|  |
| --- |
| **National Securities Depository Limited** |
| **REQUEST FOR PROPOSAL (RFP)** |
| **Selection of Vendor for Accounting ERP Software** |

|  |
| --- |
|  |

Contents

[Disclaimer 2](#_Toc177052454)

[1. Timelines for the RFP 3](#_Toc177052455)

[2. Introduction 3](#_Toc177052456)

[3. Background 4](#_Toc177052457)

[4. Eligibility Criteria 5](#_Toc177052458)

[5. Credentials of the Bidder 6](#_Toc177052459)

[6. Scope of Work 7](#_Toc177052460)

[6.1. Functional Scope 7](#_Toc177052461)

[6.2. Technical Scope 11](#_Toc177052462)

[6.3. Service Level Agreements 19](#_Toc177052463)

[6.4. Training 21](#_Toc177052464)

[7. Deliverable 22](#_Toc177052465)

[8. Timelines for delivery 24](#_Toc177052466)

[9. Commercial Proposal 25](#_Toc177052467)

[10. Evaluation Process 25](#_Toc177052468)

[11. Key Instructions for Bidders 25](#_Toc177052469)

[11.1. Submission of Bid 25](#_Toc177052470)

[11.2. Language of the Bid 26](#_Toc177052471)

[11.3. Validity of the Bid 26](#_Toc177052472)

[11.4. Late Bid 26](#_Toc177052473)

[11.5. Preliminary Examination 26](#_Toc177052474)

[11.6. Liability and Costs 26](#_Toc177052475)

[11.7. Jurisdiction and Governing Laws 27](#_Toc177052476)

[11.8. Bidder’s Obligations 27](#_Toc177052477)

[11.9. Use of Contract / RFP Documents and Information 27](#_Toc177052478)

[12. Annexures 27](#_Toc177052479)

# Disclaimer

The information contained in this RFP document, or any information provided subsequently to the bidder(s) whether verbally or in documentary form by or on behalf of the NSDL (being a private sector organization) is provided to the bidder(s) on the terms and conditions set out in this RFP document and all other terms and conditions subject to which such information is provided. This RFP is neither an agreement nor an offer and is only an invitation by NSDL to the interested parties for submission of bids. The purpose of this RFP is to provide the bidder(s) with information to assist in the formulation of their proposals. While effort has been made to include all information and requirements of the NSDL concerning the solution services requested, this RFP does not claim to include all the information each bidder may require. Each bidder should conduct its investigation and analysis and should check the accuracy, reliability, and completeness of the information in this RFP and wherever necessary obtain independent advice. The NSDL makes no representation or warranty and shall incur no liability under any law, statute, rule, or regulation as to the accuracy, reliability, or completeness of this RFP. The NSDL may in its absolute discretion, but without being under any obligation to do so, update, amend, or supplement the information in this RFP.

# Timelines for the RFP

**Table 1: Key dates and timelines**

|  |  |  |
| --- | --- | --- |
| # | Particulars | Deadline |
| 1 | Availability of Request for Proposal Document | 12th September, 2024 |
| 2 | The last Date for submission of RFP-related queries via email | 17th September, 2024 |
| 3 | Issuance of Clarifications | 20th September, 2024 |
| 4 | Last date for submission of bids (Technical & Commercial) | 25th September, 2024 |
| 5 | Date of opening of Proposal | 26th September, 2024 |
| 6 | Date of Technical and Functional Demonstrations | 30th September to 7th October, 2024 |
| 7 | E-mail for Submission of Proposal/Bid | ProcDepository@nsdl.com |
| 8 | Contact Person for Clarifications (E-mail address for queries) | Contact 1: Functional SPOC 1  Name: Prathamesh Adelkar  Email: [prathamesha@nsdl.com](mailto:prathamesha@nsdl.com)  Phone: +91-7738080304  Contact 2: Functional SPOC 2  Name: Rakesh Khandelwal  Email: [Rakeshk@nsdl.com](mailto:Rakeshk@nsdl.com)  Phone: +91-8879287922  Contact 2: Technical SPOC  Name: Shivkumar Jane  Email: shivkumarj@nsdl.com  Phone: +91-9820303066  Contact 4:  Name: Chandra P Shukla  Email: ChandraS@nsdl.com  Phone: +91-9810507865 |
| 9 | Mode of Selection | The best agency worked out based on from the Technical, Functional and Commercial bids |
| 10 | Type of Proposal Required | Techno-commercial |

