

IIDI Response to EOI Queries received by various partners						Date: 24-Sept-2024
Sr. No.	Main Clause #	Sub clause #	Text of the sub clause	Detailed Query	Remarks if any	IIDI Response
1	2. Business of IIDI	2.3	Transactions in the Depository System	Can you clarify on the process related to Transmission – Inheritance, impounding etc.		Detailed process will be shared at the RFP stage.
2	2. Business of IIDI	2.3	Transactions in the Depository System	In case of Corporate Actions distribution, Will IIDI need to get the Announcement information from various data vendors or is it always the Issuer who will provide the market information and send the messages to the downstream participants like Custodians.		Issuer will provide and update IIDI Platform
3	3. Key Features of The Solution	3.1	Solution Deployment	Will business rules vary significantly across interfaces, or should they be standardized across all portals and the API?		They would be consistent across interfaces
4	3. Key Features of The Solution	3.1	Solution Deployment	Are there specific preferences for the RDBMS technology (e.g., MySQL, PostgreSQL)?		No specific preference, However Cost effective RDBMS technology which can fulfill technological requirements would be ideal.
5	3. Key Features of The Solution	3.3	Workflow Support	Which specific transactions or master/configuration data maintenance types are to be included in the maker-checker process?		Assume all.
6	3. Key Features of The Solution	3.4	Participant Interfaces	Kindly provide a comprehensive list of all the participant and the respective modules they would access in a depository application?		Most of the list covered in EoI
7	3. Key Features of The Solution	3.5	Participant modules file upload-download & API Integrations	What are the predefined file formats required for upload/download?		Exact formats may be shared at the time of development.
8	3. Key Features of The Solution	3.5	Participant modules file upload-download & API Integrations	Kindly provide the list of transactions would require file uploads/downloads other than Pay in, Payout, client bulk activities?		As of now BDR Creation, Pay-in, Pay-out, Corporate Action, Account opening, client maintenance. Post go live will add more transactions.
9	3. Key Features of The Solution	3.5	Participant modules file upload-download & API Integrations	What does "participant's system readiness" entail? Do you expect any specific criteria for this?		API will be developed later. As of now, file exchange will be handled.
10	3. Key Features of The Solution	3.6	SMS & Email Notifications	What are the technical specifications and APIs provided by the IIDI SMS & Email gateway?		It will be standard Gateways and will be specified later. Assume ground-up development of this. Gateway provider will provide API/configurations which needs to consume to send SMS/Email.
11	3. Key Features of The Solution	3.7	Accounting and Billing	What key functionalities are expected from the billing, basic accounting and funds ledger module ?		Bill computation, Bill Generation/Export, Bill supporting statements, ledgers in terms of receivables. No P&L or B/S or other accounting functionalities

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12	3. Key Features of The Solution	3.7	Accounting and Billing	What type of interfaces need to be provisioned with banks? Are there any specific protocols or standards.		Yes. Two types, file based and API based. Depends on each bank. Ground up development can be assumed.
13	3. Key Features of The Solution	3.7	Accounting and Billing	Can you elaborate on the different types of accounts, assets, and transactions that need to be considered for billing calculations?		Transactions, value and volume based billing. Examples are Account maintenance, vaulting data etc.
14	3. Key Features of The Solution	3.8	Audit Trails	What specific actions or events should the audit trail capture? Who should have access to view, search, and export the audit trails?		Creation, modification, approval, rejection. Access should be role based and will be defined as data.
15	4. Non-Functional Requirements	4.1	Scalability	Kindly provide the actual current volumes to get a clearer understanding to propose solution & appropriate hardware sizing?		The expected volume has been shared. Current volumes are negligible because this is a new line of business.
16	4. Non-Functional Requirements	4.1	Scalability	Please provide the year-on-year projection of volume growth till 2031 to assess scalability in the below cells		Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume
17	4. Non-Functional Requirements	4.1	Scalability	Please provide the typical transaction volumes for each type of security and bullion depository activity.		Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume
18	4. Non-Functional Requirements	4.1	Scalability	Please confirm the duration for which you require the hardware sizing estimates? Our standard practice is to provide estimates for a 5-year period. Following this, the hardware sizing will be adjusted according to the volumes at that point.		Need to consider provided volume in scalability and sizing from day1. The projections are for 5 years anyway
19	4. Non-Functional Requirements	4.2	Performance criteria	We understand that all online operations should have a response time of under 2 seconds for 90 % of the transactions. However we would also like to understand the Performance requirements (TPS) for the message layer.		90 percentile @ 2sec could be taken to mean 90% under 2 seconds. No separate criteria for messaging layer defined.
20	5.Partner proposal submission structure	5.2	Project Plan	Any considerations to be taken for Project planning - Can both Bullion and Security depository be launched together in the new platform or it needs to be phased out. What is the typical duration envisaged for UAT and Market testing that needs to be considered in the planning		Preferably to be launched together
21	5. Partner proposal submission structure	5.2	Technical Section	What additional offerings surrounding to depository platform, IIDI is expecting to enhance in the future?		Cant be specified at this time. You can show case capabilities you have.

