Expression of Interest (EOI)

For

Procurement of Open API Banking & Secret Key Management Solution (E-tendering)



UCO BANK, Head Office-2 Department of Information Technology 5th Floor, 3 & 4 DD Block, Sector -1 Salt Lake, Kolkata-700 064

EOI Ref. No: UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023

The information provided by the bidders in response to this Expression of Interest (EOI) will become the property of the Bank and will not be returned. The Bank reserves the right to amend, cancel, rescind or reissue this EOI and all amendments will be advised to the bidders and such amendments will be binding upon them. The Bank also reserves its right to accept or reject any or all responses to this EOI without assigning any reason whatsoever.

This document is prepared by the Bank for its EOI for Procurement of Open API Banking & Secret Key Management Solution (E-tendering). It should not be reused or copied or used either partially or fully in any form.

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Disclaimer

While the document has been prepared in good faith, no representation or warranty, express or implied, is or will be made, and no responsibility or liability will be accepted by the BANK or any of its employees, in relation to the accuracy or completeness of this document and any liability thereof expressly disclaimed. The EOI is not an offer by the BANK, but an invitation for bidder's responses. No contractual obligation on behalf of the BANK, whatsoever, shall arise from the offer process unless and until a formal contract is signed and executed by duly authorized officials of the BANK and the Bidder.

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INTRODUCTION & OBJECTIVES

UCO Bank, a body Corporate, established under The Banking Companies (Acquisition and Transfer of Undertakings) Act 1970, having its Head Office at 10, B.T.M. Sarani, Kolkata-700001, India, hereinafter called "The Bank", is one of the leading public sector Banks in India having more than 3200+ Domestic Branches, two Overseas Branches one each at Singapore & Hong Kong Centres, 2200 + ATMs & Cash Recycler Machines, 1000 + Passbook Printing Kiosk spread all over the country. All the branches of the Bank are CBS enabled through Finacle 10.x as a Core Banking Solution. Latest state of art i.e. E-Banking & M-Banking solution to facilitate our customers to fulfil their banking need 24x7.

A paradigm shift has been brought in digital eco space through Application Programming Interface (API) based integrations. As a result of which API landscape began to increase in financial world also in order to provide instant financial services & direct integration with customer's applications or via third party financial service provider.

Presently, Bank has hosted requirement specific APIs & being used by designated third party/internal, applications. Further Bank requires Open API Banking & Secret Key Management Solution.

This EOI does not claim to cover all information that each Bidder may require. Each Bidder may conduct its own independent interpretation/ investigations and analysis of the information shared vide this EOI. The bidder can check the accuracy, reliability and completeness of the information in this EOI. The information contained in the EOI document is selective and is subject to subsequent updating, expansion, revision and amendment.

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CONTROL SHEET TABLE

EOI Reference	UCO/DIT/EOI/2509/2022-23 Date: 10/01/2023	
Date of issue of EOI	10/01/2023	
Date of Commencement of Sale of EOI Document	10/01/2023	
Pre Bid queries to be received only online at-	On or before 16/01/2023 up to 05:00 PM	
hodit.proc@ucobank.co.in	47 (01 (0000 104 00 00)	
Pre bid Meeting through online mode	17/01/2023 at 04:30 PM	
Last Date and Time for receipts of	07/02/2023 at 04.00 PM	
EOI	07/02/2023 d1 04.00 1 M	
Opening of EOI	07/02/2023 at 04.30 PM	
	UCO BANK, Head Office-2	
	Department of Information Technology,	
Address of Communication	7 th Floor,3 & 4 DD Block, Sector -1, Salt Lake,	
	Kolkata-700 064	
Address for support for Online EOI/Process of submission of tender documents	This Tender will follow e-Tendering process [e-bids] as under which will be conducted by Bank's authorized e- Tendering Service Provider M/s Antares Systems Ltd through Website https://www.tenderwizard.com/UCOBANK Following activities will be conducted online through above website: a) Submission of Eligibility/Technical Bid & Commercial Bid by the bidder b) Clarification, if any, sought by the Bank c) Opening of Eligibility/Technical Bid by the Bank d) On-line evaluation by the Bank. e) Opening of Commercial Bid by the Bank & On-line evaluation. Representatives of bidders will be given training for e- Tendering by the Service Provider, M/s Antares Systems Ltd. * Bidders who wish to participate in online tenders will have to register with the website (https://www.tenderwizard.com/UCOBANK) through the "Register" link provided on the home page. Bidder will create login id & password on their own in registration process.	

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- * Following facilities shall be provided to registered bidders by the service provider M/s Antares Systems Ltd:
- a) Support to the Bidders for participating in the bids through e-tendering Website.
- b) Call center support/ email/ phone/mobile etc. in all possible medium.
- c) Registration with the e-tendering website.
- d) User Manual / Training Kit to the Bidder.
- e) Any no. of users of Bidder organization can take support on the e-tendering system.
- f) Bidder who wish to participate in this tender need to procure Digital Signature Certificate (for Signing and Encryption) as per Information Technology Act-2000 and CVC guidelines using that they can digitally sign their electronic bids. Bidders can procure the same from any of the CCA approved certifying agencies, or they may contact M/s Antares Systems Ltd. at below mentioned address and they will assist them in procuring the same.

Bidders who already have a valid Digital Signature Certificate need not to procure the same. In case bidders need any clarification regarding online participation, they can contact Antares Systems Ltd.

Registered Office at: #24, Sudha Complex, 3rd Stage, 4th Block, Bangalore – 560079.

Phone: - 080-49352000 / 40482000

Fax: - 080-49352034

Help Desk:

Contact Person: Mr. Kushal Bose/ Mr. Siddartha

Sundar

Mobile no. 07686913157 / 09674758723

(On working days-0900 hours-1800 hours) e-mail:

kushal.b@antaressystems.com

siddharthasundar.m@antaressystems.com

Bidders who wish to participate in e-Tender need to fill data in predefined forms of EOI, Technical, Price bid available in respective tender only.

h) Bidder should upload scanned copies of

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	reference documents in support of their eligibility of the bid and as per the instructions given in tender documents		
	After filling data in predefined forms bidders need to click on final submission link to submit		
	their encrypted bid		
Email address	hodit.proc@ucobank.co.in		
Contact Telephone/Fax Numbers	Tel: 033-44559324/9770		

Note:

Kindly note that annexures which is executed on non-judicial stamp paper, must be submitted as hard copy on or before EOI submission date at the address given in control sheet.

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1. General Terms & Conditions

UCO Bank invites sealed Expression of Interest (EOI) document, comprising of detailed EOI proposal from experienced prospective bidders having proven past experience, competence in the field of providing solutions, having presence of manpower even in specified area for providing required services in the specific group, as defined in this document. The prospective bidders are required to adhere to the terms of this EOI document and any deviations to the same shall not to be acceptable to UCO Bank.

The bidder (also called the Vendor/ Service Provider/ Bidder through this document) selected / engaged through the tendering process shall own the single point responsibility for fulfilling all obligations and providing all deliverables and services required for successful implementation of the project.

Unless expressly overridden by the specific agreement to be entered into, between the Bank (s) and the bidder, the EOI document & subsequent tender document shall be the governing document for arrangement between the Bank and the prospective bidder. EOI document may be downloaded from our website www.ucobank.com/Tender.

Any EOI received after last date and time of the receipt of EOIs prescribed as mentioned above, will not be accepted by the Bank.

The EOI document shall be in two parts viz. Eligibility Document & Profile Document. All the sub parts must be submitted in separate sealed envelopes super scribing "Eligibility proposal for Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering)." on top of the envelope containing Eligibility proposal, "Profile Document & Proposal for Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering), containing Profile Document. All these sealed envelopes should be put together in another sealed envelope super scribing "Proposal for Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering)." mentioning reference number and date given hereinabove. If the cover/envelope are not sealed & super scribed as required, the Bank will assume no responsibility for its misplacement or premature opening.

The bidders should take care of submitting the EOIs properly filled so that the papers are not loose. The EOI documents should be properly numbered and submitted in a file in proper manner so that the papers do not bulge out and tear during scrutiny.

Bidders are requested to participate in the tender process according to the time schedule mentioned in control sheet above.

The Bids should be addressed to:

Deputy General Manager (DIT)
UCO Bank, Head Office-2

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Department of Information Technology, 5th Floor, 3 & 4 DD Block, Sector -1, Salt Lake, Kolkata - 700 064

UCO Bank is not responsible for non-receipt of response to EOI within the specified date and time due to any reason including postal holidays or delays. In case the specified date of submission & opening of Bids is declared holiday in West Bengal under NI Act, the EOI response, will be received till the specified time on next working day and EOI response will be opened at same time on that day.

EOI response, once submitted will be treated as final and no further correspondence will be entertained on this. No bid will be modified after the target date & time for submission of bids. No bidder shall be allowed to withdraw the bid.

2. Eligibility Criteria

SI. No.	Criteria	Documents to be submitted
1	Bidder should be a limited company (Public/Private) registered in India under the Companies Act, 1956 or 2013 and amendments thereafter or Companies registered as MSME Entrepreneur & still categorized as MSME as on EOI issuance date, if any for the last 3 years as on EOI issuance date.	 Certificate of Incorporation issued by Registrar of Companies along with Copies of Memorandum of Association Copies of Articles of Association Shareholding pattern PAN, TAN, GSTIN Certificate and any other tax related document if applicable is required to be submitted along with the eligibility bid. Registration from DIC, KVIB, NSIC, KVIC, DIHH, UAA or any other body specified by Ministry of MSME.
2	The bidder should be either Original Solution Developer (OSD) of proposed Solution or their authorized representative in India whose product they are proposing.	An authorization letter from OSD (OSDF) to this effect should be furnished as per Annexure-III. This letter should specify that in case authorized representative is not able to perform obligations as per contract during contract period, the OSD would provide the same.

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3	The bidder should be either Original Equipment Manufacturer (OEM) of proposed Solution or their authorized representative in India whose product they are proposing.	An authorization letter from OEM (MAF) to this effect should be furnished as per Annexure-IX. This letter should specify that in case authorized representative is not able to perform obligations as per contract during contract period, the OEM would provide the same.
4	The Bidder should have a minimum annual turnover of Rs. 16 Crores per year during the last three financial years (i.e. 2019-20, 2020-21 & 2021-22).	Copy of audited balance sheet of the financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted.
5	Bidder should have positive net worth in each of the last three financial years (i.e. 2019-20, 2020-21 & 2021-22)	Certificate from Chartered Accountant stating Turnover, Net worth and Profit/Loss for last three financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted.
6	The bidder must have implemented Secret Key Management Solution and successfully under live run the in any one Public sector Bank/Private sector bank/BFSI/NBFC during last three years as on bid submission date.	Copy of letter from client/ Purchase Order/ Agreement with the client to this effect.
7	The bidder must have implemented Open API Banking solution and successfully under live run in any one Public sector Bank/Private sector bank/BFSI/NBFC during last three years as on bid submission date.	Copy of letter from client/ Purchase Order/ Agreement with the client to this effect.
8	Bidder should not have been debarred / black-listed by any Bank or RBI or any other regulatory authority or Financial Institutions in India as on date of EOI submission.	Annexure VI to be submitted.
9	The service provider should ensure that there are no legal proceedings / inquiries / investigations have been commenced / pending / threatened against service provider by any statutory or regulatory or investigative agencies or any other for which performance under	Self-declaration to this effect on the company's letterhead should be submitted.

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the contract will get adversely affected	
/ may get affected.	

