As per the RFP data lakehouse solution need to ingest, store and process structured, semi structured and unstructured data. If possible please provide the nuber of data sources and their details.	Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
790	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer	Can you please share the volumetric of the data from different source systems. - Number of source tables, flat files - Number of mappings from source to raw/landing, raw to staging and staging to the final destination.	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
791	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer	List out the number of data Ingestion Jobs, frequency and the size of data handled?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
792	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer	what is the existing data volume that needs to be considered in scope?	Refer 1.10 for data size/growth.
793	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer	Is there any existing tools that is being used for Data Governance and Data Quality? Is Data Quality integrated with Data Governance?	The bidders shall submit the Bill of Material (BOM) covering all the required platforms/tools/software so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
794	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer	How many years of data needs to be loaded in Data Lakehouse.	Depending upon the necessity of the proposed use case the details shall be shared with the selected bidder.
795	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer	Approx. how many reports and dashboards can we consider in scope of this RFP? How many are operational reports, analytical reports and dashboards?	The solution should be capable to Integrate with existing reporting and visualisation tool. The minimum number of dashboards based on use case shall be 7.
796	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer	What is the total user base and how many concurrent users access would be required to access the reports?	The solution should be capable to Integrate with existing reporting and visualisation tool.
797	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.7: Analytics Layer	Would it be possible to share the break up of all the reports in terms of complexity (# simple, # medium, # complex)?	The solution should be capable to Integrate with existing reporting and visualisation tool. The complexity is as per type of the data of the use case referred in 1.5 in Annexure 9.
798	71	Annexure 9: Scope of Work		General Query	Please provide your backup and archival strategy for data Lakehouse.	The Bank Intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank. Hence the proposed solution should have the architecture to support the same.
799	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	Please allow solutions submitted to other domains like Telecom, Oil & Gas, Manufacturing, Helathcare also as part of qualification criteria.	Bidder to comply as per RFP terms
800	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India /Financial Regulatory bodies / Foreign Banks during the last 5 years, and the Implementation should have a data size of not less than 200 TB.	Please allow solutions submitted to other domains like Telecom, Oil & Gas, Manufacturing, Helathcare also as part of technical evaluation criteria.	Bidder to comply as per RFP terms
801	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: Copies of Work order / PO and Completion certificate / Sign off duly mentioning the size of the solution to be submitted for data lake/lake house implementation.	Kindly revisit the clause - PO/Completion Certificate or any other supporting document will not contain size of the solution. Size of the solution is ever changing. Secondly PO/Completion Certificate etc. will fall under Non disclosure Agreement. You may Instead like to take an undertaking from primary bidder to confirm the approximate size of the solution.	Refer revised Technical Qualification Corrigendum for section



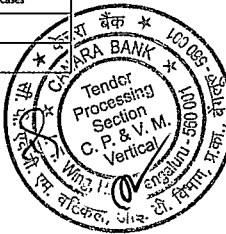
Replies to Pre Bid Queries to GeM Bid ref. no. GE/M/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder 's Query	Bank's Reply
802	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Details of institutions where the solution has been implemented - oSector: 5 marks oPrivate Sector: 4 marks oForeign: 2 marks	Kindly rephrase the statement like Details of Institutions where the solution (or similar solution) has been implemented	Refer revised Technical Qualification Corrigendum for section
803	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: oLocation: oIndia: 5 marks oOther Asian Countries: 3 marks oOther Countries: 2 marks	Kindly rephrase the statement like Location: India: 5 marks Rest of World: 3 marks	Refer revised Technical Qualification Corrigendum for section