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22	5. Partner proposal submission structure	5.5	Commercial Section	Please clarify what the "cost per year for additional customizations, modifications, extensions, and enhancements during the contract period" means ?		It covers all potential costs on an ongoing basis annually based on the team size and composition dedicated to the project. Vendor has to specify the model and methodology.
23	5. Partner proposal submission structure	5.5	Commercial Section	Please clarify in detail what the following commercial section line item entails - (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)		Own-use licenses means IIDI can not sell this onward to anyone else but does not have to go back to software vendor in future for use, modifications, enhancements or extensions.
24	4. Non-Functional Requirements			We understand that IIDI will be required to integrate with exchanges (for Bullion and Securities), Clearing Corporation, banks, nominated agencies, recognized custodians, vault management system, brokers, refineries, accounting software, customers etc.. However, we wish to know very clearly that what are the list of systems specifically to be integrated with securities depository and what are the list of systems to be specifically integrated with Bullion depository? Kindly provide us with two separate list having the list of external systems to be integrated with!		No API based active integration in phase1. Only file exchanges and UI.
25	4. Non-Functional Requirements			What are the protocols to be supported while integrating with external systems.		File transfer now, Rest APIs as and when required
26	4. Non-Functional Requirements			Kindly let us know the 1. file formats through which IIDI will be communicating to other systems like ISO/FIX/ Proprietary messages etc.. 2. the channels like Kafka, SOAP, MQ etc..		Encrypted file transfers with other systems. File formats would standards defined by SEBI / IFSCA. Cost effective channels to fulfill system needs to be proposed.
27	4. Non-Functional Requirements			We wish to know if IIDI has any Blockchain requirements so as to get connected to Blockchain network and perform transactions.		No

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28	4. Non-Functional Requirements			We would like to understand IIDI's preferred deployment model: On-Premises or Cloud. •TCS has successfully deployed solutions on cloud platforms, such as AWS and GCP, providing scalability and efficiency. Additionally, we recommend considering YOTTO Cloud, based out of GIFT City, as it offers a cost-effective, seamless implementation that can be easily upgraded as your volumes increases. We would value your thoughts on this potential solution		Preference is to cloud but it is not feasible as of now. Currently Co-located set-up as private cloud to be considered.
29	2	2.3	Point 6- Lending - Stock lending and borrowing etc.	What is expected in Stock lending and borrowing to be done at the depository level?		Tracking of lent and borrowed securities. Will be post Go-Live
30	2	2.3	Point 8- On Market - Pay-in and Pay-out as part of settlements	What is expected to be done by the depository? The settlement obligation received in the clearing account can be shared to the clearing corporation. On the basis of the same, the clearing corporation shall give the instruction of Debit and Credit to be made on the basis of obligation.		The security / BDR pay-in and security / BDR pay-out to be handled by IIDI
31	2	2.3	Point 11- Reconciliation	What reconciliation are we needing? As we are the depository.		Securities / BDR reconciliation
32	2	2.3	Point 12- Vaulting operations – Deposit, BDR creation, Withdrawal, Reconciliation	A. System is capable of inward and outward of GOLD Bars B. Reconciliation of physical gold bar against the system quantity C. Need more details on BDR Creation		Expected transactions by Vaulting operations is included in EOI. More detailed flows to be provided at RFP stage. There would be different bullion types like Gold Bars, Silver bars, Silver grains etc.
33	2	2.3	Point 13 a- 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.	What is expected in the RNTA service		IIDI itself may act as RTA for some instruments. Full fledged RTA services to issuers.
34	2	2.3	Point 13 b-RTA services- To maintain electronic data of Issuer's shareholder data and provide beneficial owner information to Issuer for statutory and other purposes.	What is expected in the RNTA service		IIDI itself may act as RTA for some instruments. Full fledged RTA services to issuers.