3. Bid Submission & Evaluation

- 1. The responses to this EOI must be complete and comprehensive with explicit documentary evidence in support of all the eligibility criteria mentioned herein above. The intended applicants are required to submit their full bio- data as per the Format in **Annexure II** along with the required documents. If necessary, Bank may ask for clarification and/or further information from the bidders.
- 2. The incomplete responses without the required documents are liable to be rejected.
- 3. The Bank reserves the right to accept / reject any or all offers submitted in response to this advertisement without assigning any reason whatsoever and Bank's decision will be final in this regard.
- 4. If deemed necessary, the Bank may seek clarifications on any aspect of EOI from the applicant. If a written response is requested, it must be provided within 02 days beyond which the response received, if any will not be considered. However, that would not entitle the applicant to change or cause any change in the substances of their EOI document already submitted. Bank may also make enquiries to establish the past performance of the applicants in respect of similar work. All information submitted in the application or obtained subsequently will be treated as confidential.
- 5. The Bank further reserves the right to issue Request for Quotes (RFQ)/Request for Proposal (RFP) to vendors if it deems eligible and qualified based on the evaluation of the responses received. Bank may issue a Request for Quotes (RFQ)/Request for Proposal (RFP) covering detailed revised Scope of Work to shortlisted applicants for inviting technical and indicative commercial bids for next process of procurement. However, it may be noted that short listing of applicants should not be treated as a contract for the proposed work.
- 6. Nothing contained in this EOI shall impair the Bank's Right to issue RFQ/RFP on the proposed Service.
- 7. In case the specified date of submission of EOI is declared a holiday in West Bengal under N.I. Act, the bids will be received till the specified time on next working day.
- 8. Bidder has to qualify in all the eligibility criteria mentioned in EOI document.

Note: This is only for the purpose of empanelment and commercials are not to be submitted with "Expression of Interest (EOI)".

This EOI shall not define project specific terms and guidelines. They shall be specified in the subsequent RFQ documents issued for the specific requirements.

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4. Scope of Work

The Scope of this project is the implementation of **Complete API Banking & Secret Key Management Solution**.

The API Banking solution should be capable of handling the entire API lifecycle encompassing design, implementation, management and monitoring along with the dedicated tools to assist in the completion of tasks at each level capable of supporting on premise, cloud-based, and hybrid deployment models. The solution should be able to expose various internal (Private) and external (i.e. public under Open, Restricted & Protected category) APIs by incorporating quintessential security features and offer consistent and modern API Management Solution functionality for new/existing back-end services hosted anywhere. The solution should be capable of publishing and consuming various types of web services, APIs etc. in secured manner. The solution should be fully scalable (Horizontal, vertical and linear scalability) and adaptable to future needs, technological evolutions and volumes of business. Bidder need to supply, implement, maintain and manage the entire API management solution during the contract period.

Secret Key Management Solution should be capable to handle/manage all symmetric encryption keys & asymmetric encryption keys (i.e. Public Private Key pair/Digital Signature Certificate) used by various systems in Bank for integration with internal & external applications/systems in secured manner. The solution should be able to manage key distribution through proper approval mechanism and integrated with various applications/systems of the Bank. The solution will ensure central maintenance & management of secret keys at separate server/environment used at various applications/systems of Bank. The proposed secret key management solution shall perform secured key/certificate storage and key/certificate lifecycle management of software keys stored by hardware, appliances, operating systems, Hypervisors, virtual machines, network devices, virtual networks, middleware, web servers, application servers, application software, utility software, system software, active directory and any other technologies. Bidder need to supply, implement, maintain and manage the secret key management solution during the contract period.

(A) The scope of work includes following but is not limited to:

- 1. The offered solution should be implemented on-premise and should be compatible with Private Cloud, Public Cloud, and Hybrid Infrastructure as available in the market. In addition, the solution should support, physical server and virtualized environment based deployments.
- 2. The solution should support integration with all categories of API- Public API, Private API, Partner API, Open API, etc.

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- 3. The solution should support publishing/release of APIs in following categories by following approval matrix in proposed solution as per requirement of Bank:
 - 3.1 <u>Private:</u> APIs used internally over the Bank's private network to facilitate the integration of different applications and systems used by UCO Bank. E.g.-CIF Enquiry API, Account Enquiry API etc. that provides information to other applications installed in Bank's premises. APIs for External agencies like NPCI, RBI, NSDL etc. connected with Bank's private network also come under this classification.
 - 3.2 <u>Public:</u> APIs exposed over the public network i.e. internet for integration with third party applications and systems. E.g. Product Enquiry, Branch/ATM Enquiry etc. Based on the criticality of data/usages, Public/External APIs will be categorized as follows:

Category	Description			
Restricted	APIs have high criticality.			
/Partner	APIs where there is debit or a credit request. E.g. NEFT, RTGS,			
71 dililoi	UPI P2M & Collect, IMPS, Cash Deposit, etc.			
	Any data for which Bank own IPR (Intellectual Property Rights)			
). E.g Customer demographics, card details etc.			
	All data depositing request which has customer specific			
	information and is end to end STP (Straight Through Process)			
	at Bank.			
	APIs will work on consent driven framework that guarantees			
	non-repudiations.			
	APIs are used for development within the government			
	agencies/empanelled organizations.			
	Users of these APIs will be authorized by API Owner i.e. UCO			
	Bank through approval matrix.			
Protected	APIs have medium criticality.			
/Partner	APIs where there is substantial customer data exchange like			
7. 3	Customer Account Number, Customer ID, Aadhaar No, PAN			
	Card, Debit Card No etc. E.g Lead Generation, OTP,			
	Standing Instruction (SI) Mandate etc.			
	API supports sensitive information like e-KYC, Balance			
	Statement etc.			
	Data Fetch APIs will work on consent driven framework that			
	guarantees non-repudiations.			
	All data depositing request which is a drop on the floor at			
	Bank and will be further reviewed/action taken as per the			

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existing process. E.g.- Leads for Loan, Account Open etc. Only a specific set of authorized agencies shall get access of data. Users of these APIs will be authorized by API Owner i.e. UCO Bank through approval matrix. Registered/ • APIs have low criticality. APIs where there is no substantial customer data exchanged like Branch Enquiry, ATM Locator, Product Enquiry etc. API supports non-sensitive information. Master data which are generic in nature like list of state code, branches, ATMs etc. Data which falls under the ambit or Right to Information Act i.e. public.

API definition will be visible to all.

Open

- Accessed by developer community and agencies having license key (provided by Al Provider) for innovative usages.
- All registered entity can access the APIs.
- 4. The solution should provide features of API Directory, an API Gateway and API Management Portal.

API Gateway should offers APIs to the outside world & handle all inbound & outbound traffic w.r.t. API Integration with external agencies/organizations. API Directory should support features of API categorization, search/discover API, Detailed API documentation with details of endpoints & authentications to consume the APIs, composing new hybrid APIs from multiple existing APIs i.e. provide Orchestration etc.

API Management Portal should act as a bridge between API Consumers and API Providers which supports Work Flow Management for API Publishing and Registration and Deregistration of application & requester and Version control of APIs, API Monitoring, performance analysis, **monetization** configuration etc.

- 5. The solution should provide Publisher/Consumer/Developer portal to maintain account & API information and Sign in and Sign up facility for API publishers and consumers. Also support Facility to test and subscribe for APIs and features to demand new APIs from API Owners.
- 6. The solution should support monetization mechanism. Depending on business model APIs can be released as Free, External Agency Pays, and External Agency gets paid etc. and same should be handled through API Management Portal.

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- 7. The solution should support Grievance Handling and unified support mechanism through email/chats in order to facilitate usages of API repository to the third party and receive enhancement requests etc.
- 8. The solution architecture should support 3-way DR setup (DC, DR and Near DR sites).
- 9. The solution should adhere to all API standards whether regional or local. All APIs should be stable & scalable. Each published API shall be properly documented with sample code and sufficient information for developers to make use of the API.
- 10. The solution should be technology agnostic i.e. the API design is agnostic to applications, programming languages and platforms and aims at seamless and secure flow of electronic data across different applications.
- 11. The solution should support minimalist, evolutionary, privacy and security by design.
- 12. The solution should be able to maintain confidentiality and integrity of the request and response data both in transit and at rest and should support content encryption, content signing, secure key management system, etc. The solution should support various cryptographic methods based on symmetric key algorithm & asymmetric key algorithm (based on public private key pair, Digital Signature Certificate etc.) as per Bank's approved standard. Detailed standard document will successful bidder durina be shared with system requirement study/Implementation phase.
- 13. The solution has to be implemented at Bank's Primary, Secondary sites and any other site as per Bank's requirement.
- 14. The Application should be sized for Active- Active cluster at DC & DR so that the solution and hardware infrastructure can fall back on each other.
 - The bidder must design the solution with high availability & secure Infrastructure in Data Centre and Disaster Recovery and any other site, as per Bank's requirement, making the proposed solution adequate to fulfil Bank's requirements and make sure that they are as per Industry accepted security standards and best practices.
- 15. DC DR replication should be available as part of the solution so that in case of switch over the complete solution should seamlessly work.
- 16. Apart from setting up DC and DR site, bidder shall also be responsible for creating separate Development, UAT and Sandbox/Pre-Production environment setup for multiple users simulating near production functionalities as per the requirement of the Bank

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- 17. Proposed solution should have highly scalable architecture, initially supporting at least 250 transactions per second (TPS) considering an average payload of 100KB (max 15MB).
- 18. The threshold for payload should be configurable at API level.
- 19. Bidders to ensure resolution time of **4 hours** for any issue in solution, individual APIs etc. with back to back arrangements with respective OEMs.
- 20. Bidder shall provide comprehensive onsite support and deploy onsite resources during the warranty period of 1 year free of cost and onsite support for subsequent ATS period of 4 years, if availed by the Bank. The Solution should be provided with 1-year onsite warranty period from Go-Live and 4 years ATS after completion of warranty period.
- 21. Bidder also needs to deploy onsite support during the period of delivery, implementation and handover to Bank after necessary training and knowledge transfer. Bidder has to deploy adequate number of onsite resources as part of the Project implementation to ensure completion of all milestones of the Project within the stipulated timelines defined by the Bank.
- 22. Bidder must appoint a Team Lead for the Bank, immediately after receiving the work order/ letter of intent. The Team Lead should have direct experience of successful end-to-end implementation and management of deployed Solution for at least one comparable project to the Bank's requirement. The Team Lead should be available onsite during the entire duration of implementation. Post implementation, the team lead shall be available onsite as per the requirement of the Bank. This resource will act as SPOC for the entire duration of the contract. The bidder should provide the same without any additional cost to the Bank.
- 23. As a part of the project implementation, one resource from the OEM having adequate experience in API Banking & Secret Key Management solution implementation has to be deployed onsite during the entire implementation period to supervise the installation and implementation process.
- 24. Post implementation, Bidder has to provide onsite support for any customization and/or new implementations in any API or the solution as per discretion of the Bank as and when required by the Bank.
- 25. The bidder shall deploy additional on-site support, as per requirement of the Bank, for resolving all the solution/application related issues, including re-installation of required software for the proposed solution, during ATS (Annual Technical Support) period or the extended period as per the EOI/ Agreement terms without any additional cost to the Bank.