**Please note:**

The above dates are likely to remain unchanged. However, NSDL will inform bidders of any changes/addendums to the above dates and/or any other changes to this RFP in an electronic manner. NSDL will inform their decision on the way forward in an electronic manner. No further discussion/interface will be granted to bidders whose bids have been technically disqualified. NSDL reserves the right to accept or reject in part or full any or all the offers without assigning any reasons whatsoever.

# Introduction

**National Securities Depository Limited (NSDL)**, is a depository registered with SEBI established in August 1996 NSDL has developed state-of-the-art infrastructure that handles most of the securities held and settled in dematerialized form in the Indian capital market.

NSDL issues a formal Request for Proposals (RFP) and invites eligible and reputable entities to submit tender offers, encompassing the Eligibility, Technical bid, and Commercial bid, to select a vendor for Accounting ERP software.

For this RFP, the term "bidder/prospective bidder" shall refer to the primary bidder participating in the procurement process, to deliver the services specified within the scope of works.

This RFP is meant for the exclusive purpose of bidding as per the terms and conditions and scope of work indicated. It shall not be transferred, reproduced, or otherwise used for purposes other than for which it is specifically issued.

# Background

NSDL (National Securities Depository Limited) is a premier depository in India, responsible for the safekeeping, settlement, and processing of securities transactions. With a robust infrastructure and advanced technological capabilities, NSDL plays a vital role in facilitating efficient and secure trading in the capital markets.

As part of its ongoing efforts to enhance operational efficiency and streamline internal processes, NSDL recognizes the need for a comprehensive Accounting ERP (Enterprise Resource Planning) software solution. The Accounting ERP software will serve as a critical tool in managing and automating various financial functions, ensuring accurate and timely reporting, and supporting decision-making processes within NSDL.

The envisioned Accounting ERP software is expected to exhibit the following key functionalities:

* General Ledger Management: The software should provide a robust and flexible general ledger module that can efficiently handle complex accounting requirements. It should support multi-dimensional charts of accounts, journal entries, and inter-company transactions, and allow for seamless integration with other modules.
* Accounts Payable and Receivable: The software should enable effective management of accounts payable and receivable, automating processes such as invoice generation, payment processing, credit control, and reconciliation. It should also facilitate efficient tracking of outstanding dues, ageing analysis, and supplier/vendor management.
* Financial Reporting and Analysis: The software should offer comprehensive financial reporting capabilities, including customizable financial statements, balance sheets, profit and loss statements, cash flow statements, cost centre wise reports and key financial ratios. It should provide built-in analytical tools to facilitate data analysis and decision-making.
* Budgeting and Forecasting: The software should support the budgeting and forecasting process by allowing users to create and manage budgets, generate variance reports, and perform scenario analysis. It should provide real-time visibility into budget performance and enable effective monitoring and control.
* Asset and Inventory Management: The software should include modules for managing fixed assets and inventory, facilitating asset tracking, depreciation calculations, inventory control, and stock valuation. It should support seamless integration with procurement and logistics systems.
* End-to-End Procurement: The software should provide a robust and flexible procurement module that can efficiently handle complex procurement requirements. It should support multi-dimensional charts of procurement requests and allow for seamless integration with other modules.
* Compliance and Regulatory Reporting: The software should adhere to relevant accounting standards, taxation requirements, and regulatory guidelines. It should enable timely and accurate preparation of statutory reports, facilitate audit trail management, and ensure compliance with applicable laws and regulations.
* Security and Data Privacy: The software should incorporate robust security measures to safeguard sensitive financial data, ensuring secure access controls, data encryption, and regular backups. It should comply with relevant data privacy laws and regulations.