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35	2	2.3	Point 13 c-RTA services- To provide beneficial owners information as on record date to Issuer for disbursement of cash and non-cash corporate benefits.	What is expected in the RNTA service		IIDI itself may act as RTA for some instruments. Full fledged RTA services to issuers.
36	2	2.3	Point 13 d-RTA services- 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.	What is expected in the RNTA service		IIDI itself may act as RTA for some instruments. Full fledged RTA services to issuers.
37	1	-	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.	Please share the detailed BRD of the proposed solution		Detailed BRD Will be shared with shortlisted partner at the RFP stage
38	3	3.7	Accounting and Billing	Which entities will be interfaced with in this module?		IIDI Internal Accounting system and Banks. In Phase1 through file exchange.
39	3	3.7	Accounting and Billing	To which entities will IIDI Bill?		DPs, Benefeciries CMs, Issuers
40	4	4.2	Performance Criteria	Are you ok if we propose to use private cloud or cloud service providers?		Preference is to cloud but it is not feasible as of now. Currently Co-located set-up as private cloud to be considered.
41	-	-	General	Does the vendor needs to be an registered entity with GIFT City?		No
42			Solution Architecture and Scope	Does IIDI have a preferred technology stack (e.g., database, middleware, development framework) for this depository solution, or are vendors free to propose their own stack?		Vendors may propose and justify the proposed stack. Cost effectiveness and technology life for long term needs to be considered.
43			Regulatory and Compliance Framework	Apart from IFSCA regulations, what additional global or local regulatory frameworks must the solution comply with, and how frequently do you anticipate regulatory changes that the system should accommodate?		Minimum once a quarter changes can be expected. Golbal standards shall be in terms of system and cyber security.

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44			Regulatory and Compliance Framework	How does IIDI plan to handle data privacy and security compliance (e.g., GDPR, SEBI standards)? Are there specific guidelines or frameworks IIDI expects vendors to adhere to beyond those mentioned in the EOI?		Yes. Few frameworks have been mentioned in the EOI. If additional compliances are required, they will be taken up as bespoke development post Go-Live
45			Scalability and Performance	What are the specific performance benchmarks IIDI expects during peak transaction volumes (e.g., 75,000 security transactions per hour, 10,000 bullion transactions per hour)? Will there be load testing requirements during and after deployment?		Already specified in the EOI
46			Scalability and Performance	Does IIDI anticipate any significant growth in data volume or participant numbers before 2031 that vendors should account for beyond the figures mentioned in the EOI (e.g., 10,000 issuers, 3,00,000 accounts)?		Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume.
47			Integration with External Systems	Could IIDI provide further clarification on how external participant systems (e.g., clearing corporations, vaults, exchanges) are expected to integrate with the depository solution? Is there a specific API standard or protocol that these systems should follow?		Encrypted file transfers with other systems. File formats would standards defined by SEBI / IFSCA. APIs would be post go live.
48			Integration with External Systems	Will the system need to integrate with any existing legacy systems at IIDI or other participants, and if so, what level of backward compatibility is required?		With accounting system on file export/import basis
49			Security and Data Management	Regarding data encryption and security, will IIDI provide any specific guidelines or policies for managing encryption keys, or is this to be managed by the vendor? How will IIDI handle data residency and sovereignty requirements?		Keys shall be managed by IIDI
50			Security and Data Management	Could IIDI clarify the expectations around audit trail requirements? Should the solution support real-time, immutable audit logs that are searchable and exportable for regulatory audits?		Yes
51			Disaster Recovery and Uptime	IIDI mentions a required system uptime of 99.999% with specific RTO and RPO targets. Can IIDI clarify the infrastructure redundancy it will provide, and what is expected of the vendor in terms of disaster recovery architecture?		Vendor to suggest infra requirement to support this. Infra cost on IIDI.
52			Disaster Recovery and Uptime	Are there any specific geographic redundancy requirements to ensure business continuity in case of regional failures (e.g., DR locations in separate seismic zones)?		Yes. GIFT City and Navi Mumbai locations have been identified.

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53			Customizations and Enhancements	How frequently does IID expect post-deployment customizations and enhancements? Will there be a formalized change request process, and how does IID prioritize such requests?		Yes. Change control will be formalized. Releases (apart from bug fixes) could be expected monthly initially and later quarterly.
54			Customizations and Enhancements	Could IID provide more context on the nature of emergency customizations? Are these typically related to regulatory changes, participant requests, or operational issues?		Emergencies are due to operations issue, few regulatory changes and deadlines those that can't be anticipate and may be for any other reason.
55			Bullion / Security Logic and Business Rules	Could IID provide more specific details on the expected business rule management requirements for the Bullion / Security Depository? How complex are the rules expected to be (e.g., multi-condition settlements, automated corporate actions)?		Both examples are appropriate. Effort should be to build business rules as configurable data & parameters.
56			Bullion / Security Logic and Business Rules	Should vendors expect to develop a custom rule engine, or will IID provide guidelines or existing rule sets for Bullion operations?		Rule engine is probably not required but may make the assessment at RFP stage
57			Participant Interfaces and User Management	Could IID provide more clarity on how participant interfaces (e.g., for depository participants, vaults, exchanges, clearing corporations) will differ in terms of access, functionality, and security? Are there specific role-based access control (RBAC) policies that IID expects the vendor to follow?		RBAC - yes. The interfaces are separate but in terms of nature and type, similar.
58			Participant Interfaces and User Management	Will IID require any custom dashboards or analytics tools for different participant types (e.g., real-time settlement status, transaction summaries), and what level of customization should vendors account for?		Custom dashboards -yes. Analytics tools - No
59			Post-Deployment Support and SLAs	IIDI mentions SLAs for production and non-production issues. Could IID provide more details on the service levels, response times, and resolution times expected for different levels of incidents?		Will be done at RFP stage. Vendor to think of support / customization model and propose.
60			Data Reporting and Export Features	Could IID elaborate on the requirements for reporting and data export features? Will IID provide a set of predefined reports, or should the system allow for custom report generation by different participants?		All predefined reports. Custom report generator functionality not expected
61			Data Reporting and Export Features	Are there specific data formats (e.g., CSV, Excel, PDF) that IID requires for export, and should the system support bulk exports of transaction data for regulatory or auditing purposes?		CSV, TXT, Excel and PDF for sure

