

Request for Expression of Interest from market players in providing complete scope of work and tentative cost of the project for building Operational Resiliency Assessment & establishing Enterprise Architecture Governance in the IT environment of the Bank.

Union Bank of India, Department of Information Technology, Adi Shankaracharya Marg, Opp Powai Lake, Powai, Andheri (E), MUMBAI-400072

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1.0 Purpose of the Project

Union Bank of India ("Bank") has seen an exponential growth of customers and digital transactions resulting into expansion of Bank's architecture, subsequently straining the core banking platform and resulting in stability challenges across the digital platforms and assets along with other front-end channel applications (Internet Banking and UPI).

The Bank intends to assess its operation resiliency of the enterprise technology landscape in order to define a stable, scalable, agile and future ready architecture to cater to the ever-changing market demands, need for faster time to market, higher volumes and significantly increased scale of business.

Bank wants to assess the maturity of its technology landscape from operational resiliency focusing on key focus areas on the following components to address top concerns like - Availability, Reliability, Agility, Stability and future readiness.

- Channel apps i.e. Mobile Banking, Internet Banking, UPI & IMPS
- > API management & Middleware Integration
- Payment systems i.e. NEFT, RTGS and SWIFT
- > Core systems CBS (Domestic & International), Non-CBS (Private Cloud Infrastructure)
- Bank's Infra/network and security (Load Balancers, routers, Firewall, HSM, and other network and IT security devices)

The EOI is issued for inviting proposals to bring out the details with respect to scope of services that are deemed necessary for operational resiliency assessment and EA governance and the tentative cost of the project to be undertaken.

The EOI document is neither an offer letter nor a legal contract.

After receiving the details as sought Bank may come up with RFP for selection of service provider in implementing the above project.

2.0 Broad Scope of Work - Enterprise Technology Architecture Assessment

This section summarizes the *indicative* scope of Work (SOW) describing the Enterprise technology architecture assessment that the Bank is seeking from the participants. The Bank is expecting the participants to undertake following activities

- i. Operation resiliency assessment
- ii. Target state recommendations and blueprint
- iii. Technology roadmap for realizing the target state

2.1 Operation Resiliency assessment

Assess Bank's architecture across key focus areas - Digital Assets (UPI, NEFT, RTGS, Mobile and Internet banking), API Management and Middleware, Integrations with Core banking system & Cloud Infrastructure

For the focus areas identified above -

2.1.1 Understand current pain points from business/ IT

- a) Understand pain points from business/IT, their expectations.
- b) Understand the problems/ challenges w.r.t key architecture pillars and future readiness.
- c) Understand and validate key on-going initiatives in these areas from architecture standpoint.
- d) Identify opportunities to simplify technology landscape.
- e) The below are some of the current pain points. As the list is an indicative one and not exhaustive, the consultant is expected to do their own analysis and provide the appropriate recommendations and suggestions after evaluating the existing pain points in UBI's IT ecosystem.
 - a. Bank already has an approved change management process to be followed by all the impacted stakeholders. Sometimes impact due to changes in a system, later, leads to issues in connected ecosystem.
 - b. Execution challenges Application availability and performance issues. Potential issues are observed as part od DC-DR switching form execution standpoint.
 - c. Critical applications have been developed over several years using the best technologies and architecture best practices available at that time and served the purpose. But it is not helping in adopting agility, developing and deploying modules/services independently, and adopting new technologies due to:
 - i. Monolithic Architecture.
 - ii. Tightly coupled modules.
 - d. Standardization of technologies: Critical applications are dependent on proprietary hardware, network infrastructure and technologies proposed by the OEM/ SI many years ago. Dependency on a proprietary

hardware/appliance (vendor lock-in), is a risk in case of inadequate support/ availability of resources in future.

- 2.1.2 Assess the current architecture of the bank Digital Assets (Channel Apps and Payment systems), API Management and Middleware, Integrations with Core systems & Bank's Infra/network and security with respect to agility, responsiveness to changes, scalability.
- 2.1.3 Asses the current infrastructure of the bank- Asses the bank's current IT infrastructure landscape with respect to implementation of technologies like AIML, Micro Service based solutions, Blockchain & Bigdata.
- 2.1.4 Asses the future readiness with respect to modern architecture principles, Current Infra and cloud readiness / deployment for the selected applications by bringing in accelerators/ assets and framework across tracks to assess current state technology improvement opportunities.

2.2 Target state recommendations

The participants will recommend improvement areas and target state architecture interventions (basis the current state gap analysis) in the target state architectures across the focus areas - Digital Assets (UPI, Mobile and Internet banking), API Management and Middleware, Integrations with Core banking system of the Bank. The prescribed target state recommendations must be realizable as a part of the implementation roadmap for the selected applications.

- 2.2.1 Recommend the target state architecture improvements
 - a. Digital platforms Architecture validation, (Channel Apps and Payment systems)
 - b. API Management Platform/Middleware (microservices, API white labeling) architecture and Integrations
- 2.2.2 Recommendations to improve stability, reliability, availability and scalability including the performance metrices.
- 2.2.3 Changes if any to ongoing initiatives from technology architecture perspective
- 2.2.4 Recommend the digital strategy impacting above focus areas.
- 2.2.5 Provide recommendations around business agility, DevOps (Assessment of containerization using Kubernetes etc.) and cloud strategy
- 2.2.6 Bank infrastructure requirement for implementing emerging technologies like Block Chain, Micro Service based Solutions, AIML, Big Data.

2.3 Technology roadmap for realizing the target state

The roadmap should outline the initiatives that the Bank will implement post this assessment. The roadmap will present a prioritization regarding which initiatives will have the biggest impact on the Bank's set objectives for the selected applications.