NSDL expects the Accounting ERP software to be highly scalable, user-friendly, and customizable to meet evolving business needs. The software vendor is encouraged to propose innovative features and functionalities that align with NSDL's vision of a modern, efficient, and technology-driven financial ecosystem.

By implementing an advanced Accounting ERP software solution, NSDL aims to optimize financial operations, enhance transparency, improve decision-making, and ultimately deliver superior services to its stakeholders.

# Eligibility Criteria

**Table 2: Eligibility criteria and documents required**

|  |  |  |
| --- | --- | --- |
| # | Particulars | Document Required |
| 1 | The bidder/reseller should be a limited company (Public/Private) registered in India under the Companies Act, 1956/2013 or a Partnership firm / LLP registered in India under Partnership Act 1932/2008 as amended for the last two years as of September 2022 | Certificate of Incorporation |
| 2 | The bidder/reseller should have been in the IT business in India for a minimum period of three years. | Certificate of Incorporation & Certificate of Commencement of Business |
| 3 | The bidder/reseller should have an average turnover of Rs. 10 crores in any two of the last three financial years from the IT services segment/system integration of the company | Audited Financial statements for the last three financial years  (21-22, 22-23, 23-24) |
| 4 | The bidder/reseller should have a positive net worth in at least two of the last three financial years | Audited Financial statements for the last three financial years  (21-22, 22-23, 23-24) including the latest shareholding pattern |
| 5 | The bidder/reseller should not be insolvent, in receivership, Bankrupt, or being wound up, not having its affairs administered by a court or judicial officer, not have its business activities suspended, and must not be subject to legal proceedings for any of the foregoing reasons | Self-Declaration |
| 6 | The bidder/reseller should also ensure that there are no legal proceedings/inquiries/investigations have been commenced/pending against the service provider by any statutory or regulatory or investigative agencies or any other for which performance under the contract will get adversely affected / may get affected | Self-Declaration |
| 7 | The bidder/reseller should have a development/support center in India | Self-Declaration |
| 8 | The bidder/reseller should provide client references and contact details (email/landline/mobile) of at least two customers for whom the Bidder has executed similar projects in India or globally (with PO date and go-live date of the Project) | Refer to Annexure 1: References |
| 9 | The bidder/reseller should have the ability to provide on-site resources in Mumbai at the NSDL's desired location for implementation and support as per the need of the NSDL's with an adequate number of business analysts, engineers & project manager having expertise & experience in understanding & implementing the technical, operational, business, functional, report level requirements of the NSDL for each module of the proposed solution | Self-Declaration |
| 10 | The bidder/reseller should provide the Company IP for any developments specific to the Company | Self-Declaration |
| 11 | The bidder/reseller should be a profit-making company in one (1) of the last three (3) consecutive financial years | Audited Financial statements for the last three financial years  (21-22, 22-23, 23-24) including the latest shareholding pattern |
| 12 | The bidder/reseller and/or OEM should be adequately staffed to support the installation, implementation, integration, customization, and periodic maintenance of the proposed ERP solution. | Self-Declaration |
| 13 | The bidder/reseller and/ or OEM should have experience in implementing the proposed ERP solution, comprising of supply, installation, customization, integration, training, and maintenance for any of the following modules a) General Ledger b) Accounts Payable & Receivable c) F, P & A d) Budgeting & Forecasting e)Asset & Inventory Management f) Compliance & Regulatory Reporting in at least Five (5) entities | Self-Declaration |

Please ensure that you provide the requested information accurately and precisely. If any specific formats or units are applicable, please include them accordingly. (*) In case the information provided in the RFP response is found incorrect/not abided by the vendor, then the vendor gets disqualified from the RFP process.*