804	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: No. of branches (in case of Banks)	Kindly remove this clause as you have already put a criteria of 'size of the solution'. Data Lakehouse system is back end system and number of branches does not impact its working. Such criteria is relevant for OLTP systems.	Refer revised Technical Qualification Corrigendum for section
805	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	2,3,4: Documentary evidence for implementation. Reference from customer along with customer contact details are required.	Please revisit the clause, for documentary evidence for size of implementation . Request you to consider this in form of undertaking from the primary bidder. Please consider and seek customer reference details at later stage post short listing of the bidder.	Refer revised Pre Qualification Corrigendum for section
806	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	6: No. of use cases implemented -	Kindly revisit this clause. Number of use case deployments are dependent upon end customers prerogative. Number of use cases deployment may not reflect bidder's implementation experience.	Refer revised Technical Qualification Corrigendum for section B
807	17	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.11: All the above LDs are independent of each other and are applicable separately and concurrently.	Suggest maximum LD/penalty to cap to the 5% of the respective segment implementation cost.	Bidder to comply as per RFP terms
808	17	Section C: Deliverable and Service Level Agreements	7: Escrow arrangement	7.4: The cost of verification of the software payable to Escrow Agent and annual subscription fee shall be payable by the selected Bidder. Bank shall not be liable to pay any amount to Escrow Agent starting from verification to its annual subscription, as well as subsequent renewal along with any other related expenditure attributable to the continuation of Escrow arrangement as per Bank's requirement.	Suggest Bank to bare ESCROW cost.	Bidder to comply as per RFP terms
809	18	Section C: Deliverable and Service Level Agreements	8: Payment Terms	8.1: A. Enterprise License Cost Enterprise License cost for the 1st year (as per Table-A of Bill-of-Material) for each environment (DC, DRG & UAT) 75% : On delivery, installation and on acceptance / signoff by the bank. 10% : After implementing two (2) use case (out of listed seven use cases) and on acceptance / signoff by the bank. 10% : After implementing three (3) more use cases (out of listed seven use cases) and on acceptance / signoff by the bank. 5% : After implementing rest two (2) use cases (out of listed seven use cases) and on acceptance / signoff by the bank.	Suggest Enterprise License cost for the 1st year to be paid 100% on Delivery of the licenses to the bank.	Refer Corrigendum 2
810	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.3: The warranty of proposed Solution including Hardware, Software, OS, licenses etc., will start from the date of acceptance of delivery and installation of the Solution as mentioned in Clause 1.5 of Section-C.	+ Remove word Hardware and OS from the clause, as no Hardware and OS will be provided by Bidder in this opportunity. + The warranty of Software Licenses for 1 year will start from the date of PO. + Solution warranty for bug fixing of 1 year will be from the date of completion of UAT.	Bidder to comply as per RFP terms
811	19	Section C: Deliverable and Service Level Agreements	9: Warranty (if applicable)	9.4: If the Solution does not perform in accordance with the Contract during the Warranty Period, then the selected bidder shall take such steps as necessary to repair or replace the Hardware/ Software. Such warranty service shall be provided at the selected bidder's expense and shall include all media, parts, labour, freight and insurance to and from the Department's site.	+ Remove word Hardware and media, parts from the clause, as no Hardware will be provided by Bidder in this opportunity. + Bidder will do solution bug fixing during the solution warranty period.	Bidder to comply as per RFP terms
812	21	Section C: Deliverable and Service Level Agreements	16: Subcontracting	16.2: The selected bidder shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required of the selected bidder under the contract without the prior written consent of the Bank	Consider allowing Sub-contracting with prior intimation to the Bank.	Bidder to comply as per RFP terms
813	38	Section F: Ownership and Awarding of Contract	12: Pricing & Payments	12.1: No escalation in price quoted is permitted for any reason whatsoever. Prices quoted must be firm till the completion of the contract period.	Prices may need changes in case of any drastic change in govt taxes /regulatory laws /exchange rate basis of market conditions / any other reasons.	Bidder to comply as per RFP terms
