Expression of Interest (EOI)

To

provide Depository solution

for

India International IFSC Depository Limited,

GIFT City.

Contents

1. Invitation to Vendors

This Expression of interest (EOI) invites proposals from vendors to provide a depository platform solution that is required to conduct Security depository and Bullion depository operations of India International IFSC Depository (IIDI) till Mar-2031.

The partners may propose a Unified depository solution to conduct Security depository & Bullion depository operations as one application solution. The partners may propose two different platforms as Bullion depository and Security depository, if their solution/product doesn't fit bullion and security operations in one Unified application.

The solution may be offered as a customized version of an existing solution or as a bespoke fresh development project.

In either case, vendor must undertake deployments of, maintenance of, enhancements to and extensions to the solution that may be required by IIDI from time to time for a period mentioned in this EOI from the date of award of contract. The deployments may include primary, disaster recovery, staging, UAT and development and additional deployments as may be required. The solution will be deployed on hardware and infrastructure provided by IIDI at IIDI's cost. IIDI would provide required IT infrastructure up to OS layer, Database, Software licenses as required by the partner. The partner needs to manage the Application & DB layer.

In case of a bespoke solution, complete Intellectual Property Rights including source code shall vest with IIDI. In case of a customized solution, at a minimum, IIDI needs to have perpetual "Own-Use" rights for the customized solution as at the end of the contract period, including a copy of the source code to be provided to IIDI strictly for IIDI "Own-Use." Or partner may propose a solution where Source Code would be available as perpetuity with IIDI for lifetime for customization and further development by IIDI.

Vendors are free to propose different commercial models and payment schedules as appropriate. All commercial proposals shall be treated as budgetary and non-binding and shall only be used to help IIDI to evaluate indicative project cost and interested partners. IIDI shall share full functional specifications and requirements, non-functional & performance requirements, and the next 5-year roadmap as Request for Proposal (RFP) to shortlisted vendors to invite firm technical and commercial proposals.

Following is an outline of the business of IIDI and its requirements.

2. Business of IIDI

IIDI is a depository handling securities and bullion depository receipts regulated by IFSCA based out of GIFT City. Its primary function is to serve the needs of the investors, exchanges, clearing corporations, accredited vaults, issuers, Depository participants and banks operating in IFSC as per IFSCA regulations as far as depository operations are concerned.

IIDI operates within the regulatory framework set by IFSCA which may change from time to time and any solution must be capable of adopting to the requisite changes.

IIDI's overall business is similar to various domestic and international depositories.

2.1 Securities Handled by IIDI

IIDI shall handle bullion depository receipts, equity of Indian companies, equity of foreign companies, corporate debt, government of India debt in dematerialized form. There may be a variety of assets/securities that may be introduced in the future to be handled in dematerialised form.

The accredited vaults transactions with respect to bullion depository operations shall also be covered by the proposed solution. The transactions such as follows…

- Physical bullion to BDR (Bullion depository receipt) creation as demat
- BDR trade and settlement in demat form
- Withdrawal process of BDR - remat

2.2 Categories of Participants in the Depository System

Apart from investors, i.e., beneficiaries in depository parlance and entities acting as agents of depository called as Exchanges (security exchange, Bullion exchange) Depository Participants, Bond or Equity issuers, Vaults, Qualified jewellers, refineries, buyer, seller, Clearing Corporations, Clearing Member and Trading Members in exchanges are the other categories that the Depository System caters to.

2.3 Transactions in the Depository System

These are most common types of transactions in the Depository. This is an indicative and not an exhaustive list.

- Demat – dematerialization of underlying assets that adds to security stock, UDR or BDR in the Depository
- Remat – re-materialization of securities that converts the stock of the security, UDR or BDR to its underlying asset.
- Security Corporate Actions – Such a stock split, mergers, bonus share issue, rights issue, IPO, FPO issue etc.
- Financial Transactions – Distribution of dividends, interest and redemption etc.
- Pledge Related – Pledging, re-pledging, de-pledging, pledge invocation etc.