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62			Version Management and Upgrades	Could IIDDI clarify its expectations for version management and change deployment across UAT, staging, and production environments? Does IIDDI prefer modular upgrades, and how should the vendor handle rollback procedures in case of deployment issues?		Version management & Change deployment across UAT, staging and production environments. Modular upgrades/change deployment to be considered to keep minimum downtime and impact to whole system. In case of issues, rollbacks has to happen. Vendor to propose the model & tools.
63			Version Management and Upgrades	Will IIDDI handle software tool procurement for version management and change deployment, or is the vendor expected to propose and manage these tools?		IIDI will procure a suitable tool. Mostly open source.
64			Billing and Accounting Module	Could IIDDI provide further details on the complexity of the billing and accounting module? Specifically, how should vendors account for different billing scenarios (e.g., based on transaction types, asset classes, holding periods) and interfaces with external accounting systems?		Billing could be complex. Txn, Account Maintenance, Volume, time and Value based. Only data export required for upload to external accounting system.
65			Billing and Accounting Module	Will IIDDI provide integration details for banking interfaces related to funds ledger management, or should vendors propose standard integration solutions?		Integration to get data through exchange. API would be after go live, vendor may propose standard integration solutions.
66			Security Standards and Compliance Audits	How frequently does IIDDI plan to conduct security audits and compliance reviews (e.g., PCI-DSS, ISO 27001)? Will vendors be expected to participate in these audits, and what is the process for addressing any non-compliance identified during audits?		Expect twice a year. Partner is expected to close open observations at the application and database side.
67			Cost Structure and Licensing Models	What level of source code and documentation is IIDDI expecting from vendors at the end of the contract period?		Complete source code except third party libraries and tools. All that the vendor team has written. And associated documentations.
68	1	1.2	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.	Proposing separate platforms for Bullion and Security depository operations, will there be a required integration layer between these two platforms? If yes, what specific data or transactions must be shared between the two systems?	This affects how the two systems interact and the level of effort needed for integration.	Yes. Some users and participants may be common

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69	1	1.4	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.	Please clarify whether IIDDI will provide the Database software and licenses, or if the partner is expected to provide them. What are the expectations for integration with third-party services, especially for payment processing or clearing services?	Clarity needed on responsibilities for database software licensing. Clarifying the scope of third-party integrations will help in defining the integration architecture.	Hardware, OS, DBMS Costs shall be borne by IIDDI. Partner to propose cost effective technology. Third party integrations would be based on file exchange which is open ended at this stage. RFP Stage will get you precise file exchange requirements. API integrations would be after go live.	
70	1	1.4	The partner needs to manage the Application & DB layer.	Can you specify the scope of responsibilities for managing the application layer? What are the expectations for integration with third-party services, especially for payment processing or clearing services?	Clarifying the scope of application layer and third-party integrations will help in defining the architecture including integrations.	Application Layer is to be fully managed by Vendor including third party integrations.	
71	1	1.4	The partner needs to manage the Application & DB layer.	Can you specify the scope of responsibilities for managing the database layer? Does this include database administration tasks, performance tuning, backups, and disaster recovery, or is it limited to basic operational maintenance?	Clarity on the scope of database management will impact the staffing and support structure.	DB Layer, performance monitoring, tuning shall be the responsibility of Vendor.	
72	1	1.5	In case of a customized solution, at a minimum, IIDDI 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 IIDDI strictly for IIDDI 'Own-Use.' Or partner may propose a solution where Source Code would be available as perpetuity with IIDDI for lifetime for customization and further development by IIDDI.	Does IIDDI have a preference between receiving source code for 'Own-Use' at the end of the contract period or having perpetual access for lifetime customization?	Understanding IIDDI's expectations regarding source code rights will help in proposing an appropriate licensing model.	IIDI needs control of source code because the vendor may be changes after first term of the contract.	