814	38	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract	13.1: The Bank reserves its right to cancel the entire / unexecuted part of the Purchase Order at any time by assigning appropriate reasons and recover expenditure incurred by the Bank in addition to recovery of liquidated damages in terms of the contract,	Bank to provide 60 days written notice to the selected bidder in case of cancellation / termination of contract. Also, Bank to make payment of all the completed deliverable till the date of cancellation / termination. Propose remove of the recover of additional expenditure from selected bidder.	Bidder to comply as per RFP terms
815	39	Section F: Ownership and Awarding of Contract	13: Order Cancellation/Termination of Contract	13.4: In case the selected Bidder fails to conduct an event as per stipulated schedule, the Bank reserves the right to get it conducted by alternate sources at the risk, cost and responsibility of the selected Bidder by giving 7 days' prior notice to the Bidder.	In such case service provider liability shall be limited to 110% cost of the undelivered services.	Bidder to comply as per RFP terms
816	44	Section G: General Conditions	14: Indemnity	14.2:The Bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action suits and other proceedings, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of service provided by them	Selected Bidder shall indemnify, protect and save the Bank against only for direct claims attributable to Bidder.	Bidder to comply as per RFP terms
817	44	Section G: General Conditions	14: Indemnity	14.2.1: All indemnities shall survive notwithstanding expiry or termination of the contract and Bidder shall continue to be liable under the indemnities.	Consider modifying the clause as "All indemnities shall survive only for 1 year after expiry or termination of the contract."	Bidder to comply as per RFP terms
818	17	Section C: Deliverable and Service Level Agreements	6: Penalties & Liquidated damages	6.1.11: All the above LDs are independent of each other and are applicable separately and concurrently.	Suggest maximum LD/penalty to cap to the 5% of the respective segment implementation cost.	Bidder to comply as per RFP terms
819	45	Section G: General conditions	14: Indemnity	14.2.1: All indemnities shall survive notwithstanding expiry or termination of the contract and Bidder shall continue to be liable under the indemnities.	Consider modifying the clause as "All indemnities shall survive only for 1 year after expiry or termination of the contract."	Bidder to comply as per RFP terms

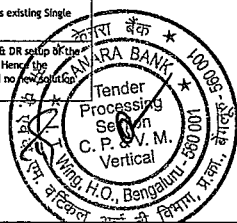


Replies to Pre Bid Queries to GeM Bid ref. no. GEW/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for implementing Data Lakehouse & End-to-End Analytics Solution In Canara Bank for 3 years

Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
820	65	Annexure 9: Scope of Work	1: Summary of Project	1.1: Design and development of Data Lakehouse to store data from structured, semi-structured and unstructured data sources. This Lakehouse should be able to integrate structured data from Bank's existing Data Warehouse. The present Data Warehouse will be continued for all enterprise wide reporting needs of the business while the proposed Data Lakehouse will be primarily used for AI/ML use case development. Bank prefer to retain the Data Warehouse and the Investments made on existing analytical tools.	1) What is the existing technical environment architecture which includes Source systems, Data model, Datawarehouse, analytical tools, ETL/ELT, Scheduling, data governance, data quality monitoring, Security, Authentication mechanism, etc.. 2) What is the business use case to have Data lake house which is not resolved by existing system. 3) Define the data granularity required for each of the usecase. For ex: A report may be monthly wise and another report may be Intra-day report which needs the source data to be organized granularly. 4) Any data modelling requirements 5) Any refactoring/decommissioning effort involved as we migrate 6) How many existing Tables/Views/Materialized View/Stored Procs/Fuctions 7) How many environments exists. Dev/Test/Preprod/Prod IT 8) Volume of data in each environment. Both batch and streaming. 9) Any painpoints in existing systems to be addressed. 10) How are the current user access or roles maintained. Any LDAP exists.	1. Refer Technological stack 2. Refer Annexure 9 : Scope of work 3. It will be decided on case to case basis 4. & 5 The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage 6. Will be shared with successful bidder
821	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.14: The proposed solution should have integrated data management, metadata-driven data governance and security framework. It should provide secured open data initiatives and platform to enable community innovation.	Please elaborate on Open data initiatives and community innovation	The solution should be capable of offering data to external developer community via modes such as API in a secured manner, for the Bank to promote open data initiatives which can benefit Bank as well as external community for identified analytical use cases. The data shall be consumed by interested parties through a secured channel and be used to develop innovative solutions.