- Lending - Stock lending and borrowing etc.
- Margin – Using stocks / BDR in lieu of cash margins. Thru margin pledge.
- On Market - Pay-in and Pay-out as part of settlements
- Off Market – Off market sale or purchase or account to account transfer
- Transmission – Inheritance, impounding etc.
- Reconciliation
- Vaulting operations – Deposit, BDR creation, Withdrawal, Reconciliation
- RTA services
    - To carry on the activities as registrar to an issue and share transfer agent for the Issuers propose to list in IFSC jurisdiction as per extent applicable regulation.
    - To maintain electronic data of Issuer's shareholder data and provide beneficial owner information to Issuer for statutory and other purposes.
    - To provide beneficial owners information as on record date to Issuer for disbursement of cash and non-cash corporate benefits.
    - Facilitate domestic Issuer RTA to connect to IFSC depository where domestic Issuer direct listing of securities in IFSC jurisdiction. Maintain domestic Issuers shareholding data in IFSC jurisdiction like their domestic RTA.

3. Key Features of The Solution

3.1 Solution Deployment

The solution should be capable of being deployed as four different interfaces –

1) Customer or beneficiary portal
2) Partner Portal for all types of participants except beneficiaries
3) Application Programming Interface for all partners
4) Internal Administration Portal

The interfaces fulfil monitoring, master management, configuration management, data maintenance, business rule management, Role and rights management and administrative actions. All user interfaces shall be browser based. APIs should follow commonly supported protocols. The browser-based interface should use responsive elements and should adopt to different devices.

All the above interfaces may have one or more common or separate back-end components and a centralized RDBMS. The business process and transaction would flow through various interfaces.

3.2 Modules expected

Following additional modules expected in the solution over and above core modules to be developed mentioned in above section.

- Master maintenance module
- Reporting module
- account management module
- Admin & configuration module
- Role based access management
- Audit module

3.3 Workflow Support

The maker-checker type of workflows should be supported in all master and configuration data maintenance and most of the transactions. The checker should be able to approve or rejects the transaction with comments, in case of the transaction rejection, it should go to maker to modify and resubmit the transaction. The Maker & Check should have visibility of respective approved, pending, rejected transactions.

3.4 Participant Interfaces

The depository application would be accessed by various participants (Depository, Depository participants, Clear Corporations, Vaults, Exchanges, customers etc). Respective participants would have their own interface to execute their level of transactions. The participants would have admin module for their respective modules to perform admin tasks like user creations, deletion, password change, role-based access for their module etc.

3.5 Participant modules file upload-download & API Integrations

The respective participant would download or upload files in the pre-defined file formats to execute their level of transactions. They may need to download files from depository system and upload in their system or they need to download files from their system and upload files into depository system. For example, Pay in and Payout transactions, client bulk activities etc.

The manual file upload download activities would be converted to API based integrations gradually as and when required and whenever participant's system readiness.

3.6 SMS & Email Notifications

SMS & Email should be triggered at the time of actual transactions like credit, debit, account open, status change etc. The SMS would contain minimum transaction related information/confirmation. The Email would contain transaction details in form of reports/statements/letter as PDF attachments. SMS & Email gateway would be provided by IIDI, integration would be done by the partner. The respective module user should be able to resend transactional Email/SMS in case the recipient hasn't received it.

3.7 Accounting and Billing

The solution must include a billing, basic accounting and funds ledger module and should be capable of provisioning appropriate interfaces to banks. The billing calculation to be supported basis on type of accounts, type of assets, holding period, type of transactions, split between buyer and seller, etc. The billing details should be exported for or interfaced with accounting software for the invoice creation and posting into the accounting software

3.8 Audit Trails

Extensive use of audit trails and mechanism to inspect the audit trails must be supported. The Audit trails should be searchable, viewable, exportable through front end as and when required.