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- 26. Bidder will have to provide and implement patches, updates and upgrades of the entire solution stack and other related software(s), tools required for smooth functioning of Solution, supplied by the bidder and provided by the Bank without any cost to the Bank during the contract period.
- 27. The accessories, tools, software, application and other necessary components required for the installation, configuration and seamless functioning of the API Banking & Secret Key Management solution should also be supplied by the Bidder as a part of this EOI. Bank will not arrange for the same.
- 28. Bidder should provide **perpetual Enterprise Wide Licenses** required for all the applications, software, tools, components, etc. provided as a part of the Solution without any constraint and without any additional cost to the Bank. The licenses provided should have unrestricted access (without any limitation in no. of users, instances, installations, hardware etc.) and should not be tied to the hardware supplied even after expiry of the contract. Bank will be free to reuse/port any of the software(s), tool(s), application(s), etc for any purpose in the future without any dependency on the Bidder or the Solution. Necessary perpetual licenses/ proof of the tie-up arrangements with the OEM(s) are to be provided to the Bank. Bank may pay ATS for the same but license cost will be paid onetime only. The bidder has to ensure that the supplied software is legal version and no pirated software should be supplied to the Bank.
- 29. Bidder has to carryout hardening of Operating System, DB, App, patch management activity and other configuration on OS, DB, App, etc. on premises/private cloud/public cloud/hybrid cloud and related software, etc., periodically as per the requirement of the bank.
- 30. Bidder has to guarantee minimum uptime of **99.95%** on monthly basis (calculated on the basis of 24 X 7 X No. of days of the month) and should be ready to execute service level agreement for the same.
- 31. The bidder is responsible for supply, install, re-install and maintenance of entire solution along with its related hardware or other software tools at Bank's 3-way DR setup. The scope covers end-to-end installation of whole setup and making it operational and also includes imparting training on the same to Bank officials by OEMs/solution provider.
- 32. Bidder has to arrange for providing advance hands-on training by OEMs to the Bank officials for day-to-day troubleshooting, configuration, customization of APIs and maintenance of proposed Solution before Go-Live as a part of project implementation. Bidder shall provide comprehensive training manual, presentations, videos, lecture notes, hand-outs and other training documentation for the training.

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- 33. The proposed solution must include all the software, application, services, accessories, tools and other components necessary to meet the requirements and for any customization of existing API or creation of any new API on the provided Solution at any time during the contract period without any additional cost to the Bank.
- 34. No freeware or open-source software, pirated tool etc. shall be used as a part of this solution.
- 35. Bidder and OEM have to certify that the proposed versions of the software(s), tools etc. to be deployed as part of API Banking & Secret Key Management solution are free from any bugs, vulnerabilities or malicious codes.
- 36. Bidder has to provide dashboards and reports as required by the Bank from time to time, including but not limited to, availability, usage, performance, monitoring and maintenance etc. of the Solution with drill down facility to reach root cause of the failed event/service. Periodic MIS as per the requirements stipulated in this document, as well as Bank's policies and guidelines issued from time to time are also included in the scope.
- 37. The solution should be able to provide alerts by way of SMS/E-Mail/Dashboard for various failure events for defined thresholds/ scenarios. Integration of the solution with SMS/E-Mail/Dashboard and any other solution, if required by the Bank, will have to be done by the bidder without any additional cost.
- 38. The proposed solution by the bidder should include support & subscription services from the OEM with unlimited number of support requests, remote support, and access to product updates/upgrades and 24x7 supports for Severity Level-3 issues.
- 39. Detailed (Installation, Configuration, Secure manuals Configuration, Troubleshooting, Developer etc.), process documentation, SOPs (Standard operating procedures) for API Banking & Secret Key Management solution monitoring, developer on boarding, API security configuration, deployment, architecture/administration, API gateway configuration, creation of APIs, configuration for API etc. and other SOPs for management, integration with SIEM/AD/DAM/Patch Management/Inventory Management, DR Drill, Business Continuity Plan etc. of solution should be created and submitted before project signoff. SOP should also cover log monitoring management including configuration, deployments, backup and recovery etc. The SOP should be updated on regular basis by supplier.
- 40. The onsite resource will manage and monitor the installed setup for day to day activity. Daily backup of the proposed solution and restoration of the same as per Bank's policy is also the responsibility of onsite resource.

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- 41. The onsite resource(s) will co-ordinate will all stake holders-OEM, Vendor and Bank, etc. and log the call with OEMs if the problem resolution is beyond his capacity and get it resolved. Daily status of calls logged with OEM along with status of the same is to be provided to the Bank.
- 42. Bidder as well as OEM escalation matrix must be provided for Service Support.
- 43. The selected bidder has to provide the educational as well as background verification of the onsite resources to Bank. Before deploying any engineer, Bank has the right to assess his skills and retain the right to refuse.
- 44. Total number of APIs required to be integrated (end-to-end) before go-live at API Banking & Secret Key Management solutions is approx. **100 plus**. The signoff for go-live implementation of proposed solution will be given only after successful end-to-end integration of **100** APIs i.e. after Implementation of proposed Solution with end-to-end external as well as internal systems/applications integration pertaining to these **100** APIs. Bidder shall prepare of data migration plan and rollback strategy, if any required.
- 45. During the Implementation phase, Bidder has to undertake migration and creation of **approx**. **500** APIs which includes External APIs, Internal APIs and related internal service orchestrations which may involve multiple systems/applications in integration(s). Name and details of APIs will be shared with successful bidder during system requirement study/Implementation phase.
 - Source code of the developed/customized APIs will be exclusive property of UCO Bank. Selected bidder shall provide the latest, error free and complete source code of the actual running module including source code of DLLs, JARs, Classes and other supporting libraries which can be compiled and deployed by UCO Bank along with all the prerequisites Source Code, Libraries, DLLs, JARs, Classes, IDEs etc. UCO Bank shall remain the exclusive owner of its proprietary information and all patents, copyrights, trade secrets, trademark and other intellectual property rights therein.
- 46. Migration of existing APIs/services/integrations (post retrofit, if required) onto this new technology stack. Bank is already using In-House customized APIs/SFTP based services etc. for various types of external/internal/internet/intranet communication.
- 47. The proposed solution should support conversion to/from multiple formats like ISO, JSON, XML, Flat files, CSV, HTML, ASN1 etc. The solution should support integration with CBS (Finacle 10 & later versions), LENS, Credit Card as well as other systems/applications of Bank using API, Fl Calls, Web Services, ISO, TCP/IP adaptor, SOAP, File based etc. to provide flexibility of data sharing in multiple format i.e. XML (Extensive Markup Language), JSON (), KML (Key-Hole Markup Language),

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- GML (Geography Markup Language), RSS/ATOM and RDF (Resource Description Framework) formats etc.
- 48. Selected bidder should be expert in data communication with external systems using various technologies like ISO-8583 messages, XML, JSON, Text, SOAP API, Rest API, X-Service API, DB Link, SQL Link Server etc. Mentioned technologies are only indicative.
- 49. During the development or migration of existing APIs phase Bank may suggest minor changes as per Bank's business policy and selected bidder has to incorporate the same at no extra cost to the Bank.
- 50. The solution should be able to mitigate various types of risks i.e. Security lapses Lack of type checking, improper error handling, vulnerability to SQL injection, Code Injection, Cross-Site Forgery, Document Threats etc., insufficient memory overflow handling, privacy of Customer's data, insufficient use of encryption at transport layer and insecure endpoints. The bidder has to ensure that no APIs contains any bugs, no private data leakage and implementation of recommended TLS certificate at transport layer for successful use of solution.
- 51. Bidder shall comply with all the extant & new regulations, guidelines of the Bank's Information Security Policy, Guidelines of RBI, CERT-In, Respective Govt. Agencies and the Bank's policies and guidelines and provide such regulatory requirements at no additional cost to Bank till the warranty period.
- 52. The Solution is subject to audit by regulatory authorities, internal and external auditors engaged by Bank during the contract period and compliance of all security and audit observations pointed out by these bodies required to be complied by the successful bidder within the timelines stipulated by the regulatory agencies, without any additional cost.

Bidder has to comply to all audit observations of the audit, assessment, testing etc. immediately, failing which Bank will impose penalty.

- 53. The bidder shall propose Plan & Design/Architecture services through the OEM. The bidder has to arrange for OEM to conduct a health-check of the deployed solution on yearly basis during the contract period and submit a report indicating compliance to reference architecture and best industry practices. The bidder has to make necessary arrangement for the same and Bank will not pay any additional cost for implementation/configuration by OEM.
- 54. For implementation of the proposed Solutions, Bank prefers the architecture having Web Server, Application Server & Database Server separately with cluster supported High Availability mode. Bank prefer Oracle Database 19C and above as database software and Windows or Linux as OS. All Servers should be able to

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- integrate with Bank's Active Directory, Patch Management, Inventory Management System, etc.
- 55. Bidders' will be required to provide the necessary hardware, software, tools etc., to operationalize the API Banking & Secret Key Management Solution separately based on the volume and the growth indicated in the EOI document for following purposes:
 - Setting up of Production Environment in High Availability Mode (Web, Application & Database Server)
 - Setting up of DR site in High Availability Mode of equal capacity to Production (Web, Application & Database Server)
 - The Solution should also include Pre-Production, Development and UAT Setup (Web, Application & Database Server) as per the requirement of the Bank.
 - Storage
 - Other components required for hosting the hardware including server racks, cables, HSM etc. (DC, DRS, Development/Test Setups)
 - Details of redundancy and security setup

The hardware supplied needs to meet data, performance, load balancing, concurrent usage, scalability, availability requirements of the project. The bidder shall further ensure that at any point hardware parameters (like CPU, Memory, Storage, Network, etc.) should not cross the 50% utilization levels at all the proposed deployment sites of the Bank. The Bank is not responsible for any assumption made by the Bidder with respect to the hardware sizing. In the event the Bidder does not meet the performance / service levels of the Bank, the Bidder will at their cost carry out the necessary upgrades / replacements. The Bank has the right to deduct / recover from the Bidder the required additional expenses which Bank may incur on account of such upgrades / replacements.

- 56. Bidder to factor and propose both hardware and software as per their architecture which includes associated monitoring and management software(s) including Storage, OS license (core based), database license (core based with unlimited device/ user access etc. any.
- 57. All changes and/or customizations in any individual API or the solution itself should first be deployed in UAT Environment and only after successful testing and goahead by Bank Officials, the same will have to be deployed in production environment. Production deployment of upgraded code, configuration etc. should not result in any kind of downtime.

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- 58. The selected bidder may also be required to supply/implement the same Solution, if required, for Bank's subsidiaries, sponsored RRBs and any other entity(s) (in case of merger of any other organization within UCO Bank).
- 59. The proposed solution should allow to produce, publish, create, consume, manage and monitor its APIs on a single, centralized portal.
- 60. The solution should be able to manage Third Party API consumption.
- 61. The solution should support load balancing for API traffic.
- 62. The solution should support automatic generation of industry-standard WADL/RAML/Swagger files/WSDL/other industry standard web services descriptions/API specifications from code. Document should cover-up:
 - Approach/Standard of API i.e. REST-based interface or a SOAP service or an event emitter or connector-based.
 - Supported Processing Type i.e. fire-and-forget or synchronous or asynchronous.
 - Supported Methods i.e. Post/Get/Put etc.
 - What will be the supported contract interface types (XML, JSON) and what are the attributes in payload (multipart or not, data fields etc) for the interface?
 - How is the service secured authentication, authorization, transport security, end-to-end security?
 - What is the exception handling mechanism for the service?
 - How does the Versioning/ Deprecation and Decommission of service is handled?
 - How does auditing and monitoring capabilities are built for the service?
 - Monetization mechanism, if any.
- 63. The solution should provide developer administration capabilities such as access management, issue resolution, and developer engagement, developer rate tier administration, and billing integration.
- 64. The solution should support API mocking i.e. a service that mimics the behaviour of a real service in a controlled manner. The solution should have facility to test APIs directly from the web console.
- 65. The solution should support automatic code generation (such as SDK generation) for APIs in multiple languages (i.e. JAVA, C#, Java script, PHP etc.).
- 66. The solution should support defining, implementing and validating consistent design standards for APIs across the organization.