822	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.16: The proposed solution should comply to all Information and cyber security governance guidelines of the Bank as well as regulatory bodies.	1) What are all the compliances/Security guidelines existing in the current system and any additional compliances required. 2) Any audit report needs to be generated from the bank to the regulatory bodies.	Bidder to comply as per RFP terms
823	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	1) For DR, can we think of a hybrid solution to backup the data on cloud so it will be useful when we move to cloud solution at later point? 2) Any Data archival policies already exists? Please list.	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
824	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.4: Data Sources Layer 3.4.1: Structured	1) Any lookup/Static data /flat files , or reference files being used?	The existing structured data of the bank will be taken from one single source of DATAWARE HOUSE. Any new requirement or additional datasource identified for the purpose of use case and solution will be decided along with successful bidder based on use case document. Refer clause 3.4 for Data sources, Refer clause 3.5.6 for data types. Refer 1.10 for data size/growth.
825	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer 3.5.5: It should have ability to perform intelligent aggregation on clickstream data before ingesting to data lake house.	Any specific tool been currently used to capture clickstream data?	Refer Technological stack
826	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer 3.5.7: Data sanity checks, validations and reconciliation of data should be available as part of the data ingestion solution in order to support universally acknowledged policies, such as missing personally identifiable information or using canonical data representations, as well monitoring the inbound data flow for completeness, consistency and accuracy.	1) Whether the solution can involve 3rd party tools along with proposed data platform. 2) Any existing Data reconciliation reports and what type of validation?	Bidder to comply as per RFP terms
827	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5: Data Ingestion Layer 3.5.9: Trigger mechanisms in identifying schema changes at source and packaging data in formats for quick retrieval should be available in the solution.	What does the "packaging data in formats" mean to? If its an data export requirement, what is the format required?	Bidder to propose and comply the RFP terms
828	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer 3.6.1.8: Robust to handle multiple concurrent access by processing engines / end users.	1) How many end users also how many concurrent users can log on at a time. 2) How much of concurrent queries expected	Bidder to arrive at the number based on the complexity of use cases expected to be implemented and sources defined. Further refer detail scope of work as per annexure 9
829	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer 3.6.1.6: Compatible to perform processing operations on whole dataset as well as individual records or individual groups.	1) As part of transformation process, Do we have any existing ETL Transformation and what type of transformation it is? 2) Do we have CDC requirements to maintain History?	The bidders are expected to submit the complete solution with detailed BOM mentioning the tool they propose to use at each layer. While bidding no assumption needs to be made. Bank has the option to leverage any existing technology available with bank and same will be discussed with the successful bidder.
830	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer 3.6.2: The proposed solution should ensure the following data quality aspects-	1) Any existing DQ tool available in technology stack?	Refer Technological stack
831	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer 3.6.3.4: Provide a robust change management framework to track versioning, change history with date and user information, track migration of code from development to production, security.	Does the bank uses any existing change management tool, CICD solution?	The bidders are expected to submit the complete solution with detailed BOM mentioning the tool they propose to use at each layer. While bidding no assumption needs to be made. Bank has the option to leverage any existing technology available with bank and same will be discussed with the successful bidder.