3.9 Reporting & Data export Features

Reporting features for all categories of participants must be included in the user interfaces provided. Defined Reports or data exports should be available to respective module for download in PDF/Excel/CSV/TXT as per defined file formats. The data would searched be exported basis on respective Search / Selection criteria of respective participants.

4. Non-Functional Requirements

4.1 Scalability

Following table captures the scale expected by Mar-2031. Vendors should keep this in mind while proposing their solution and defining architecture.

	FY 31 - PY
No of Issuers & Securities	10,000
No Participants	100
No Accounts	3,00,000
No Concurrent users	400
No of Security depository transactions (Daily transactions, Demat, Remat, Corporate Actions, Account transfers)	10,00,00,000 (peak would be 75000 per hour)
No of Bullion transactions (BDR Creation, Payin, Payout, Withdrawal)	2,00,00,000 (peak would be 10,000 per hour)

4.2 Performance Criteria

All on-line operations should have a response time of under 2 seconds for 90 % of the transactions. 2 seconds is from web browser side response perspective and not from server side. Vendors must suggest and/or provide appropriate tools / logs for performance monitoring on an ongoing basis.

Vendors must support load-testing twice a year after initial deployment.

The proposed architecture should support performance enhancement and increase number of transactions by configuration parameters, increase servers and resources horizontally and by adding web/app/database layers vertically.

Partner to define and propose their strategy/ways to handle scalability at DB level basis on proposed solution, to increase performance and support scale of respective modules in the future. For example, support increasing transactions, reporting requirements, etc. Partners should keep this in mind while proposing their solution and defining architecture.

4.3 System Availability and support mechanism

System uptime should be 99.999 %. RPO is 10 minutes and RTO is 30 minutes. Primary infrastructure redundancy is expected to be maintained by IIDI. Partner to propose, manage & support application and database high availability, redundancy, load balancing, Database replication and application replication mechanism.

Partner to propose application & DB support mechanism and SLAs basis on production/non-production issues and issue levels.

4.4 Version management & Change deployment

The partner needs to consider a mechanism for version management and change deployments in UAT / QA / Staging / Production environments. The change deployments should be modular enough to perform changes with respect to specific modules/section of the modules. The rollback should bring the change module/section to previous version quickly.

The software/tool for version management and change deployment should be proposed by partner and managed by the partner. IIDI will procure the required licenses as proposed by the partner.

4.5 Post deployment – Customization, Enhancement and new features development

The partner to propose onsite Team, mechanism and modalities for post deployment application customizations, enhancements and new features development. Partner to showcase their capabilities & ecosystem to fulfil higher development efforts in short timeframe.

There would be minor / emergency customizations to support unforeseen transactional scenarios. The onsite team should be able to support such emergency changes / customizations to facilitate operations on priority.

4.6 Security Standards

The Vendors should note that IIDI may have to comply with various security standards and frameworks prescribed by the regulator from time to time including the following but not limited to.

- Secure coding guidelines and standards
- secure software development lifecycle (SSDLC).
- OWASP
- NIST
- Center for Internet Security (CIS)
- PCI-DSS / PA-DSS
- CIC 2005 / CICR 2006
- ISO 27001/ 27005 / 27017
- MITRE

The partner needs to take above standards and framework requirements in to the consideration for application development architecture, framework, coding, change management and application management.

The partners must actively support IIDI in the application and source code audits & compliance fulfilment with these standards and also fix any non-compliance areas to the satisfaction of the auditors, compliance and regulatory requirements. Partner proposal submission structure

5. Partner proposal submission structure

5.1 Credentials Section

- Description of the similar domain solutions (up to 3 projects) implemented and number of years in operation
- Description of comparable size or larger projects (up to 3 projects) with project timelines and average team size during development and maintenance phases of the project.
- Size of the vendor in terms of IT Employees
- Average turnover and profit in the last 3 financial years
- Domain Knowledge – Partners need to showcase how they will bring in MII and specifically depository domain knowledge into the project for better understanding, development and delivery of the project.