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73	2	2.1	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.	How does IIDI plan to handle multi-currency operations in the depository system? Will this require additional modules or customizations?	Understanding multi-currency handling will impact both functional and technical design efforts.	There will be base currency for transactions, and may be another base currency for billing. A single transaction will not involve multiple currencies but only conversion from and to base currency
74	2	2.1	There may be a variety of assets/securities that may be introduced in the future to be handled in dematerialised form.	Can IIDI provide examples of potential future assets/securities to ensure the solution is designed to accommodate them?	Understanding future asset classes will help in building a flexible and scalable solution and also will help in accurately estimating development efforts..	As of now for Bullion (Gold/Silver) Bars & grains, Securities (Stock, AIF, etc). A more comprehensive list shall be provided at RFP stage.
75	2	2.3	These are most common types of transactions in the Depository. This is an indicative and not an exhaustive list.	Could IIDI provide a more comprehensive list of transactions that the solution should support?	Ensuring all required transaction types are considered during solution design and also will help in accurately estimating development efforts.	Standard transaction types needed as Phase1 provided in EOI. A more comprehensive process flow shall be provided at RFP stage.
76	2	2.3	Vaulting operations – Deposit, BDR creation, Withdrawal, Reconciliation	Can you provide more functional details on how the system should handle the reconciliation between the physical vault and the electronic BDRs in real-time? Is there a specific reconciliation frequency expected?	Clarification here will help in designing the bullion vault reconciliation module and also will help in accurately estimating development efforts..	Standard Vaulting operations and transactions provided in EOI. A more comprehensive process flow shall be provided at RFP stage.

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77	2	2.3 (RTA services)	RTA services o 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. o To maintain electronic data of Issuer’s shareholder data and provide beneficial owner information to Issuer for statutory and other purposes. o To provide beneficial owners information as on record date to Issuer for disbursement of cash and non-cash corporate benefits. o 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.	Could IIDI elaborate on the specific functionalities required for the RTA services module? Is full-fledged RTA capability expected, and what level of integration with domestic Issuer RTAs is required?	Clarity on the scope of RTA services will help in accurately estimating development efforts.	IIDI itself may act as RTA for some instruments. Full fledged RTA services to issuers.
78	3	3.1	APIs should follow commonly supported protocols.	Does IIDI have a preferred API protocol or standard (e.g., REST, SOAP, GraphQL) for the Application Programming Interface?	This will help in designing compatible and efficient APIs for partner integration.	REST is the preference but other APIs may be required if partners support only those. API would be Post Go_live. File exchange would required during phase1.
79	3	3.1	The browser-based interface should use responsive elements and should adopt to different devices.	Are there specific devices, screen resolutions, or operating systems that must be supported?	Clarification on device support will guide UI/UX design.	1920×1080, 1366×768, 1280×1024, 1440×900, 1600×900, 1680×1050, 1280×800, 1024×768

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80	3	3.1	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.	Could IIDI provide more details on the specific functionalities required under each of these areas?	Understanding the depth of required functionalities will aid in accurate scoping.	At this stage rough scoping is adequate. AT RFP stage detailed specs shall be available	
81	3	3.1	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.	Does IIDI expect multi-language support for any of the user interfaces? If so, which languages are required?	Clarifying language support will influence the UI design and scope of localization efforts.	English only at present	
82	3	3.3	The maker-checker type of workflows should be supported in all master and configuration data maintenance and most of the transactions.	For transaction-based workflows (e.g., demat, remat, pledging), are there any specific timeframes within which the checker must approve or reject a transaction? Should there be an automatic escalation if no action is taken within the time limit?	This impacts the design of workflow engines and SLA management.	No time-frames as part of workflow definition but as business rules validation possible	

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83	3	3.4	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.	Can you provide a list of all specific participant types (e.g., Clearing Corporations, Vaults, Qualified Jewellers) and the transactions they will need to perform in the system? What specific operations or admin tasks should each participant handle in the portal?	Detailed understanding of participant-level functionalities will aid in accurate scoping and also will help in accurately estimating development efforts.	Functionalities are common. Implemented along with role based access control
84	3	3.4	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.	Are there any data encryption requirements for data transferred between the depository and external participants (e.g., banks, vaults)?	Understanding encryption requirements will be critical for designing secure data flows.	HTTPS as per latest standards, data encryption in storage as supported by DBMS. File exchange to be encrypted
85	3	3.5	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.	Could IIDI provide the specifications or formats of these pre-defined files? Is there an existing standard to be followed?	File format details are necessary for designing import/export functionalities.	Encrypted file transfers with other systems. File formats would standards defined by SEBI / IFSCA.

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86	3	3.5	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.	Is there a maximum file size limitation for uploads and downloads, and how should the system handle large file transfers?	Clarification on file size will help in planning infrastructure and system capabilities.	Each file will have single digit MB limitation excpet for image uploads for attached documents
87	3	3.6	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.	Will there be specific templates for different types of transactions for SMS and Email notifications? Should the system allow for customizable content within these templates based on the transaction type?	Customizable templates for notifications can affect how the communication module is designed and will aslo help is accurately estimating development efforts.	Yes, templates shall be pre-defined
88	3	3.5	The manual file upload download activities would be converted to API based integrations gradually as and when required and whenever participant’s system readiness.	Should the solution support both file-based and API-based integrations from the start? Is there a phased plan for this transition?	Understanding the integration roadmap will help in planning development efforts.	As of now file exchange only. API would be post golive as required.
89	3	3.7	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	What are the expectations for handling multi-currency billing, particularly in the case of international participants in the system?	Understanding multi-currency billing requirements will influence the design of the billing system.	Billing would be in one base currency.