832	71	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.6: Data Storage and Transformation Layer 3.6.3.6: Industry standard metadata management is required on Data Lakehouse to prevent it from becoming a data swamp.	Any requirement of MDH solutioning? Any existing Data governance tool been used?	Bidder to propose and comply the RFP terms
833	68	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.1: The proposed solution should be built on on-premises hardware, taking into account not only the Bank's current data and processing needs but also the Bank's growing number of sources, semi-structured data and unstructured data.	Are there specific vendors or technologies you are already invested in or prefer for on-premises or cloud solutions?	Refer Technological stack
834	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.1: The proposed solution should be built on on-premises hardware, taking into account not only the Bank's current data and processing needs but also the Bank's growing number of sources, semi-structured data and unstructured data.	What is the current state of your on-premises Infrastructure (e.g., servers, storage, networking)?	Refer Technological stack
835	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.1: The proposed solution should be built on on-premises hardware, taking into account not only the Bank's current data and processing needs but also the Bank's growing number of sources, semi-structured data and unstructured data.	Do you have the necessary resources and expertise to manage and maintain an on-premises data lakehouse effectively?	Bidder to propose the same based on the proposed solution and defined use cases
836	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.3.2: Data Ingestion Layer	Are there any integration challenges specific to each deployment option?	Bidder to propose the same based on the proposed solution and defined use cases
837	67	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.1: The proposed solution should have a unified, horizontally scalable, central, parallel processing Data Lakehouse for storage and processing.	Are there any specific challenges or pain points that the proposed solution aims to address?	Refer Annexure 9 : Scope of work
838	69	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.3.1: Data Sources Layer	What existing systems and applications need to connect to the data lakehouse?	15-20 applications



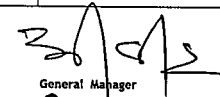
Replies to Pre Bid Queries to GeM Bid ref. no. GE/M/2023/B/3708093 dated 18/07/2023 for Selection of Service Provider for Implementing Data Lakehouse & End-to-End Analytics Solution in Canara Bank for 3 years						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
839	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.12: The proposed solution should serve the models as batch, message queuing as well as real-time endpoints in the form of APIs / microservices that can be consumed for automated provisioning, reporting, tracking and management. It should allow integration with DevOps/ MLops / ModelOps tools and SDK automation with existing BI tools.	Can your on-premises environment provide the necessary redundancy and failover capabilities?	No. The proposed data lake solution is expected to reach the size of 60TB from all sources including DW
840	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	What are your disaster recovery and high availability requirements?	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank
841	78	Annexure 9: Scope of Work	Section A: Bidder's compliance to Functional and Technical Requirements	NA	Does your organization have a broader cloud adoption strategy (eg. preferred cloud platform)?	Kindly refer to Clause No.2.2. (Detailed Scope of Work) page No 67 of the RFP
842	80	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	15: The proposed solution should have integrated data management, metadata-driven data governance and security framework.	Does your organization currently have a Data Governance Framework in place?	Bidder to propose and comply the RFP terms
843	83	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	49: Support the capabilities for data quality checks to discover outliers and inconsistencies in the incoming data.	Does your firm currently have an established firm-wide Data Quality framework in place?	Bidder to propose and comply the RFP terms
844	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.12: The proposed solution should serve the models as batch, message queuing as well as real-time endpoints in the form of APIs / microservices that can be consumed for automated provisioning, reporting, tracking and management. It should allow integration with DevOps/ MLops / ModelOps tools and SDK automation with existing BI tools.	Do you have a preferred DevOps toolkit for your organization?	Bidder to propose and comply the RFP terms
845	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.9: It should also be possible to monitor ingestion pipelines to ensure that data is not becoming corroded over time. An alerting, reporting and monitoring utility about the ingest pipelines should be available as part of the solution. Trigger mechanisms in identifying schema changes at source and packaging data in formats for quick retrieval should be available in the solution.	What observability toolkit does your firm currently use?	Bidder to propose and comply the RFP terms
846	72	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.8: Data Science Platform with AI/ML Capabilities	Does your organization currently utilize AI/ML for predictive analytics? If so, kindly provide more details on the tools and technologies currently in use?	Refer Technological stack
847	80	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	15: The proposed solution should have integrated data management, metadata-driven data governance and security framework.	What measures will be taken to ensure data security and access controls?	Bidder to propose and comply the RFP terms
848	70	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3.5.9: It should also be possible to monitor ingestion pipelines to ensure that data is not becoming corroded over time. An alerting, reporting and monitoring utility about the ingest pipelines should be available as part of the solution. Trigger mechanisms in identifying schema changes at source and packaging data in formats for quick retrieval should be available in the solution.	What are your performance expectations for data retrieval and processing?	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank.