5.2 Technical Section

- Proposed application solution's full technology stack, with architecture and other technical details
- Number of projects using similar stack – up to 3 projects with project timelines, average team size during development and maintenance phase of the project
- Approximate timeline to Go-Live, in weeks, for bespoke development or customizations after signing the contract.
- Approximate total team size and team details, till Go-Live, to be deployed for bespoke development or customizations after signing the contract.
- Proposed model for customization and additional development after go-live. Mention calculated hours/days/manpower also. Show case model to support dynamic need of the development/customizations in term of quantity of the work.
- Suggestions / Concerns with any of the Functional / Non-Functional Requirements outlined above.
- An explanation of why the proposed solution is appropriate.
- Additional offering surrounding to depository platform, can be offered by you for future enhancements.
- An explanation why IIDI to choose you as partner for this project.
- Proposed application hosting architecture, expected Bill of material for IT infrastructure requirements (# of Servers/VM with resources, OS, DB, technology licences, etc)

5.3 Submission Methodology

- Partner to prepare a table of respective submission points and mention respective responses as annexure
- Partner to furnish detailed proposal and submit response against respective points mentioned above.
- Partner may submit additional information documents as additional points.
- Partner to prepare & submit a presentation as well of their overall submission. The presentation doesn't omit the requirement of detailed submission as mentioned above.
- The queries & proposals to be submitted to EOIsubmission@iidi.co.in

5.4 Queries submission & clarifications

The partners to raise their queries in written by filling attached queries submission form (Annexure-A). The queries to be submitted within 15 days from the date of the release of this EOI.

The extension of the query submission would be sole discretion of IIDI.

IIDI will revert the respective partner's queries in written to their queries submission form within next 15 days of the last query submission date. IIDI may upload the generic clarifications basis on the queries received at IIDI website if required. In lieu of the written response or website upload, IIDI may conduct a webinar to clarify all the written queries received.

5.5 Commercial Section

An indicative pricing / cost is mandatory. Responses without indicative pricing / cost will not be considered for further processing. Vendors are, however, free to suggest an alternative commercial model.

Item	Cost / Price in Lakhs of Rupees
Initial Product Licensing Cost if any for application (Excluding DB, OS, Infra, OEM Software licenses) -	
Cost till Go-Live for bespoke development / customizations	
Cost per year for basic solution maintenance during contract period	
Cost per year for additional customizations and modifications and extensions and enhancements during contract period (mention calculated hours/days/manpower also in line with proposed model above)	
Cost of "Own-Use," "Perpetual" license with source code at the end of contract period* if any *	
*In case vendor does not want to grant a "Perpetual", "Own-Use" license, indicative cost of migration to a third-party depository system should be indicated	
Approximate Up-front Cost of Middleware, DBMS, Development Tools including any licensing fees etc.	
Approximate Annual Cost of Middleware, DBMS, Development Tools including any licensing fees etc.	
Any other cost which partner foresee.	

6. Submission date

The last date of the submission would be 45 days from the date of EOI uploaded on the website or 15 days from the queries response provided to the partner / uploaded on the website or webinar conducted whichever is later.

The extension of the proposal submission date would be sole discretion of IIDI.

7. Proposal Evaluation and way forward

- IIDI will go through the partner proposal submissions and check if all required details have been submitted.
- In case any documents not submitted, or the proposal is not in line with the IIDI requirements, IIDI may reject the proposal.
- IIDI will communicate with the eligible / shortlisted partners to present their solutions to IIDI officials, explain the solution in detail, clarify the queries.
- IIDI will share RFP (Request for Proposal) to get the firm commercials with the shortlisted partners whose proposed solution and modalities suits IIDI Business operations. The RFP document will be shared with precise functional requirements and modalities.

8. Annexure

- Annexure – A - Query submission form

IIDI - EOI (Expression of Interest)					Date -
Sr. No.	**Main Clause #**	**Sub clause #**	**Text of the sub clause**	**Detailed Query**	**Remarks if any**