# Credentials of the Bidder

Bidders are expected to submit a profile of their organization in a presentation format or a pdf version of a presentation covering the following aspects:

1. About the organization and credentials
2. Key implementations completed, live and under progress including the total number of similar ERP implementations done
3. CVs of key personnel who shall be working with NSDL including the following aspects:
   1. Name
   2. Designation in the organization along with roles and responsibilities
   3. Educational and professional qualifications
   4. Years of work experience
   5. Details of work experience
   6. Credentials of similar work (ERP implementation in B2B space)
   7. Base location
   8. Whether personnel will be on-site or remote

# Scope of Work

The detailed scope of work is described in this section and the annexures are referred to herein. The bidder should go through all the requirements in detail. The bidder should propose a complete solution that considers all business requirements. NSDL reserves the right to change the scope of the RFP considering the company’s requirements.

## 6.1. Functional Scope

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Components** | **Particulars** | **Details** |
| **1** | **Accounts Payable** | **-** | **All relevant Features as per Industry Standard to be available** |
| 1.01 | Accounts Payable | Master | Process of Master creation & invoice entries for B2C (individual) transaction. Currently master not created for B2C (individual) parties. Single consolidated entry passed in tally and invoices prepared & sent manually to individuals on their email ID. |
| 1.02 | Accounts Payable | Reversal of Expenses | Creditors Ageing report & reversal of expenses provision for more than one year to be tracked. |
| 1.03 | Accounts Payable | Smart Matching | AI enabled smart matching automatically matches purchase orders, receipts and invoices to streamline accounts payable processes |
| **2** | **Accounts Receivable** | **-** | **All relevant Features as per Industry Standard to be available** |
| 2.01 | Accounts Receivable | Accounts Receivable | Scheduled reminders to clients for payment of outstanding dues as per format selected |
| 2.02 | Accounts Receivable | Grouping | Grouping of debtors separately based on service category or as defined |
| 2.03 | Accounts Receivable | Collection Automation | AI enabled collection automation: Automates reminders and follow-ups for overdue accounts receivable. |
| **3** | **Audit Trail** | **-** | **All relevant Features as per Industry Standard to be available** |
| 3.01 | Audit Trail | Alerts | Alerts for violation of rules or attempt to bypass etc. |
| **4** | **Automation** | **-** | **All relevant Features as per Industry Standard to be available** |
| 4.01 | Automation | Integration | Integration with internal NSDL DM / CA software or other systems to automatically receive billing information, computation and generation of invoices and emailing to clients with upload of copy on issuer portal. Integrations to be with the following systems (not limited to):  1. Depository Module  2. Data Warehouse  3. Issuer Portal  4. CRM  5. HRMS  6. FPI Portal |
| 4.02 | Automation | External Systems Integration | Seamless integration with Govt. Portal for GST compliance & e-invoice |
| 4.03 | Automation | Payment Gateway Integration | Integration with Payment Gateway and payment aggregator. |
| 4.04 | Automation | AI enabled automation | Scans and digitizes invoices, receipts, and other documents automatically extracting relevant data and inputting it into the system |
| 4.05 | Automation | AI enabled automation | Scans and digitizes invoices, receipts, and other documents automatically extracting relevant data and inputting it into the system |
| **5** | **Balance Sheet** | **-** | **All relevant Features as per Industry Standard to be available** |
| 5.01 | Balance Sheet | Monthly Balance Sheet | All relevant Features as per Industry Standard to be available |
| 5.02 | Balance Sheet | Multiple Entities | We should be allowed to have multiple entities in single instance – there can be some additional commercials prorate rather than having a full instance separate. |
| **6** | **Banking** | **-** | **All relevant Features as per Industry Standard to be available** |
| 6.01 | Banking | Banking API Integration | All relevant Features as per Industry Standard to be available. HDFC Bank, ICICI Bank or other Bank Open API connectors to be available |