849	68	Annexure 9: Scope of Work	3: Detailed Scope of Work - Technical Requirements	3: Detailed Scope of Work - Technical Requirements	Do you have any specific requirements for data virtualization capabilities within the data lakehouse?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
850	68	Annexure 9: Scope of Work	2: Detailed Scope of Work - Functional Requirements	2.17: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	What is the data retention policy for the data lakehouse, and how will archiving be managed?	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank
851	96	Annexure 17: Bill of Material		General Query	Do you have any budgeted total cost for building and maintaining the data lakehouse?	Bidder to propose and comply the RFP terms
852	20	Section C: Deliverable and Service Level Agreements	10: Scope Involved during Contract period	10.7: Escalation matrix as per Annexure-16 should be provided for post-delivery operational support, technical support, project related issues, etc.	Are there any ongoing operational costs to consider?	Bidder to propose and comply the RFP terms
853	65	Annexure 9: Scope of Work	1: Scope of Work	1.5: An Indicative list of use cases is listed in the below table. Bank, upon deployment of the solution, may prefer to develop the listed use cases, or implement other use cases of similar complexity as required by the Bank. The use cases have to be implemented within the timelines specified by the Bank.	Various model will be built for multiple use cases. How will the effectiveness of the models be tested?	It will be decided on case to case basis
854	56	Annexure 2: Pre-Qualification Criteria	4	4: The Bidder should be a partnership firm registered under LLP Act, 2008/Indian Partnership Act, 1932 or Company in India as per Indian Companies Act, 1956 or Indian Companies Act, 2013 and should have been in operation for a period of at least five years as on RFP date	Request bank to relax the clause to 2 years and encourage fintechs participation in the bidding process	Refer revised Pre Qualification Corrigendum for section
855	56	Annexure 2: Pre-Qualification Criteria	5	5: The Bidder should have successfully implemented / maintaining the proposed solution / any similar solution during the last 5 years from the date of RFP in any organization in Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks.	Request bank to add NBFCs also along with Banks and Financial regulatory bodies.	Refer revised Pre Qualification Corrigendum for section
856	56	Annexure 2: Pre-Qualification Criteria	6	6: The Bidder should have average annual turnover of Rs.100.00 Crores in the last three financial years (i.e., 2019-20, 2020-21 and 2021-22). This must be the individual company turnover and not of any group of companies.	Request bank for relaxation of the average turnover to 50 Crores and for the last 2 financial years (2020-21, 2021-22) and encourage fintech participation in the bidding process.	Refer revised Pre Qualification Corrigendum for section
857	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	1: The bidder and OEM should have implemented the proposed solution in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years, and the implementation should have a data size of not less than 200 TB.	Request bank to consider implementation in NBFC as well with a data size of 80TB for this assignment and encourage Fintech participation in the bidding process.	Refer revised Pre Qualification Corrigendum for section
858	78	Annexure 10: Technical Evaluation Criteria	Section A: Bidder's compliance to Technical Experience Criteria	2: The bidder should have implemented AI/ML use cases with Big Data components, including data integration, self-service Business Intelligence solutions, Advanced Analytical models etc. in one or more Scheduled Commercial Banks in India / Financial Regulatory bodies / Foreign Banks during the last 5 years.	Request bank to add NBFCs also along with Banks and Financial regulatory bodies.	Refer revised Pre Qualification Corrigendum for section
859	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	3: The proposed solution should support hybrid architecture which enables flexibility to host the platform either on-premise or on public/ private/ hybrid cloud at any point of time as required by the Bank to leverage advanced infrastructure technologies like containerization, microservices, server less computing and data mesh capabilities. Bidder should provide option to switch over to cloud at any point of time within the existing license cost quoted with all the latest features. Bank can use cloud environment with the existing licenses whenever required. Also, for this migration (on-premise to cloud), the required resources shall be provided by the bidder at similar cost as proposed for on-premise setup.	In order to support the on-prem and hybrid architecture we need support for a comprehensive virtualization and container orchestration layer. For example: vmware as a hypervisor and tanzu for container orchestration. Should we assume that this is available up front with the bank or we need to propose this as part of the solution?	The bidders shall submit the Bill of Material (BOM) covering all the layers so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during implementation stage.