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90	3	3.7	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	Will there be a need to integrate this system with external financial systems or ERP systems for handling invoicing and payments?	ERP integration requirements will help in understanding integration needs and efforts.	No ERP integration required. Bill and payment and receipts data export / import is sufficient
91	3	3.8	The Audit trails should be searchable, viewable, exportable through front end as and when required.	Are there specific compliance standards or data retention policies that need to be adhered to?	Knowing compliance requirements will help in designing the audit module appropriately and also will help in accurately estimating development efforts.	Audit trails to be as detailed as feasible.
92	3	3.8	Extensive use of audit trails and mechanism to inspect the audit trails must be supported.	Should the audit trail module allow for role-based access to logs (e.g., compliance officers can access all logs, while general users have limited access)?	Detailed audit access controls will influence the development of the audit module and subsequently the efforts.	Role based access like in all other cases
93	3	3.9	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.	Could IIDI provide a list of required reports or reporting templates to be included in the solution?	Detailed reporting requirements are necessary for accurate estimation.	All predefined reports. CSV, TXT, Excel and PDF for sure.

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94	4	4.1	Following table captures the scale expected by Mar-2031. Vendors should keep this in mind while proposing their solution and defining architecture: <table><tr><td>No of Issuers & Securities</td><td>10,000</td></tr><tr><td>No Participants</td><td>100</td></tr><tr><td>No Accounts</td><td>3,00,000</td></tr><tr><td>No Concurrent users</td><td>400</td></tr><tr><td>No of Security depository transactions (Daily transactions, Demat, Remat, Corporate Actions, Account transfers)</td><td>10,00,00,000 (peak would be 75000 per hour)</td></tr><tr><td>No of Bullion transactions (BDR Creation, Payin, Payout, Withdrawal)</td><td>2,00,00,000 (peak would be 10,000 per hour)</td></tr></table>	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)	Could IIDI provide the initial expected volumes at the start of the project to plan scalability over time?	Knowing the initial load helps in planning the system architecture appropriately.	Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume
No of Issuers & Securities	10,000																	
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95	4	4.1	Following table captures the scale expected by Mar-2031. Vendors should keep this in mind while proposing their solution and defining architecture: 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)	Is there a preferred number of users that the system must be able to handle concurrently across each type of interface (Customer Portal, Partner Portal, Internal Admin Portal)? Should we expect varying loads for each interface type?	This will help determine the resource allocation for UI responsiveness and load balancing.	Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume
96	4	4.2	Vendors must support load-testing twice a year after initial deployment.	Is the vendor expected to use their own tools for load testing, or will IIDI provide specific tools or environments?	Clarity on responsibilities and tool provisions is needed.	IIDI will provide the tools and environments. Partners may suggest tools
97	4	4.3	Partner to propose application & DB support mechanism and SLAs basis on production/nonproduction issues and issue levels.	Does IIDI have existing SLA templates or specific expectations regarding issue response and resolution times?	Aligning on SLAs is important for support planning.	Will be done at RFP stage. Vendor to think of support / customization model and propose.
98	4	4.4	IIDI will procure the required licenses as proposed by the partner.	Does IIDI have any preferred tools for version control and deployment, or is the partner free to propose any tools?	Knowing any preferred tools helps in alignment.	Suggestions welcome. IIDI would prefer open source tools

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99	4	4.6	The Vendors should note that IIDDI 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.	Could IIDDI specify which security standards are mandatory and if any certifications are required from the vendor?	Understanding compliance obligations is critical for project planning.	Already specified	
100	5	5.5	Cost till Go-Live for bespoke development / customizations	Will IIDDI consider a phased Go-Live approach for different modules, and if so, how should the costs be structured around this phased implementation?	A phased Go-Live approach might affect cash flows and milestone payments, so clarity is needed for cost structuring.	All modules specified will Go-Live together	
101	5	5.5	Cost per year for basic solution maintenance during contract period	Can IIDDI provide specific requirements for the scope of basic solution maintenance? Will it include support for minor updates or patches?	Clarification on the scope of basic maintenance is necessary to estimate costs accurately.	Full production support plus bugfixes, operational issues, modifications, extensions and enhancements	
102	5	5.5	Cost per year for additional customizations and modifications	What is the expected frequency or volume of customizations per year? Can IIDDI provide an estimated range to help in defining the customization model?	Understanding the customization needs will help define appropriate resource allocation and cost models.	This includes whatever is not included in Go-Live and whatever may come up later. Vendor to think of support / customization model and propose.	