| 6.02 | Banking | H2H | Host to Host payment to banks as an encrypted file output |
| 6.03 | Banking | Reconciliation | Bank reco of payments as well as receipts through virtual codes |
| 6.04 | Banking | Bank Feeds & Anomaly detection | Automated bank feeds: integrates with bank accounts, to automatically import and reconcile transactions. Identifies discrepancies and potential errors in bank statements and transactions. |
| 6.05 | Banking | NACH and eNACH | NACH and e-NACH mandates to be included |
| **7** | **Budgeting** | **-** | **All relevant Features as per Industry Standard to be available** |
| 7.01 | Budgeting | Limits | Alert for exceeding budget or limit set |
| 7.02 | Budgeting | Predictive Analytics | AI enabled: Uses historical data to forecast future financial trends, cash flow, and budget requirements |
| 7.03 | Budgeting | Scenario Analysis | AI enabled: Allows users to create and analyze different financial scenarios to aid in strategic planning |
| **8** | **Cost Centre** | **-** | **All relevant Features as per Industry Standard to be available** |
| 8.01 | Cost Centre | Allocation | Allocation of common costs at data entry level and month end as per defined rule |
| 8.02 | Cost Centre | Cost Centre Reporting | Cost Centre Wise, Branch Wise, Department wise, project wise, etc. |
| 8.03 | Cost Centre | Entry Level reporting | Allocation of common costs at data entry level and month end as per defined rule |
| 8.04 | Cost Centre | Entry Level reporting | Cost center reporting and accounting |
| **9** | **Expenses** | **-** | **All relevant Features as per Industry Standard to be available** |
| 9.01 | Expenses | Billing | All relevant Features as per Industry Standard to be available |
| 9.02 | Expenses | Expense Categorization | AI enabled automatic categorizations of expenses based on historical data and predefined rules |
| 9.03 | Expenses | Expense Receipt Matching | AI enabled receipt matching to transactions automatically, reducing manual reconciliation efforts |
| **10** | **Financial Control** | **-** | **All relevant Features as per Industry Standard to be available** |
| **11** | **Fixed Asset Management** | **-** | **All relevant Features as per Industry Standard to be available** |
| 11.01 | Fixed Asset Management | Customization | Customization for Fixed Assets register |
| 11.02 | Fixed Asset Management | Depreciation & Location | Fixed Asset Module (with Location of Asset for Physical Verification) along with Depreciation calculation (As per Companies Act & as per I.T. Act |
| 11.03 | Fixed Asset Management | Fixed Asset Management | All relevant Features as per Industry Standard to be available |
| **12** | **General Ledger** | **-** | **All relevant Features as per Industry Standard to be available** |
| **13** | **Inventory** | **-** | **All relevant Features as per Industry Standard to be available** |
| 13.01 | Inventory | Book Investments | Check inventory module to book investments i.e. with date of purchase, cost, quantity etc. |
| **14** | **Invoicing** | **-** | **All relevant Features as per Industry Standard to be available** |
| 14.01 | Invoicing | Additional Pages | Invoice with additional attachment (FAQ and Calculation in PDF or excel format) send to client |
| 14.02 | Invoicing | Alerts | Auto response to clients and RMs on booking of receipts, TDS credit or reversal of any credits |
| 14.03 | Invoicing | Auto-Interest Calculation | Automatic interest calculation on overdue invoices |
| 14.04 | Invoicing | Auto-Invoicing | All relevant Features as per Industry Standard to be available |
| 14.05 | Invoicing | Backdated Restriction | Restriction of IRN generation on Backdated Invoices after specified date |
| 14.06 | Invoicing | E-Invoicing | All relevant Features as per Industry Standard to be available |
| 14.07 | Invoicing | Failed Mails | Report for failed mails or bounced mails with reasons |
| 14.08 | Invoicing | Mailers | Monthly mail statement of accounts to clients |
| 14.09 | Invoicing | Overdue | Automatic interest calculation on overdue invoices |
| 14.10 | Invoicing | TDS | Automatic TDS deduction as per applicable rates |
| 14.11 | Invoicing | Automated Invoicing | AI enabled automated invoicing, generates and sends invoices based on predefined schedules and conditions |
| 14.12 | Invoicing | Payment Predictions | AI enabled: predicts likelihood of invoice payments based on customer behavior and historical data |