- 2.3.1 Identify the key technology initiatives to achieve the target state.
- 2.3.2 Identify the synergies and dependencies across the technology initiatives.
- 2.3.3 Prioritize the different initiatives identified across target state outputs based on business impact and ease of implementation Quick wins, mid-term, long term initiatives.
- 2.3.4 Validate/ review the technology roadmap w.r.t bank's overall strategy as part of this program.
- 2.3.5 Planning of technology Roadmap and Infrastructure readiness for next 3-5 years keeping in view of emerging technologies like Block Chain, AIML, Micro Service based Solutions, Big Data and Analytics.

2.4 EA governance and Future readiness initiatives

The participants will make the bank understand every facet of the Enterprise Architecture i.e. structure, practices, evaluation & Governance.

- 2.4.1 EA governance model.
- 2.4.2 EA governance best practices for sustaining the existing architectures & Future readiness.
- 2.4.3 Evaluation of effectiveness of EA practices to the business.
- 2.4.4 Establish the basis for the EA program existence and reflects its purpose within EA team.
- 2.4.5 Determination of the skill sets and design the plan to close the skill gaps for enabling digital business.
- 2.4.6 Infra and cloud readiness / deployment for the selected applications by bringing in accelerators/ assets and framework across tracks to assess current state technology improvement opportunities.
- 2.4.7 Infrastructure readiness for the selected applications for adoption of emerging technologies like AI-ML, Blockchain etc.

As per the understanding of the Bank, the scope of work as enshrined above is only indicative and not exhaustive. Market players are requested to enlarge the scope for better understanding and proper implementation of the project.

3.0 Deliverables

The participants will share the detailed findings, observations, and recommendations based on results of the assessment.

- 3.0.1 Gap analysis/Current state assessment report
- 3.0.2 **EA capability map** w.r.t modern architecture practices and future readiness
- 3.0.3 Target state recommendations basis the gap analysis
- 3.0.4 Identify the key technology initiatives to achieve the target state.
- 3.0.5 Identify the synergies and dependencies across the technology initiatives.
- 3.0.6 Prioritize the different initiatives identified across target state outputs based on business impact and ease of implementation Quick wins, mid-term, long term initiatives.
- 3.0.7 Validate/ review the technology roadmap w.r.t bank's overall strategy as part of this program.
- 3.0.8 Planning of technology Roadmap and Infrastructure readiness for next 3-5 years keeping in view of emerging technologies like Block Chain, AIML, Big Data and Analytics.
- 3.0.9 Estimated cost of the project.
- 3.0.10 Estimated timelines for the project along with the milestones.

Note: As per the understanding of the Bank, the deliverables as enshrined above are only indicative and not exhaustive. Market players are requested to enlarge the deliverables for better understanding and proper implementation of the project.

4.0 General Term & Condition

- 4.0.1 This document is neither an offer letter nor a legal contract.
- 4.0.2 An expert committee constituted by bank will scrutinize the details by prospective service providers.
- 4.0.3 The applicants may be called for a presentation regarding their strengths and business proposals.
- 4.0.4 All incidental expenditure incurred in preparation/ submission or presentation of the EoI shall be borne by the participating consultants.
- 4.0.5 Participation does not guarantee any association with the bank.
- 4.0.6 Post finalization of Scope of work, Deliverables & estimated project cost, bank may float public RFP for inviting proposals from prospective participants to carry out this entire exercise as per the prevailing bank guidelines.
- 4.0.8 Multiple responses / solutions from the respondent will not be considered.
- 4.0.10 The selected participant shall indicate the authorized signatories who can discuss and correspond with the Bank. The participant shall furnish proof of signature identification for above purposes as required by the Bank
- 4.0.11 Bank will communicate only with the prime respondent for all requirements and other related activities.
- 4.0.12 Bank makes no commitments, implied or otherwise, that this document of issuance, the respondent's preparation and submission of a response can result in a business transaction with the respondent or any other participant.
- 4.0.15 The Bank is not responsible for any assumptions or judgments made by the participant for proposing the deliverables.
- 4.0.17 The document is to be submitted with a covering letter enclosing/documents/ information indicated above the declaration, signed by the authorized signatory with the seal of the company. All pages are required to be signed.

5.0 Process

Interested market players may submit their presentation/documents with their details as per Annexure - I to the following address.

> Union Bank of India-DIT Adishankaracharya Marg, Opp Powai Lake, Powai Andheri(E) MUMBAI -400072

6.0 Schedule

The proposed schedule is tabulated below. However, the Bank, at its discretion can change the schedule assigning no specific reasons for the same.

Activity	Scheduled Dates
Reference	04-06-2022
Last Date for receipt of response	24-06-2022

7.0 Contact Details

The contact details for submitting the document / presentation are as follows:

Primary Address:

Shri Suresh Kannan

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Union Bank of India-DIT
Adi Shankaracharya Marg,
Opp Powai Lake, Powai
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Alternate Address:

Naveen Pandey

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Email: naveen.pandey@unionbankofindia.bank

Participants Profile

#	Parameters	Response
1	Name of the Firm/Company	
2	Year of Incorporation in India	
3	Names of the Partners/Directors	
4	Name and Address of the Principal Banker	
5	Addresses of Firm/Company	
	a) Head Office	
	b) Local Office in Mumbai	
6	Authorized Contact person	
	a) Name and Designation	
	b) Telephone number	
	c) E-mail ID.	
8	Site details where the participant has experience in performing the similar exercise.	Name of The Bank:
		Brief Detail of the Work Done:
		Details can be given as annexure.

Yours faithfully,

(Signature of Authorized Signatory) <NAME, TITLE AND ADDRESS>