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103	5	5.5	*In case vendor does not want to grant a "Perpetual", "Own-Use" license, indicative cost of migration to a thirdparty depository system should be indicated	Could IIDDI clarify what is meant by 'indicative cost of migration to a third-party depository system'? Is the vendor expected to estimate this cost?	Understanding expectations regarding migration costs will help in preparing the commercial proposal.	Yes on the vendor side since IIDDI would want to change the platform. This is not a preferred scenario for IIDDI	
104	5	5.5	Any other cost which partner foresees	Are there any mandatory regulatory or compliance-related certification for the partner to comply with.	Knowing whether regulatory or compliance costs are covered will prevent unexpected cost overruns during the contract.	The software and BA teams costs are on the vendor side. All other costs are on IIDDI side	
105	5	5.5	Any other cost which partner foresees	Does IIDDI have any tool for the VAPT or, we have to do the VAPT testing?	Knowing whether VAPT costs is covered will prevent unexpected cost overruns during the contract.	VAPT will be carried out by IIDDI, identified vulnerabilities in the application to be fixed by the vendor.	
106	5	5.5	Any other cost which partner foresees	Does IIDDI have any existing VAPT tools / vendors which can be utilised, or do we have to consider those cost as well? Also, what is the frequency of VAPT Testing?	Knowing whether VAPT cost is covered will prevent unexpected cost overruns during the contract.	VAPT tools, hardware costs are not to vendor	
107	2.2	-	Categories of Participants in the Depository System... Exchanges (security exchange, Bullion exchange), Depository Participants, Bond or Equity issuers, Vaults, Qualified jewellers, refineries...	Query: Could you provide more detailed profiles or use cases for each category of participant? Understanding their specific needs and how they interact with the system will help us tailor the solution more effectively to meet their requirements.		The expected participant list is provided in EOI. It is assumed that the depository solution provider knows respective participant's basic activities, assuming the same partner to propose solution as of now. Detailed process flows of respective participant would be provided during RFP stage.	
108	2.3	-	Transactions in the Depository System... This is an indicative and not an exhaustive list.	Suggestion: To future-proof the system, we suggest designing a modular architecture that allows easy addition of new transaction types and functionalities. Adopting microservices architecture could enhance scalability and maintainability. Would IIDDI be open to this approach?		Expected highlevel transaction during phase1 is mentioned, more detailed would be mentioned in the RFP. IIDDI is open for the architecture and future proof technology suggestions and solutions.	
109	3.3	-	The maker-checker type of workflows should be supported in all master and configuration data maintenance and most of the transactions.	Suggestion: We recommend implementing a flexible workflow engine that allows dynamic configuration of approval hierarchies and processes. This would enable IIDDI to adapt quickly to organizational or regulatory changes without significant code modifications.		Partner may propose architecture/solution as they feel best. We can discuss this at the time of EOI response presentation.	

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110	3.5	-	The manual file upload download activities would be converted to API based integrations gradually as and when required...	Query: Is there a preferred API standard or protocol (e.g., RESTful APIs, GraphQL) that IIDI requires us to use for these integrations? Additionally, are there existing systems or third-party applications we need to integrate with? Providing their technical specifications would be helpful.		REST is preferred but subject to participants accepting it. As of now third party system integration would be through file exchange only. API would be after go-live as required.
111	3.7	-	The solution must include a billing, basic accounting and funds ledger module and should be capable of provisioning appropriate interfaces to banks.	Query: Can you provide more details on the banking interfaces required? Are there specific banks or financial systems we need to integrate with? Do you have any preferred standards or protocols for financial data exchange, such as ISO 20022 or any proprietary formats?		IIDI Accounting and Banks integration would be through file exchange at the time of Go-live. API would be post Go-live as required.
112	4.1	-	Following table captures the scale expected by Mar-2031...	Query: To plan for scalability appropriately, could you share the expected growth rates or user base projections for each year leading up to Mar-2031? Understanding annual growth will help us design a solution that scales efficiently over time.		Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume.
113	4.2	-	All on-line operations should have a response time of under 2 seconds for 90% of the transactions...	Query: Could you provide more details on the expected user load patterns, such as peak transaction times, number of concurrent users during peak hours, and types of transactions most frequently performed? This information will help us design the system to meet the performance criteria effectively.		90 percentile @ 2sec could be taken to mean 90% under 2 seconds. No separate criteria for messaging layer defined. Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume.
114	4.3	-	System uptime should be 99.999%. RPO is 10 minutes and RTO is 30 minutes... Partner to propose, manage & support application and database high availability...	Suggestion: We propose leveraging cloud-based infrastructure with auto-scaling capabilities and multi-region deployments to achieve the desired uptime and disaster recovery objectives. Would IIDI consider using cloud services for this project, or is there a preference for on-premises solutions?		Preference is to cloud but it is not feasible as of now. Currently Co-located set-up as private cloud to be considered.
115	4.5	-	Partner to propose onsite Team, mechanism and modalities for post deployment application customizations...	Query: Are there specific expectations regarding the size or composition of the onsite team for post-deployment support? Does IIDI require a minimum number of team members to be available onsite, or are remote support and periodic onsite visits acceptable?		Vendor to think of support / customization model and propose. Expected to provide application support from all perspective BA, Backend, Frontend, DB & Other as required.
116	4.6	-	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.	Query: Besides the listed security standards and frameworks, are there any additional security policies or specific frameworks mandated by IIDI or IFSCA that we need to adhere to? Also, are there any upcoming regulations we should be aware of to ensure future compliance?		There will very likely to be additional standards that need to be supported post Go-Live