| **15** | **Online Payments** | **-** | **All relevant Features as per Industry Standard to be available** |
| **16** | **P & L** | **-** | **All relevant Features as per Industry Standard to be available** |
| 16.01 | P & L | Auto Deduction Expense | Automatic booking of prepaid expense entry each month based on period defined for expense |
| 16.02 | P & L | Automatic Revenue Recognition | Automatic revenue recognition entries as per defined rule for advances received or advance invoicing |
| 16.03 | P & L | Monthly P & L | All relevant Features as per Industry Standard to be available |
| **17** | **Payroll processing** | **-** | **All relevant Features as per Industry Standard to be available** |
| **18** | **Purchase Orders** | **-** | **All relevant Features as per Industry Standard to be available** |
| **19** | **Reporting** | **-** | **All relevant Features as per Industry Standard to be available** |
| 19.01 | Reporting | Cost Centre Reporting | Cost centre reporting and accounting |
| 19.02 | Reporting | Reporting | All relevant Features as per Industry Standard to be available |
| 19.03 | Reporting | TDS | TDS return related reports |
| 19.04 | Reporting | Various | Creditors MIS, aging report, MSME identification and report on delayed payments etc. |
| 19.05 | Reporting | Various | Debtors MIS, aging report, collections report, DSO and CER ratio calculations |
| 19.06 | Reporting | Various | See standard reports on day one |
| 19.07 | Reporting | Various | Tax Audit Reports |
| 19.08 | Reporting | Various | Business Intelligence Module, Management dashboards Module |
| 19.09 | Reporting | Various | AI enabled Querying |
| 19.10 | Reporting | Various | AI enabled fraud detection: monitors transaction patterns to identify unusual activities that may indicate fraud through real time alerts and reports |
| **20** | **Sales Orders** | **-** | **All relevant Features as per Industry Standard to be available** |
| **21** | **Tax Management** | **-** | **All relevant Features as per Industry Standard to be available** |
| 21.01 | Tax Management | Customization | Can we customize Tax Invoice format. |
| 21.02 | Tax Management | GST | All relevant Features as per Industry Standard to be available |
| 21.03 | Tax Management | GST | GST 2A reconciliation |
| 21.04 | Tax Management | Tax Management | All relevant Features as per Industry Standard to be available |
| 21.05 | Tax Management | TDS Management | All relevant Features as per Industry Standard to be available |
| 21.06 | Tax Management | TDS Management | Automatic TDS deduction as per applicable rates |
| 21.07 | Tax Management | TDS Management | TDS Returns |
| 21.08 | Tax Management | TDS Management | TDS Form 26AS reconciliation, Treasury related activities |
| 21.09 | Tax Management | Tax Calculation & Filing | AI enabled automated tax calculations and tax filings |
| **22** | **Transactional Approvals** | **-** | **All relevant Features as per Industry Standard to be available** |
| **23** | **User Management** | **-** | **All relevant Features as per Industry Standard to be available** |
| 23.01 | User Management | Access Restriction | Maker / Checker in the system |
| 23.02 | User Management | Access Restriction | Segregation of roles and responsibilities in the access control |
| 23.03 | User Management | Control, restricted Access | Maker / Checker in the system |
| 23.04 | User Management | Control, restricted Access | Segregation of roles and responsibilities in the access control |
| **24** | **Vendor Management** | **-** | **All relevant Features as per Industry Standard to be available** |
| 24.01 | Vendor Management | Master | Vendor master form to be created for vendors to fill in details which can be then verified by NSDL team and approved for posting in vendor ledger |
| 24.02 | Vendor Management | TDS & GST | Vendor management system from TDS and GST angle |
| 24.03 | Vendor Management | TDS/GST | Vendor management system from TDS and GST angle |
| 24.04 | Vendor Management | Validation | Validation rules for blocking payments to vendors who are defaulters in GST payments / return filing |
| 24.05 | Vendor Management | Vendor Portal | All relevant Features as per Industry Standard to be available |
| **25** | **Procurement Management** | **-** | **All relevant Features as per Industry Standard to be available for end-to-end procurement process (Procure to Pay)** |