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- 67. The solution should support at least 25% annual growth (Year-on-Year) in terms of number of transactions per second (TPS). If at any stage during the contract period, the performance of the solution degrades due to any reason, the vendor shall be responsible for taking corrective steps with respect to performance tuning, software up gradation, customization etc. without any additional cost.
- 68. Obtaining Road permits or any other document for delivery of the material, if any, till Bank's premises will be the sole responsibility of the vendor (successful bidder). The vendor (successful bidder) shall arrange road permit for locations applicable at no extra cost to the Bank. However, Bank will sign the necessary forms as purchaser, as per the requirements.
- 69. Bidder must design the secure Infrastructure in Data Centre and Disaster Recovery and any other site, as per Bank's requirement, making the proposed solution adequate to fulfil Bank's requirements and make sure that they are as per industry accepted security standards and best practices.
- 70. The proposed solution should support multistep processes, composite applications and services, flow specification, flow representation, flow extension, long lasting
- 71. The solution should be able to respond error in structured manner. Error response must pass basic criteria to be helpful i.e. An HTTP Status Code, so that the source and realm of the problem can be ascertained with ease. An Internal error code which provides more information about the error and Human readable messages that summarize the context, cause, and general solution for the error at hand.
- 72. The solution should support API Versioning Strategy. Major version should be kept in URLs & adopt semantic versioning. The solution should be capable to decide version on basis of breaking change, backward compatible change, No impact, etc. as per the requirement of Bank. Provided version control tools should be compatible for the APIs and Bank's other applications
- 73. The solution should support API Deprecation and Decommission Strategy. The deprecation and decommission of an API can be done at the individual API level or at API catalog level. The solution should be capable to communicate Deprecation and Decommission through Technical approach i.e. through response headers. Another, headers can provide deprecation strategy or alternate resource for the deprecated API as per the requirements of Bank.

(B) Securities:

Bidder shall comply with all the extant & new regulations, guidelines of the Bank's Information Security Policy, Guidelines of RBI, CERT-In, Respective Govt. Agencies and the Bank's policies and guidelines and provide such regulatory requirements at no additional cost to Bank till the contract period.

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Security being the prime concern, vendor should adhere to the best security practices. The proposed solution should not breach any security concern of the Bank. Bank may conduct Security Audit, Source Code audit, IS Audit, VA-PT etc. from time to time and selected bidder is required to comply the audit points submitted by the Auditor without any extra cost to the Bank. Bank may also conduct the Audit of the Bidder' system at Bidder's location and selected Bidder should assist to complete the audit.

However any security breach in the solution provided by the selected bidder, it will be the responsibility of the selected bidder's and selected bidder has to bear the financial loss incurred to the Bank.

- The solution should support standard authentication i.e. JWT, OAuth etc. as per requirement of Bank. It should support token expiration (TTL, RTTL). Each end points should be protected behind authentication to avoid broken authentication process.
- The solution should be able to limit requests (Throttling) to avoid DDoS / bruteforce attacks. It should support HTTPS on server side to avoid MITM (Man in the Middle Attack).
- The solution should not return sensitive data like credentials, Passwords, or security tokens.
- The solution should support HSTS header with SSL to avoid SSL Strip attack.
- The solution should support TLS version TLSv1.2 & above.
- Audit Logs should be used.
- The solution should support input validation at the endpoint level.
- The solution should support Layered Security i.e. Business Layer, Application Layer, and Protocol Layer etc. This layer of security will vary from project to project.
- The solution should support IP Whitelisting at API level also.

(C) Disaster Recovery Mechanism:

The Application should be sized for High Availability Mode of equal capacity to Production at DR location with exact **100** % replica of DC. DC – DR replication mechanism should be available as part of the solution so that in case of switch over the complete solution should seamlessly work.

The successful vendor should describe the provisions for disaster recovery and show that the proposed solution facilitates disaster recovery. The bidder needs to submit the technical architecture relating to data replication between primary and secondary site.

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There will be DR Drill once in every quarter (4 times in a year) wherein Bank may plan to shift functioning of all the systems from DC to DR which would include the API Banking & Secret Key Management solution also. The RTO permitted for applications during DR activities would be maximum 90 minutes and RPO permitted for applications would be maximum 30 minutes which is subject to change as per Bank's requirement. This is subject to change from time to time as per Bank's requirement. For Automation of DR Drill, Bidder has to integrate the API Banking & Secret Key Management Solution with the tool prevalent in Bank for conducting DR Drill without any additional cost.

(D) Availability, Usage, Performance & Monitoring Measurement:

Bidder has to provide dashboards and reports, including but not limited to, uptime, availability, usage, performance, monitoring and maintenance of API Banking & Secret Key Management Solution with drill down facility to reach individual API/Integration Service. Dashboard should be able to flash Failure of individual API/Integration. Dashboard should also facilitate log of all issues that have been raised / closed / pending closure by the bidder. Apart from the dashboards and reports on availability, usage, performance, monitoring measurement parameter, the dashboard and reports should also include the following:

- Redo log shipping
- Backup report
- Call resolution Time
- DC & DR Sync (Web, Application & DB)

The frequency of reports may be daily, weekly, monthly, quarterly and yearly & event basis or as per the requirement of the Bank. However, all the availability and performance measurement will be on a monthly basis for the purpose of Service Level reporting. For Automation of Performance monitoring, Bidder has to integrate the API Banking & Secret Key Management Solution with the tool prevalent in Bank for performance monitoring without any additional cost to the Bank.

4. Customization Process:

Any customization/new API development done by the Successful bidder to provide the functionality already available in the functional requirements of the EOI shall be at no extra cost to the Bank, whatsoever.

In case of any additional APIs are requested by the Bank subsequent to award of contract, which are not part of the scope and/or requirements as given in the Contract document, the Bank shall place such a request in writing giving the required details. The selected successful bidder shall submit their efforts in number of man days and shall carry out the desired change on mutually agreed terms. The per man day

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cost shall include all expenses to be incurred for delivering such modifications / changes and man-days cost many be negotiated by Bank.

5. Facility Management Service

The bidder should provide Facility Management service for the Application:

- Application (including customizations and interfaces)
- Hardware,

The FM Support services will be stationed at Head Office of the Bank's Data Centre, preferable at Kolkata. However Bank may deploy these resources at any location in India for smooth operation.

- ii. The required FM resource should be available 24X7X365 (general shift including Sundays and other holidays) at bank. The engineers should work in close co-ordination with the bank.
- iii. Bidder has to arrange for L3/L4 support on demand, onsite whenever required, if the onsite team is not able to resolve the issues.
- iv. Bank at its discretion may conduct an interview of the onsite engineer / resource proposed to be deployed. Prior notice of one month needs to be provided if any of the existing engineer /resource is leaving the project. Also, suitable replacement is to be deployed and the knowledge transfer should happen, to the satisfaction of the bank, before the existing engineer /resource leave the project.
- v. All Facility Management engineers deployed should be on the payroll of the bidder and should not deploy Franchise engineers.
- vi. In case any of the FM engineer is on leave, suitable resources to be provided during the period for smooth conduct of activities.
- vii. The required desktop and seating space for the FM engineers will be provided by Bank.
- x. Bank shall be conducting various audits i.e. VA & VAPT, security audit etc. and bidder should extend necessary support for smooth conduct of the audits & compliance of the observations.

6. Rejection of EOI Response

The Bid is liable to be rejected if:

- 5.1 The document doesn't bear signature of authorized person on each page signed and duly stamp.
- 5.2 It is received through E-mail.
- 5.3 It is received after expiry of the due date and time stipulated, or such extended time as stipulated by the Bank, for bid submission.
- 5.4 Incomplete Bids, including non-submission or non-furnishing of requisite documents / Conditional Bids/ deviation of terms & conditions or scope of work/

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- incorrect information in bid / Bids not conforming to the terms and conditions stipulated in this Expression of Interest (EOI) are liable for rejection by the Bank.
- 5.5 Bidder should comply with all the points mentioned in the EOI. Non-compliance of any point will lead to rejection of the bid.
- 5.6 Any form of canvassing/lobbying/influence/query regarding short listing, status etc. will be a disqualification.
- 5.7 The bidder submits Incomplete Bids, including non-submission or non-furnishing of requisite documents / Conditional Bids / Bids not conforming to the terms and conditions stipulated in this Expression of Interest (EOI).
- 5.8 Non-submission of Integrity Pact as per format given in Annexure –V.

Any form of canvassing/lobbying/influence/query regarding short listing, status etc. will be a disqualification.

7. Pre Bid Meeting

For the purpose of clarifications of doubts of the bidders on issues related to the EOI, Bank intends to hold a pre bid meeting on the date & time as indicated in the EOI (Control Table). The queries for the Pre-bid meeting should be reached by email on or before the date mentioned above on e-mail: hodit.proc@ucobank.co.in. It may be noted that no query from any bidder shall be entertained or received after the above mentioned date. Queries raised by the prospective bidder and the Bank's response will be hosted at Bank's web site. No individual correspondence will be accepted in this regard. Only authorized representatives of bidder will be allowed to attend the Pre-bid meeting. Any deficiencies should also be raised in the pre-bid queries.

8. Modification and Withdrawal of Bids

- a) Bids once submitted will be treated, as final and no modifications would be permitted. No correspondence in this regard will be entertained.
- b) No bidder/sub-contractor shall be allowed to withdraw the bid after the deadline for submission of bids.
- c) The bidder/sub-contractor will not be allowed to withdraw from or seek amendments to the bid commitments. The bid earnest money in such eventuality shall be forfeited and all interests/claims of such bidder shall be deemed as foreclosed

9. Information Provided

The EOI document contains statements derived from information that is believed to be reliable at the date obtained but does not support to provide all of the information

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that may be necessary or desirable to enable an intending contracting party to determine whether or not to enter into a contract or arrangement with Bank in relation to the provision of services. Neither Bank nor any of its employees, agents, contractors, or advisers gives any representation or warranty, express or implied as to the accuracy or completeness of any information or statement given or made in this EOI document.

10. For Respondent Only

The EOI document is intended solely for the information to the party to whom it is issued ("the Recipient" or "the Respondent") and no other person or organization.

11. Confidentiality

The EOI document is confidential and is not to be reproduced, transmitted or made available by the Recipient to any other party. The EOI document is provided to the Recipient on the basis of the undertaking of confidentiality given by the Recipient to Bank. Bank may update or revise the EOI document or any part of it. The Recipient acknowledges that any such revised or amended document is received subject to the same terms and conditions as this original and subject to the same confidentiality undertaking.

The Recipient will not disclose or discuss the contents of the EOI document with any officer, employee, consultant, director, agent or other person associated or affiliated in any way with Bank or any of its customers, suppliers or agents without the prior written consent on Bank.

12. <u>Disclaimer</u>

Subject to any law to the contrary, and to the maximum extent permitted by law, Bank and its officers, employees, contractors, agents, and advisers disclaim all liability from any loss or damage (whether foreseeable or not) suffered by any person acting on or refraining from acting because of any information, including forecasts, statements, estimates, or projections contained in this EOI document or conduct ancillary to it whether or not the loss or damage arises in connection with any negligence, omission, default, lack of care or misrepresentation on the part of Bank or any of its officers, employees, contractors, agents, or advisers.