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117		Additional Suggestions from Our Side:	Enhanced Security Measures:	We recommend incorporating advanced security features such as multi-factor authentication, biometric verification, and real-time threat monitoring to safeguard sensitive data and transactions.		Partner to propose in their EOI submission and incorporate in the architecture/solution. Will discuss in the detail during EOI evaluation. IIDDI may include good and feasible suggestions in the RFP.
118		Additional Suggestions from Our Side:	User Experience (UX) Design:	Investing in intuitive and user-friendly interfaces can significantly improve participant satisfaction and reduce training time. We propose conducting UX workshops with key stakeholders during the design phase.		Partner to propose in their EOI submission and incorporate in the architecture/solution. Will discuss in the detail during EOI evaluation. IIDDI may include good and feasible suggestions in the RFP.
119		Additional Suggestions from Our Side:	Regulatory Compliance Automation:	Implementing tools that automate compliance checks can help ensure adherence to evolving regulations and reduce the risk of non-compliance.		Partner to propose in their EOI submission and incorporate in the proposed solution. Will discuss in the detail during EOI evaluation. IIDDI may include good and feasible suggestions in the RFP.
120		Additional Suggestions from Our Side:	Training and Knowledge Transfer:	We suggest organizing training sessions for IIDDI staff and participants to ensure the smooth adoption of the new system. Comprehensive documentation and user manuals can also be provided.		Partner to propose in their EOI submission. Will discuss in the detail during EOI evaluation. IIDDI may include good and feasible suggestions in the RFP.
121	1	Para 5	In case of a bespoke solution, complete Intellectual Property Rights including source code shall vest with IIDDI. In case of a customized solution, at a minimum, IIDDI 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 IIDDI strictly for IIDDI "Own-Use." Or partner may propose a solution where Source Code would be available as perpetuity with IIDDI for lifetime for customization and further development by IIDDI.	We may be using some of the existing modules of our Exchange Technology Solution for the proposed platform and develop all other modules as bespoke solution. In such a case, whether IIDDI will be open to consider Joint IPR for the final product. Such an arrangement can reduce the overall cost of the solution.		We don't prevent you from providing what you have already developed for third parties as long as it does not infringe on any of the rights of IIDDI as we have specified, in perpetuity

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122	2	2.3	RTA Services: 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.	How about RTA services for Foreign Issuers? Whether it will be handled by foreign Depository? Do we need to build any API with Foreign Depositories?		There may be linkages with foreign depositories or custodians
123	4	4.1	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.	Is it possible to share the NFR for initial deployment?		Need to consider provided volume in scalability and sizing from day1. We will load test for indicated volume.
124	4	4.5	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.	Is it mandatory to maintain an onsite team? Can we handle the maintenance support through a dedicated offsite team?		Yes, at least a part of it but IIDI is open to other models. Vendor to think of support / customization model and propose.
125	Key Features of the Solution	Participant Interfaces	The depository application would be accessed by various participants (Depository, Depository participants, Clear Corporations, Vaults, Exchanges, customers etc).	Is access to the depository application required for any of these participants also? 1. Trading Member 2. Clearing Member 3. Clearing Bank Note: We understand that access is required for the following participants: 1. Customer (Buyer / Seller for Securities and QJ / QS for Bullion) 2. Depository IIDI 3. Depository Participants 4. Exchanges 5. Clearing Corporation (NICCL) 6. Vault		Interfaces for all those listed. Access has to be role based and hence configurable. Role is at entity as well as user level



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126	Key Features of the Solution	SMS & Email Notifications	SMS & Email gateway would be provided by IIDI, integration would be done by the partner.	Which gateway / tool do you plan to use for these features?		It will be standard Gateways and will be specified later. Assume ground-up development of this. Gateway provider will provide API/configurations which needs to consume to send SMS/Email.
127	Key Features of the Solution	SMS & Email Notifications	SMS & Email gateway would be provided by IIDI, integration would be done by the partner.	Is the gateway / tool to be used for this feature pre-decided or are you open for suggestions?		Suggestions are welcome