860	79	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	5: The proposed solution should bundle and offer all the features / technology components through a unified user interface with a single user login.	Request bank to relax this requirement as developing a single login user across all tools may not be possible and may not be required as well on day to day basis. We could integrate Single login (SSO) facility.	The specification mentioned in the RFP Clause is to integrate into Bank's existing Single Sign On/Single Authentication System (SAS)/Microsoft AD/LDAP facility.
861	80	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	20: The proposed solution should have an architecture that supports DC / DR, backup and archival as per the policies of the Bank.	Request bank to share if there is any organization-wide Enterprise solution where we need to integrate or bring in as a new solution from scratch on this?	The Bank intends to integrate the proposed solution in the existing DC & DR setup of the bank and also to comply with Backup and Archival Policies of the Bank. Hence the proposed solution should have the architecture to support the same and no integration from the scratch is warranted.



862	81	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	25: The bidder should present their future roadmap on Analytics with respect to the Banking industry, including enhancements / new features planned to be introduced in the proposed platform.	Whether the Vendor would we have the flexibility to prepare the road map and propose various phases in which they will bring in the solutions required?	The bidder is expected to provide the road map as per the vision and mission of their organisation for future growth in the field of Analytics and Machine Learning and how they propose to use for the benefit of the bank.
863	81	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	31: It should support ingestion of data in batches, incremental additions, streaming (like Kafka/Spark etc.) and real-time feeds.	Whether the bank has organization-wide enterprise streaming platform which can be used as part of the proposal or do we have to propose a solution for this requirement?	The bidders shall submit the Bill of Material (BOM) covering all the required platforms/tools/software so as to meet the technical specifications stipulated in the RFP Clause. Bank shall have the option to leverage any existing technology available if any, during Implementation stage.
864	82	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	41: Support RDBMS and non-RDBMS structures with ACID support for a true Data Lakehouse capability.	What are technologies being used on the OLTP systems, especially the RDBMS systems?	For OLTP systems Oracle is the RDBMS being used.
865	83	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	55: Provide a unified interface to ensure seamless data access to the users and reports between Data Warehouse and Data Lakehouse.	Providing a unified interface across all the different tools would be difficult. Can we get more clarifications on this requirement ?	Bidder to propose analytical solution which has a unified interface right from data access to the users, processing, creating pipelines from different sources like DWH & Data Lakehouse for whole ML model lifecycle.
866	84	Annexure 10: Technical Evaluation Criteria	Section B: Bidder's compliance to Functional and Technical Requirements	75: Support GPUs, if required basis use cases	Are there GPU servers available in house part of the current infrastructure? Or do we have to provide an estimate of the GPU servers required based on the possible set of use cases?	Bidder is supposed to provide the hardware sizing with complete specification for the proposed solution. Based on the Hardware sizing it will be the responsibility of the bank to provide the hardware for selected bidder
867	86	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	1: Details of Institutions where the solution has been implemented - Stating branches ?	Request bank to add NBFCs also along with Banks and Financial regulatory bodies.	Refer revised Pre Qualification Corrigendum for section
868	87	Annexure 10: Technical Evaluation Criteria	Section C: Bidder's capability including proven relevant experience and capabilities of identified professionals for the project	3: Size of implementation - Min 200TB	Request bank to consider the data size around 80TB to 100TB for this assignment and encourage Fintech participation in the bidding process.	Refer revised Technical Qualification Corrigendum for section

Date: 16/08/2023

Place: Bengaluru


General Manager