13. Costs Borne By Respondents

All costs and expenses incurred by Recipients / Respondents in any way associated with the development, preparation, and submission of responses, including but not limited to attendance at meetings, discussions, demonstrations, etc. and providing any additional information required by Bank, will be borne entirely and exclusively by the Recipient / Respondent.

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14. No Legal Relationship

No binding legal relationship will exist between any of the Recipients/ Respondents and Bank until execution of a contractual agreement.

15. Errors and Omissions

Each Recipient should notify Bank of any error, omission, or discrepancy found in this EOI document.

16. Acceptance of Terms

A Recipient will, by responding to Bank EOI, be deemed to have accepted the terms as stated in the FOI.

17. EOI Response

If the response to this EOI does not include the information required or is incomplete or submission is through Fax mode or through e-mail, the response to the EOI is liable to be rejected.

All submissions will become the property of Bank. Recipients shall be deemed to license, and grant all rights to, Bank to reproduce the whole or any portion of their submission for the purpose of evaluation, to disclose the contents of the submission to other Recipients who have registered a submission and to disclose and/or use the contents of the submission as the basis for any resulting EOI process, notwithstanding any copyright or other intellectual property right that may subsist in the submission or Banking documents.

18. Notification

Bank will notify the Respondents in writing as soon as possible about the outcome of EOI evaluation process, including whether the Respondents" EOI response has been accepted or rejected. Bank is not obliged to provide any reasons for any such acceptance or rejection.

19. Language of Bids

The bid, correspondence and supporting documents should be submitted in English.

20. Cancellation of EOI Process

BANK reserves the right to accept or reject in part or full any or all offers without assigning any reason thereof. Any decision of the Bank in this regard shall be final,

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conclusive and binding upon the respondent (s). The Bank reserves the right to accept or reject any Bid in part or in full, and to cancel the Bidding process and reject all Bids at any time during the tender process or prior to contract award, without thereby incurring any liability to the affected respondent or respondents or any obligation to inform the affected respondent or respondents of the grounds for Bank's action. During the evaluation process at any stage if it is found that the respondent does not meet the eligibility criteria or has submitted false /incorrect information the response will be rejected summarily by The Bank.

21. <u>Authorized Signatory</u>

The selected bidder shall indicate the authorized signatories who can discuss, sign negotiate, correspond and any other required formalities with the bank, with regard to the obligations. The selected bidder shall submit, a certified copy of the resolution of their Board, authenticated by Company Secretary, authorizing an official or officials of the company to discuss, sign with the Bank, raise invoice and accept payments and also to correspond. The bidder shall furnish proof of signature identification for above purposes as required by the Bank.

22. Publicity

Any publicity by the selected bidder in which the name of the Bank is to be used should be done only with the explicit written permission of the Bank.

23. Privacy & Security Safeguards

The Selected bidder shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the selected bidder under this contract or existing at any Bank location. The Selected bidder shall develop procedures and implementation plans to ensure that IT resources leaving the control of the assigned user (such as being reassigned, removed for repair, replaced, or upgraded) are cleared of all Bank data and sensitive application software. The Selected bidder shall also ensure that all subcontractors who are involved in providing such security safe guards or part of it shall not publish or disclose in any manner, without the Bank's prior written consent, the details of any security safeguards designed, developed, or implemented by the selected bidder under this contract or existing at any Bank location.

24. Corrupt And Fraudulent Practices

As per Central Vigilance Commission (CVC) directives, it is required that Bidders/ Suppliers/Contractors observe the highest standard of ethics during the procurement and execution of such contracts in pursuance of this policy:

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"Corrupt Practice" means the offering, giving, receiving or soliciting of anything of values to influence the action of an official in the procurement process or in contract execution AND "Fraudulent Practice" means a misrepresentation of facts in order to influence a procurement process or the execution of contract to the detriment of the Bank and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Bank of the benefits of free and open competition.

The Bank reserves the right to reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

The Bank reserves the right to declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if at any time it determines that the firm has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

25. Compliance

The products & services offered to the Bank must comply with all laws, regulations & Govt. guidelines of India. It also not violates any of the provisions of the Banking act in anyway or any other legal provisions relating to such products or services in India.

26. Applicable Law & Jurisdiction Of Court

The Contract with the selected bidder shall be governed in accordance with the Laws of India for the time being enforced and will be subject to the exclusive jurisdiction of Courts at Kolkata (with the exclusion of all other Courts).

27. Adoption of Integrity Pact

UCO Bank has adopted practice of Integrity Pact (IP) as per CVC guidelines. The Integrity Pact essentially envisages an agreement between the prospective vendors / bidders / sellers, who commit themselves to Integrity Pact (IP) with the Bank, would be considered competent to participate in the bidding process. In other words, entering into this pact would be the preliminary qualification. In case of bids for the purchase of Goods, Services, and Consultancy etc. not accompanied with signed IP by the bidders along with the technical bid, the offers shall be summarily rejected. The essential ingredients of the Pact include:

- i. Promise on the part of the principal not to seek or accept any benefit, which is not legally available.
- ii. Principal to treat all bidders with equity and reason

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- **iii.** Promise on the part of bidders not to offer any benefit to the employees of the Principal not available legally
- iv. Bidders not to enter into any undisclosed agreement or understanding with other bidders with respect to prices, specifications, certifications, subsidiary contract etc.
- **v.** Bidders not to pass any information provided by the Principal as part of business relationship to others and not to commit any offence under PC/IPC Act.
- **vi.** Foreign bidders to disclose the name and address of agents and representatives in India and Indian Bidders to disclose their foreign principals or associates.
- **vii.** Bidders to disclose any transgressions with any other company that may impinge on the anti-corruption principle.
- viii. For Joint Ventures (JV) entities, Integrity Pact should be signed by all partners.
- ix. In case of foreign contractor, details of their Indian counterpart should be submitted to Bank by the vendor.

Integrity Pact, in respect of a particular contract, shall be operative from the date IP is signed by both the parties till the final completion of the contract. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings. IP shall cover all phases of contract i.e. from the stage of Notice Inviting Tenders (NIT)/Expression of Interest (EOI) till the conclusion of the contract i.e. final payment or the duration of warrantee/guarantee. Format of IP is attached as Annexure – IV for strict compliance.

The following Independent External Monitors (IEMs) have been appointed by UCO Bank, who will review independently and objectively, whether and to what extent parties have complied with their obligation under the pact.

 Shri Ranjan S Katoch A-91, Alkapuri, Bhopal, MP- 462022 email: rkatoch@nic.in

 Shri Hare Krushna Dash House.No.829, Sector 8 Gandhinagar- 382007, Gujarat email: hkdash184@hotmail.com

All pages of Integrity Pact (IP) must be signed and stamped Integrity Pact (IP) should be deposited with IT Department undertaken procurement at the address mentioned along with EOI document.

28. Issue of Corrigendum

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At any time prior to the last date of receipt of bids, Bank may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the EOI document by a Corrigendum. Any such corrigendum shall be deemed to be incorporated into this EOI.

29. ESCROW Arrangement

- a. The Bank and the Bidder shall enter into escrow arrangement mutually agreed on 50:50 charge basis. The Bank to provide escrow mechanism for the deposit of the source code for the proposed solution in order to protect its interests in an eventual situation. In case of a disagreement between the Bank and the Vendor regarding appointment of an escrow agent, the Bank shall appoint an escrow agent in its entire discretion which shall be final and binding on the Vendor.
- b. The Bank and the Vendor shall enter into a tripartite escrow agreement with the designated escrow agent, which will set out, inter alia, the events of the release of the source code and the obligations of the escrow agent. Costs for the Escrow will be borne by mutually agreed 50:50 charge. As a part of the escrow arrangement, the final selected Vendor is also expected to provide a detailed code documentation of the proposed solution which have been duly reviewed by an external independent organization.
- c. The Escrow arrangement suggested by the Vendor shall not be binding on the Bank. The Bank reserves the right to explore alternate escrow mechanisms based on the Bank's existing practices. The Bank and the Vendor may enter into such escrow arrangement that is mutually agreed upon by the two parties.
- d. This agreement will be signed between four parties i.e. Bank, Bidder, OEM and Escrow agent.
- e. The escrow arrangement is at the discretion of the Bank.

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Annexure – I

Application

Ref. No.: UCO/DIT/EOI/2509/2022-23 dated 10.01.2023

To,
The Deputy General Manager (DIT)
Department Of Information Technology
UCO Bank, Head Office - II
5th Floor, 3&4 DD Block
Sector-I Salt Lake, Kolkata -700064.

Dear Sir,

Sub: Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering)

With reference to your advertisement published in the (name of the newspaper in English) / (name of the newspaper in Hindi) / your website on the captioned subject, we furnish below the following Information / Papers / Documents related to subject EOI.

Date: Seal & Signature

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General Details of the Bidder

A. Profile of Bidder

- 1. Name of bidder:
- 2. Location

Regd. Office:

Controlling Office:

- 3. Constitution:
- 4. Date of incorporation & Date of Commencement of business:
- 5. Shareholding Pattern:
- 6. Major change in Management in last three years:
- 7. Names of Banker /s:

B. Proposed Service details in brief

- > Description of service
- > Details of similar service provided:

Details of Experience in the field of experience in similar field:

Public sector Bank/Private sector Bank/BFSI/NBFC			
Name of Organization	Period		
Name of Organization	From	То	

N.B. Enclose copies of Purchase Orders and references.

Place:	AUTHORISED SIGNATORY

Date: Name:

Designation:

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Annexure-III

(Letter to be submitted by the OSD on firm's official letter head) Original Solution / Software Developer Authorisation form (OSDF)

To,
Deputy General Manager (DIT)
UCO Bank, Head Office-II
Department of Information Technology
5th Floor, 3&4, DD Block, Sector-I
Salt Lake, Kolkata -700064

Dear Sir.

Ref: Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key
Management Solution (E-tendering)

We				(Name of the dev	eloper) who
are	established	and	reputable	developer/solution	provider
of	• • • • • • • • • • • • • • • • • • • •	ho	aving factories ,	offices at	,,
• • • • • • • •	and	do he	reby authorize	M/s	(Name and
addre	ess of Bidder) who	is the bid	dder submitting	its bid pursuant to the	Request for
Propo	sal issued by UCO	Bank on k	pehalf, to submit	a Bid and negotiate ar	nd conclude
a cor	ntract with you for	supply c	of solution / soft	ware developed by us	against the
Reque	est for Proposal re	eceived fr	om your bank	by the Bidder and we	e have duly
autho	rized the Bidder for	this purpo	ose.		

We hereby extend our guarantee/ warranty and ATS as per terms and conditions of the EOI No UCO/DIT/EOI/2509/2022-23 Date: 10/01/2023 and the contract for the solution / software and services offered for supply against this EOI No UCO/DIT/EOI/2509/2022-23 Date: 10/01/2023 By the above-mentioned Bidder, and hereby undertake to perform the obligations as set out in the EOI No UCO/DIT/EOI/2509/2022-23 Date: 25/01/2023 In respect of such solution / software and services. We undertake to provide back-to-back support for modifications / customization and skill/ knowledge transfer to the bidder for subsequent transmission of the same to the Bank. We also undertake to provide support services during warranty as well as ATS period if the above bidder authorized by us fails to perform in terms of the EOI.

Yours Faithfully
Authorized Signatory
(Name:
Designation:
Phone No:
E_mail:)

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Annexure-IV

[This is an Undertaking to be given on a Non-Judicial Stamp Paper of Appropriate Value]

To,

Deputy General Manager (DIT)
Department of Information Technology
UCO Bank, Head Office – II
5th Floor, 3 & 4, DD Block
Sector I, Salt Lake, Kolkata - 700 064

Dear Sir,

Sub: Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering)

With reference to the above EOI we have to state the following:-

- 1. We undertake to respond to any Request for Quote (RFQ) as and when called for by the Bank under limited tendering process.
- 2. We have examined and understood the instructions, terms and conditions forming part of the abovementioned EOI and agree to abide by the General Terms and Conditions stated therein.
- 3. We further confirm that any offer in response to Request for Quote (RFQ) will be in conformity with the terms and conditions as mentioned therein.
- 4. We also understand that the Bank is not bound to accept the offer either in part or in full and that the Bank has right to reject the offer in full or in part without assigning any reasons whatsoever.
- 5. We also understand that our empanelment and performance will be reviewed on a quarterly yearly basis and, if found unsatisfactory will be removed from the list of empanelled vendors.

Yours faithfully,

Authorised Signatory,
(Signature and Seal of the Company / Firm)

EOI REF NO: UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023 Page 36 of 56

INTEGRITY PACT (To be stamped as per the Stamp Law of the Respective State)

Whereas UCO Bank having its registered office at UCO BANK, a body corporate
constituted under The Banking companies (Acquisition & Transfer Act of 1970), as
amended by The Banking Laws (Amendment) Act, 1985, having its Head Office at
10, Biplabi Trailokya Maharaj Sarani , Kolkata-700001 acting through its Department
of IT, represented by Authorised Signatory hereinafter referred to as the Buyer and
the first party, proposes for Procurement of Open API Banking & Secret Key
Management Solution (E-tendering) hereinafter referred to as Stores and / or
Services. and M/s having its registered
office at represented
by Authorised signatory, (which term, unless
expressly indicated by the contract, shall be deemed to include its successors and
its assignee), hereinafter referred to as the bidder/seller and the second party, is
willing to offer/has offered the Stores and / or Services.

2. Whereas the Bidder/Seller is a private company/public company/ partnership/ registered export agency, constituted in accordance with the relevant law in the matter and the BUYER is a Public Sector Undertaking and registered under Companies Act 1956. Buyer and Bidder/Seller shall hereinafter be individually referred to as —Party or collectively as the —parties, as the context may require.

3. Preamble

Buyer has called for tenders under laid down organizational procedures intending to enter into contract /s for Procurement of Open API Banking & Secret Key Management Solution (E-tendering) and the Bidder / Seller is one amongst several bidders /Proprietary Vendor /Customer Nominated Source/Licensor who has indicated a desire to bid/supply in such tendering process. The Buyer values and takes primary responsibility for values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness / transparency in its relations with its Bidder (s) and / or Seller(s).

In order to achieve these goals, the Buyer will appoint Independent External Monitor(s) (IEMs) in consultation with Central Vigilance Commission, who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

4. Commitments of the Buyer

4.1 The Buyer commits itself to take all measures necessary to prevent corruption and fraudulent practices and to observe the following principles:-

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- (i) No employee of the Buyer, personally or through family members, will in connection with the tender, or the execution of a contract demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
- (ii) The Buyer will during the tender process treat all Bidder(s) /Seller(s) with equity and reason. The Buyer will in particular, before and during the tender process, provide to all Bidder (s) /Seller(s) the same information and will not provide to any Bidders(s) /Seller(s) confidential /additional information through which the Bidder(s) / Seller(s) could obtain an advantage in relation to the process or the contract execution.
- (iii) The Buyer will exclude from the process all known prejudiced persons.
 - **4.2** If the Buyer obtains information on the conduct of any of its employees which is a criminal offence under the Indian Legislation Prevention of Corruption Act 1988 as amended from time to time or if there be a substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer and in addition can initiate disciplinary action.

5 Commitments of the Bidder(s) /Seller(s):

- **5.1** The Bidder(s)/ Seller(s) commit itself to take necessary measures to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.
- (i) The Bidder(s) /Seller(s) will not directly or through any other persons or firm, offer promise or give to any of the Buyers employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he / she is not legally entitled to, in order to obtain in exchange any advantage during the tendering or qualification process or during the execution of the contract.
- (ii) The Bidder(s) /Seller(s) will not enter with other Bidders / Sellers into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.
- (iii) (The bidder(s) /Seller(s) will not commit any offence under the Indian legislation, Prevention of Corruption Act, 1988 as amended from time to time. Further, the Bidder(s) /Seller(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or

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document provided by the Buyer as part of the business relationship, regarding plans, technical proposals and business details, including information constrained or transmitted electronically.

- (iv) The Bidder(s) /Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s) / sub-contractor(s), if any, Further, the Bidder /Seller shall be held responsible for any violation/breach of the provisions by its sub-supplier(s) /Sub-contractor(s).
- (v) Foreign bidders to disclose the name and address of agents and representatives in India and Indian Bidders to disclose their foreign principals or associates.
- (vi) Bidders not to pass any information provided by the Principal as part of business relationship to others and not to commit any offence under PC/IPC Act.
- (vii) Bidders to disclose the payments to be made by them to agents/brokers or any other intermediary.
- 5.2 The Bidder(s) /Seller(s) shall ensure compliance of the provisions of this Integrity Pact by its sub-supplier(s) / sub-contractor(s), if any, Further, the Bidder /Seller shall be held responsible for any violation /breach of the provisions by its sub-supplier(s) /sub-contractor(s)
- **5.3** The Bidder(s) /Seller(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

5.4 Agents / Agency Commission

The Bidder /Seller confirms and declares to the Buyer that the bidder/Seller is the original manufacturer/authorized distributor / stockiest of original manufacturer or Govt. Sponsored /Designated Export Agencies (applicable in case of countries where domestic laws do not permit direct export by OEMS of the stores and /or Services referred to in this tender / Offer / contract / Purchase Order and has not engaged any individual or firm, whether Indian or Foreign whatsoever, to intercede, facilitate or in any way to recommend to Buyer or any of its functionaries, whether officially or unofficially, to the award of the tender / contract / Purchase order to the Seller/Bidder; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller / Bidder agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in anyway incorrect or if at a later stage it is discovered by the Buyer that the Seller incorrect or if at a later stage it is discovered by the Buyer that the Seller/Bidder has engaged any such individual /firm, and paid or intended to pay any amount, gift, reward, fees, commission or

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consideration to such person, party, firm or institution, whether before or after the signing of this contract /Purchase order, the Seller /Bidder will be liable to refund that amount to the Buyer. The Seller will also be debarred from participating in any Tender for new projects / program with Buyer for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Contract / Purchase order either wholly or in part, without any entitlement of compensation to the Seller /Bidder who shall in such event be liable to refund agents / agency commission payments to the buyer made by the Seller /Bidder along with interest at the rate of 2% per annum above LIBOR (London Inter Bank Offer Rate) (for foreign vendors) and Base Rate of SBI (State Bank of India) plus 2% (for Indian vendors). The Buyer will also have the right to recover any such amount from any contracts / Purchase order concluded earlier or later with Buyer.

6. Previous Transgression

- **6.1** The Bidder /Seller declares that no previous transgressions have occurred in the last three years from the date of signing of this Integrity Pact with any other company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could justify Bidder's /Seller's exclusion from the tender process.
- **6.2** If the Bidder /Seller makes incorrect statement on this subject, Bidder /Seller can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason without any liability whatsoever on the Buyer.

7. Company Code of Conduct

Bidders /Sellers are also advised to have a company code of conduct (clearly rejecting the use of bribes and other unethical behaviour) and a compliance program for the implementation of the code of conduct throughout the company.

1. Sanctions for Violation

- 1.1 If the Bidder(s) /Seller(s), before award or during execution has committed a transgression through a violation of Clause 5, above or in any other form such as to put his reliability or credibility in question, the Buyer is entitled to disqualify the Bidder(s) /Seller (s) from the tender process or take action as per the procedure mentioned herein below:
 - (i) To disqualify the Bidder /Seller with the tender process and exclusion from future contracts.

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To debar the Bidder /Seller from entering into any bid from Buyer for a period of two years.

- (ii) To immediately cancel the contract, if already signed /awarded without any liability on the Buyer to compensate the Bidder /Seller for damages, if any. Subject to Clause 5, any lawful payment due to the Bidder/Seller for supplies effected till date of termination would be made in normal course.
- (iii) To encash Advance Bank Guarantees / Performance Bonds / Warranty Bonds, etc. which may have been furnished by the Bidder /Seller to the extent of the undelivered Stores and / or Services.
- **8.2** If the Buyer obtains Knowledge of conduct of Bidder /Seller or of an employee or representative or an associate of Bidder /Seller which constitutes corruption, or if the Buyer has substantive suspicion in this regard, the Buyer will inform to its Chief Vigilance Officer.

2. Compensation for Damages

- 2.1 If the Buyer has disqualified the Bidder(s) /Seller(s) from the tender process prior to the award according to Clause 8, the Buyer is entitled to demand and recover the damages equivalent to Earnest Money Deposit in case of open tendering.
- 2.2 If the Buyer has terminated the contract according to Clause 8, or if the Buyer is entitled to terminate the contract according to Clause 8, the Buyer shall be entitled to encash the advance Bank guarantee and performance bond / warranty bond, if furnished by the Bidder / Seller, in order to recover the payments, already made by the Buyer for undelivered Stores and / or Services.

3. Independent External Monitor(s)

- 3.1 The Buyer has appointed independent External Monitors for this Integrity Pact in consultation with the Central Vigilance Commission (Names and Addresses of the Monitors are given in EOI).
- 3.2 As soon as the integrity Pact is signed, the Buyer shall provide a copy thereof, along with a brief background of the case to the independent External Monitors.
- **10.3** The Bidder(s) / Seller(s) if they deem it necessary, may furnish any information as relevant to their bid to the Independent External Monitors.
- **10.4** If any complaint with regard to violation of the IP is received by the buyer in a procurement case, the buyer shall refer the complaint to the Independent External Monitors for their comments / enquiry.

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- **10.5** If the Independent External Monitors need to peruse the records of the buyer in connection with the complaint sent to them by the buyer, the buyer shall make arrangement for such perusal of records by the independent External Monitors.
- **10.6** The report of enquiry, if any, made by the Independent External Monitors shall be submitted to MD & CEO, UCO Bank, Head Office at 10, Biplabi Trailokya Maharaj Sarani, Kolkata-700001 within 2 weeks, for a final and appropriate decision in the matter keeping in view the provision of this Integrity Pact.
- **10.7** The word "Monitor" would include both singular and plural.

4. Law and Place of Jurisdiction

This Integrity Pact is subject to Indian Laws, and exclusive Jurisdiction of Courts at Kolkata, India.

12.Other Legal Actions

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provision of the extant law in force relating to any civil or criminal proceedings.

13.Integrity Pact Duration.

- **13.1** This Integrity Pact begins when both parties have legally signed it. It expires of order / finalization of contract.
- **13.2** If any claim is made/ lodged during this time, the same shall be binding and continue to be valid despite the lapse of this Integrity Pact as specified above, unless it is discharged / determined by MD & CEO, UCO Bank.
- **13.3** Should one or several provisions of this Integrity Pact turn out to be invalid, the reminder of this Integrity Pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

14 Other Provisions

- **14.1** Changes and supplements need to be made in writing. Side agreements have not been made.
- **14.2** The Bidders (s)/ Sellers (s) signing this IP shall not initiate any Legal action or approach any court of law during the examination of any allegations/complaint by IEM and until the IEM delivers its report.
- **14.3** In view of nature of this Integrity Pact, this Integrity Pact shall not be terminated by any party and will subsist throughout its stated period.
- **14.4** Nothing contained in this Integrity Pact shall be deemed to assure the bidder / Seller of any success or otherwise in the tendering process.
- **15.** This Integrity Pact is signed with UCO Bank exclusively and hence shall not be treated as precedence for signing of IP with MoD or any other Organization.

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16. In the event of any contradiction betwee Clause in the Integrity Pact will prevail.	een the Integrity Pact and its Anne	exure, the
17. The Parties here by sign this Integrity Pac	ct.	
BUYER	BIDDER /SELLER	
Signature:	Signature:	
Authorized Signatory	Authorized Signatory (*)
Department of IT		
Place		
Date:		
Witness:	Witness:	
(Name & Address)	(Name & Address)	
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Annexure-VI

UNDERTAKING FOR NON-BLACKLISTING / NON-DEBARMENT OF THE BIDDER TO BE STAMPED AS A DECLARATION & DULY ATTESTED BY A NOTARY

Sub: Expression of Interest (EOI) for Procurement of Open API Banking & Secret Key Management Solution (E-tendering)

- 1) I/We, Proprietor/Partner(s)/Director(s) of M/s...... hereby confirm that I/We have read and understood the eligibility criteria and fulfil the same.
- 2) I/We further confirm that all the information furnished by me/us, as per the requirement of the Bank, have been included in our bid.
- 3) I/We further hereby undertake and agree to abide by all terms and conditions and guidelines stipulated by the Bank. We understand that any deviation may result in disqualification of our bid.
- 4) *I/We further hereby declare that I/We have not been black-listed or otherwise debarred by any Bank/Financial Institution/Central Government/ State Government/any Central or State Undertaking or Corporation/ Reserve Bank of India or any other Regulatory Authority or any other Statutory Authority as on date of the publication of this Tender/Procurement.

(OR)

I/We	furth	er h	nereby	declare	that	the	Propriet	orship (Conc	ern/Po	artnersl	hip
Firm/C	Compo	any/_			(if	any	otl	her	entit	y)	nam	ely
M/s				_was blac	klisted,	'debai	rred by	• • • • • • • • • • • • • • • • • • • •	••••	(Name	of
the A	uthorit	y who	blackl	isted/deba	rred) fr	om ta	king part	t in their ⁻	Tende	er/Proc	cureme	ent
for a p	period	of		years w.	e.f	• • • • • • • • • • • • • • • • • • • •	to		Th	ne per	iod is	
subsist	ling/	over	on	and	now	I/We	is/are	entitled	to	take	part	in
Tende	er/Proc	urem	ent.									

- 5) I/We declare that no proceedings/inquiries/investigations have commenced/pending against me/us by any Statutory Authority/Regulatory Agency/Investigating Agency which may result in liquidation of company/firm/proprietorship concern and/or may act as deterrent on the continuity of business and/or may hamper in providing the said services, as envisaged in this document.
- 6) I/We further hereby declare that no legal action is pending against me/us for any cause in any legal jurisdiction.
- 7) I/We undertake that adequate number of resources, if required by the Bank, will be deployed for the project to complete the assignment within the stipulated time.

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*STRIKE OUT WHICH IS INAPPLICABLE
(Deviation to the above if any, the Bidder must provide details of such action(s))
Signature (1) (2)
(duly authorized to sign) Name: Capacity in which as executed:
Name & registered address of the Bidder:
Seal of the Bidder to be affixed

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Annexure-VII

Eligibility Criteria

SI. No.	Criteria	Documents to be submitted	Compliance (Yes/No)
1	Bidder should be a limited company (Public/Private) registered in India under the Companies Act, 1956 or 2013 and amendments thereafter or Companies registered as MSME Entrepreneur & still categorized as MSME as on EOI issuance date, if any for the last 3 years as on EOI issuance date.	 Certificate of Incorporation issued by Registrar of Companies along with Copies of Memorandum of Association Copies of Articles of Association Shareholding pattern PAN, TAN, GSTIN Certificate and any other tax related document if applicable is required to be submitted along with the eligibility bid. Registration from DIC, KVIB, NSIC, KVIC, DIHH, UAA or any other body specified by Ministry of MSME. 	
2	The bidder should be either Original Solution Developer (OSD) of proposed Solution or their authorized representative in India whose product they are proposing.	An authorization letter from OSD (OSDF) to this effect should be furnished as per Annexure-III. This letter should specify that in case authorized representative is not able to perform obligations as per contract during contract period, the OSD would provide the same.	
3	The bidder should be either Original Equipment Manufacturer (OEM) of proposed Solution or their authorized representative in India whose product they are proposing.	An authorization letter from OEM (MAF) to this effect should be furnished as per Annexure-IX. This letter should specify that in case authorized representative is not able to perform obligations as per contract during contract period, the OSD would provide the same.	

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4	The Bidder should have a minimum annual turnover of Rs. 16 Crores per year during the last three financial years (i.e. 2019-20, 2020-21 & 2021-22).	Copy of audited balance sheet of the financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted. Certificate from Chartered	
5	Bidder should have positive net worth in each of the last three financial years (i.e. 2019-20, 2020-21 & 2021-22)	Accountant stating Turnover, Net worth and Profit/Loss for last three financial years i.e. 2019-20, 2020-21 & 2021-22 should be submitted.	
6	The bidder must have implemented Secret Key Management Solution and successfully under live run the in any one Public sector Bank/Private sector Bank/BFSI/NBFC during last three years as on bid submission date.	Copy of letter from client/ Purchase Order/ Agreement with the client to this effect.	
7	The bidder must have implemented Open API Banking solution and successfully under live run in any one Public sector Bank/Private sector Bank/BFSI/NBFC during last three years as on bid submission date.		
8	Bidder should not have been debarred / black-listed by any Bank or RBI or any other regulatory authority or Financial Institutions in India as on date of EOI submission.	Annexure VI to be submitted.	
9	The service provider should ensure that there are no legal proceedings / inquiries / investigations have been commenced / pending / threatened against service provider by any statutory or regulatory or investigative agencies or any other for which performance under the contract will get adversely affected	on the company's letterhead	

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/ may get affecte Yours faithfully,	<u> </u>	
For	••••••	
Designation:		
(Signature and sec	l of authorized person)	
Bidder's corporate	name:	
Place:	Date:	

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Annexure-VIII

TECHNICAL AND FUNCTIONAL SPECIFICATIONS OF THE APPLICATION

(To be submitted in original on letterhead of OEM & signed by OEM and to be countersigned by the bidder)

Mandatory functional and technical requirements are listed below for evaluation of this EOI. Vendor to indicate compliance against each item as Yes/No.

SI. No.	Mandatory Functional/Technical Requirement	Compliance (Yes/No)
	Architecture	
1.	The proposed solution should be implemented on-premise and should be compatible with Private Cloud, Public Cloud, Hybrid Cloud Infrastructure and solution should support container-based architecture.	
2.	The solution architecture should support 3-way DR setup (DC, DR and Near DR)	
3.	The proposed solution should provide comprehensive platform for API development, execution and monitoring & management	
4.	Add or remove pre-built or custom policies at runtime with minimal or no downtime.	
5.	The proposed solution should have features to create APIs from legacy and modern data sources through automation and business logic application to rapidly expose web services responsible for handling dedicated tasks.	
6.	The proposed solution should have facility to test APIs directly from the web console	
7.	The proposed solution should allow to produce, publish, create, consume, manage and monitor its APIs on a single, centralized portal	
8.	The proposed solution should automatically create interactive documentation from industry-standard WADL/RAML/Swagger files/WSDL and other industry standard web services descriptions.	
9.	The solution should support for consumption of service exposed by any external party and publish APIs in turn to be consumed by internal systems and vice-versa.	
10.	The solution should support publishing/release of APIs with full access control over each API in following categories through approval matrix in proposed solution as per requirement of the Bank. • Private- Internal APIs • Public- Public facing APIs under Open, Protected & Restricted Categories.	
11.	The proposed solution should be able to route data between endpoints and orchestrate the flow of information and business logic across those endpoints	
12.	The solution shall provide service orchestration capability (e.g., aggregation, wiring of multiple services etc.)	
13.	The solution should support a portal content management for ease of on boarding clients.	
14.	The product should provide required IDE, tools, and libraries for service development	
15.	The Solution shall provide HA Cluster support for high availability. Ensure failover and reliability through Active-Active clustering model.	

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16. The Solution shall provide capability to support standard protocols but not limited to SOAP, HTTP/REST, JMS, RPC, SFTP, MQ, WSDL, TCP/IP, AMQP, ODBC, etc. 17. The solution should support all types of application connectors, data Connectors/adapters. 18. The solution should support industry-standard message formats like EDIFACT, ACORD, HLZ, SWIFT, ASI/AS2, Rosetta Net and a various protocols associated with B28 integration 19. The solution should support event broker protocols for access to proprietary, Standard APIs and open protocols or to open-source based platforms. 20. The solution should be able to provide software development kits (SDKs) to allow customers to create additional connectors to less-common or unique endpoints of data and applications. 21. The solution should support different communication mechanisms like Protocol mapping. Request/reply interaction, Publish-and-subscribe interaction, Synchronous messaging interaction, Asynchronous messaging interaction, Event driven interaction, File-driven interaction, etc. 22. The Solution should support 23. The Solution should support 24. Event-based messaging and triggers. 25. Support database integration 26. Support various messaging patterns but not limited to synchronous, 27. Support various messaging patterns but not limited to synchronous. 28. Asynchronous, publish/subscribe, multicast, etc 29. Ille-driven interaction 29. Bank's Centralize Antivirus Integration. 20. Bank's Patch & Inventory Management Solution. 20. Bank's Patch & Inventory Management Solution. 21. Bank's Patch & Inventory Management Solution. 22. The solution should support third party libraries, leverage open source platform capabilities, periode with undernation capabilities, scripting and embedded capabilities, provide visibility into the code of the implemented functions. 22. The product should support Open-API 3.0/3.1 (Swagger) to design APIs and embedded capabilities, provide visibility into the code of the implemented functions. 24. In proposed solutio			
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security of TLS 1.2 onwards		Consumer/Application registration, token generation & token validation for each registered/ authorized consumers as and when required	
30. The solution should be horizontally scalable without any extra cost to the		security of TLS 1.2 onwards	
	30.	The solution should be horizontally scalable without any extra cost to the	

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	Deval	
	Bank	
31.	The solution should have the facility to create custom fields in order to	
	capture additional information about an API application	
32.	The solution should have workflow for life cycle governance of APIs in	
	UAT/Sandbox/Production environments with ability to implement user	
	approval based publishing	
33.	The solution should have capability to maintain different version of same	
0.4	API for migration and other activities.	
34.	The Solution should support Maven, Jenkins etc. for CI/CD (Continuous Integration, Continuous Polivery and Continuous Popleyment)	
25	Integration, Continuous Delivery and Continuous Deployment).	
35.	The Solution should be able to integrate with source code management	
27	tools such as github, svn, TFS etc as per the requirement of Bank.	
36.	Identify fraudulent data injections at the API level	
37.	Support for API virtualization and Mocking.	
38.	Support API Caching	
39.	Support extensions using common languages like Java, Python, PHP,	
	C#, Dot.Net or JavaScript etc.	
40.	Common error handling platform	
41.	Ability for an API to call another managed API endpoint out of the box	
42.	Solution supports monetization mechanism on various business model as	
	Free, External Agency Pays, and External Agency gets paid etc.	
43.	Solution supports Grievance Handling and unified support mechanism	
	through email/chats in order to facilitate usages of API repository to the	
A DI Traff:	third party and receive enhancement requests etc.	
	The solution should support API throttling, gueta and rate limiting for	
44.	The solution should support API throttling, quota and rate limiting for both single node & cluster wide as per Bank requirement	
45.	The solution should have the ability to set quotas and rate limits per	
45.	developer account	
46.	The solution should manage API traffic prioritization	
47.	The solution should have capability to manage API response as per	
47.	requirement	
48.	The proposed solution should include a rich set of metrics(activity logs,	
10.	alerts and notifications, diagnostic logs) through monitoring mechanism	
	like dashboards for API related traffic monitoring	
49.	The proposed solution should support concurrent processing (multiple	
	instances) and dynamic and intelligent routing to backend service	
	instances	
50.	The solution shall provide "Error Handling" - Messages that can't be	
	processed after multiple redelivery attempts, where they can be	
	viewed, corrected if necessary, and reprocessed.	
51.	The solution should provide SLAs to be measured and monitored (such	
	as their number of errors, minimum and maximum response times, and	
	number of processed messages).	
52.	The solution should provide the support mechanism for the Reliable and	
	guaranteed messaging.	
53.	Accommodate unexpected bursts/spikes in API Traffic without	
ADI Sacri	degrading performance of the solution	
54.	rity and Access Control The solution should support both modern security standards including	
54.	OAuth 2.0, JWT, OpenID Connect, PKI, X.509 certificates, LDAP, HTTP	
	basic, digest, SSL client-side/mutual SSL certificate authorization and	
	other industry security	
	1 2	<u> </u>

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	Standards.	
55.	The solution should have the ability to collect information relevant to	
	monitoring Operational state of integration activities.	
56.	Support End-to-end tracking of message delivery.	
57.	Should have facility for the development and administrative environments (via API based, command line interface, etc.) such that administrators, external tools and applications can dynamically modify and control runtime behaviour.	
58.	Provide a console that enables domain-specific display for integration activity streams related to all systems.	
59.	The solution should support various security policies like authentication of API Client, Content Scanning for threats such as SQL Injection, content validation, encryption of sensitive information, automated attack/bot-detection, message level security, signature validation, API Key management, code injection, cross-site request forgery, document structure threats, schema validation, limit message size, digital signature validation, limit time availability, content-type, file size, etc.	
60.	The proposed solution should Pass rigorous vulnerability tests like broken authentication, sensitive data exposure, broke access control, elevation of privilege, cross-site scripting, cross-site request forgery, parameter tampering, man-in-middle attack, denial of service, injection attack, etc. and should be able to integrate with any popular IAM system with support for OAuth 2.0 and RADIUS and should support encryption/decryption (HSM/Public key/other industry standards), IP white listing etc.	
61.	The solution should be able to integrate with STS (Secure Token Server) issuer to provide certificate to on-board new partner when required	
62.	The solution should have the ability to generate an API certificate/key/token	
63.	Configure Single Sign-On (SSO) using SAML 2.0 for easy integration with existing web apps	
64.	The proposed solution should track system for failed authentications and/or violations to identify and analyse patterns and potential threats	
65.	The solution should support JSON configuration-based validation/manipulation: JSON Transformation (to/from XML), JSON Path Execution, JSON Schema validation, JSON document threat protection and other industry standards	
66.	The solution should provide filtering facilities for sensitive/confidential data and take actions accordingly as and when required	
67.	The solution should support content/data validation using XML Schemas, XPath JSON Schemas, JSON Path, regular expressions and string comparisons and other industry standards.	
68.	The solution should support End user notifications over email/SMS etc. The proposed solution should help with effective Governance and control all APIs by supporting branching of API Policies, global API policies, API policy debug tracing, real time API Policy validation, automation, entitlement and enforcement, monetization, depreciation, reuse, tracking, artifacts cataloguing, operational analytics etc.	
69.	The solution should be able to authenticate certifications from partners systems/APIs for ensuring secure data exchange.	
70.	The solution should be able to develop and execute successful API strategies in order to execute, measure and iterate the requirement.	

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71.	The solution should provide Policy configuration which should require no coding of any kind	
72.	The solution should automate API migration across environments along with automatically resolving dependencies	
73.	The solution should support system level monitoring/alerting/auditing/logging	
74.	The solution should be capable of validating DoS (Denial of Service) attack, SQL injection and payload size restriction for JSON/XML and other such threats etc.	
75.	The solution should support integration with Active Directory/LDAP for IAM (Identification and Authentication Management).	
76.	The solution should support robust authentication techniques: Bank to Bank, Bank to Customers, Multi-Factor Authentication, etc.	
77.	The solution should have proper authorization strategies for managing access control s like group based, policy based, attribute based, etc.	
78.	The solution should support SSL/TLS v1.2 and above communication with Strong ciphers which are not deprecated/demonstrated to be insecure/vulnerable	
79.	The solution should support various version and flavours of SOAP, REST, JWT,OAUTH 2.0, WS-Security etc.	
80.	The solution should be resilient and should include mechanisms like stricter access privileges, authorised end-to-end encryption, authentication mechanisms, vulnerability testing, establishing an audit trail, setting expiration time for tokens, IP whitelisting, etc.	
81.	Manage API visibility and restrict access to end-users	
82.	Ability to detect anomalous behaviour in API traffic and generate SMS/Email/ Dashboard Alerts	
83.	Secure channels and secure payloads.	
84.	Provide secure audit trail to record what changes made and their details.	
API Moni	itoring	
85.	The proposed solution should be able to track/monitor API performance as a whole and at each layer/operation separately.	
86.	The proposed solution should have facility for a centralized/comprehensive portal that allows enterprises to engage, on board, educate, and manage internal or external developers, publish APIs for consumption by end users and provide insights into API usage/performance.	
87.	The solution should provide a management console for application management, operational control, diagnostic, auditing and cluster management.	
88.	The platform should provide the support mechanism for the Reliable and guaranteed messaging.	
89.	The solution should support predictive analysis and optimize delivery and value of APIs	
90.	The solution should provide Dashboard for providing various statistics and graphical interfaces with real-time count of success/ failure API wise, service wise, integration-wise, time period wise, user wise, aggregated, etc. for effective monitoring.	
91.	The solution should provide dashboards including but not limited to, uptime, availability, usage, performance, DC & DR Sync (Web, Application & DB), monitoring and maintenance of APIM Solution with drill down facility to reach individual API/Integration Service. Dashboard	

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	should be able to flash Failure of individual API/Integration.	
92.	Generate custom SLA Reports	
93.	Provide performance management data with counters per application type and per API message type	
94.	Ability for exception management reporting	
95.	Mitigate sophisticated bot and malicious client attacks	
96.	Support for third-party client verification	
97.	Support for message logging	
98.	Generate reports on security policies enforced across APIs	
API Repo	, , ,	
99.	The solution should support alert notification over SNMP, email and HTTP Post	
100.	The solution should support generating reports like API throughput report,	
100.	utilization report, and usage report against assigned quota and dashboard for the same	
101.	The solution should have the facility to integrate with existing enterprise	
	reporting system	
102.	The proposed solution should help in building custom-build reports like API usage trend reports, most used APIs, latency report and dashboard	
API Optir		
103.	The solution should support JSON/XML conversions and message compression and other such industry standard conversions and messages	
104.	The proposed solution should support caching for certain API requests to decrease the load on backend server	
Develor	per Portal	
	Provide interactive documentation	
	Customize/Modify the portal without vendor involvement	
107.	Developer key management tool features such addition/deletion/activation/de-activation etc. of keys as per requirement	
	•	
108	Manage own pool of developers and access to the enterprise's APIs	
108. 109.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and	
109.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes	
109.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process	
109.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process Provide granular role-based and developer-based security Have team-based development capabilities such as version control and	
109. 110. 111.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process Provide granular role-based and developer-based security	
109. 110. 111. 112.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process Provide granular role-based and developer-based security Have team-based development capabilities such as version control and collaboration Support for reuse (for example, across developers and projects, identification of redundancies, capability of a common/shared user interface for design and development of integration constructs, and interchangeable use of artifacts for on premises and cloud	
109. 110. 111. 112. 113.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process Provide granular role-based and developer-based security Have team-based development capabilities such as version control and collaboration Support for reuse (for example, across developers and projects, identification of redundancies, capability of a common/shared user interface for design and development of integration constructs, and interchangeable use of artifacts for on premises and cloud environments) Have detailed, high-control UX for integration specialists, including APIs	
110. 111. 112. 113.	The developer portal should have a graphical user interface with Graphical representation of repository objects, data models and multistep processes Provide workflow management for the development process Provide granular role-based and developer-based security Have team-based development capabilities such as version control and collaboration Support for reuse (for example, across developers and projects, identification of redundancies, capability of a common/shared user interface for design and development of integration constructs, and interchangeable use of artifacts for on premises and cloud environments) Have detailed, high-control UX for integration specialists, including APIs and a command line interface (CLI) Have high-productivity-oriented UX for "ad hoc" integrators (such as LOB developers and SaaS administrators) who occasionally need to perform project specific integration tasks, and may also need to use APIs and a	

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	self-service, interoperation with citizen integrator tools, develop			
	rules/algorithm, testing capabilities, change management and control.			
Secret Key Management Solution				
118.	The solution has capability of central maintenance & management of secret keys at separate server/environment.			
119.	Solution is capable to handle/manage symmetric encryption keys.			
120.	Solution is capable to handle/manage asymmetric encryption keys (i.e. Public Private Key pair/Digital Signature Certificate) used by various systems in Bank like HSM, other industry standards etc.			
121.	Solution is able to provide alerts trough SMS/Email w.r.t. expiry of the secret keys/DSC.			
122.	The solution is able to manage key distribution through approval/workflow mechanism as per requirement of Bank.			
123.	Solution have capability to store keys/certificate at separate server/environment			
124.	Solution has capability to integrate with various application/software of the Bank for providing secret keys/certificate.			
125.	Solution has capability to manage key/certificate lifecycle of software keys stored by hardware, appliances, operating systems, Hypervisors, virtual machines, network devices, virtual networks, middleware, web servers, application servers, application software, utility software, system software, active directory and any other technologies.			

Yours faithfully,	
For	
Designation:	
(Signature and seal	of authorized person
Place:	Date:

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Annexure- IX

Manufacturer's Authorization Form (MAF)

То
Deputy General Manager (DIT)
UCO Bank, Head Office-II
Department of Information Technology
5 th Floor, 3&4, DD Block, Sector-I
Salt Lake, Kolkata -700064

We hereby extend our guarantee/ warranty and AMC as per terms and conditions of the EOI No UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023 and the contract for the equipment and services offered for against this EOI No vlagus UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023 By the above-mentioned Bidder, and hereby undertake to perform the obligations as set out in the EOI No UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023 In respect of such equipment and services. We undertake to provide back-to-back support for spares and skill to the bidder for subsequent transmission of the same to the Bank. We also undertake to provide support services during warranty as well as AMC period if the above bidder authorized by us fails to perform in terms of the EOI.

Yours Faithfully

Authorized Signatory

(Name:

Phone No.:

Fax:

E-mail@

EOI REF NO: UCO/DIT/EOI/2509/2022-23 Date: 10.01.2023 Page 56 of 56