The implementation phase will include but not limited the following:

1. **Project Objectives & Goals:** Define primary objectives of ERP implementation.
2. **Project Timeline:** Provide detailed timelines, including key milestones, deadlines and project phases.
3. **Current System Assessment:** Describe the existing financial systems processes and data structures that the new ERP system will replace or integrate with.
4. **Integrations Requirements:** Detail the required integrations with other existing systems and any third-party applications.
5. **Data Migration:** Outline the scope of data migration, including the types of data to be migrated, data cleansing requirements, and any historical data considerations.
6. **Customization & Configuration:** Define the level of customization and configuration needed to tailor the ERP systems to NSDL.
7. **OnPrem AD Integration**
8. **User Roles and Access Control:** Specify the different roles within the system and the access control requirements for each role.
9. **Training & Support:** Outline the training requirements for end-users and administrators. including initial training, ongoing support and documentation needs.

## 6.2. Technical Scope

|  |  |
| --- | --- |
|  | **Technical Module** |
| **1** | **Architecture Requirement** |
| 1.01 | Specify the model of deployment of the solution (On-Premise/Cloud). If the proposed solution is supported in Cloud and On-Premises models, it can be mentioned separately in response and the Total cost of ownership (TCO) in Annexure 3 to be provided separately for the On-Premise and Cloud deployment. |
| 1.02 | Specify whether the Physical Server/VM is supported for Deployment |
| 1.03 | Specify Hardware Specifications needed with the Architecture Diagram, Network Diagram, Schema Design, and Functional Specification Document of the solution for the proposed implementation |
| 1.04 | Benchmark on minimum Bandwidth (in kbps) required for accessing the application smoothly. |
| 1.05 | Specify the Web Server, Application Platform & DB Details |
| 1.06 | Maximum memory used by the application on Client Side |
| 1.07 | Product Customization Certification Training shall be provided by OEM |
| 1.08 | Benchmark on Solution Performance in terms of CPU, Memory, application Page load time, etc. |
| 1.09 | Specify the Client Machine configuration required to access ERP Solution smoothly |
| 1.10 | Specify the List of Supported Browsers for accessing the solution with Base version details in each browser |
| 1.11 | Specify the End of Life of the present version of the software proposed |
| 1.12 | Specify the mode of Data Security of the application available |
| 1.13 | Ability to encrypt Personally Identifiable Information (PII) of Customer Data in a Database |
| 1.14 | Availability of custom web portal from ERP Application which can be deployed in DMZ server & intranet zone |
| **2** | **System Administration** |
| 2.01 | The solution should provide a UI for System Administration |
| 2.02 | The solution should provide remote server administration |
| 2.03 | The solution should encrypt user passwords |
| 2.04 | The solution should have an archival process that is automated (scheduled) by administrators |
| 2.05 | The solution should maintain an audit trail |
| 2.06 | The solution should maintain a log for all transactions/changes |
| 2.07 | Restricted read/write(create/update) access to menus based on user profiles |
| 2.08 | The solution should facilitate defining security (read, write, delete, edit) at multiple levels e.g. User, Role / Group, Menu, Menu Item, Form/Page, Field, etc. |
| 2.09 | The solution should maintain error logs |
| 2.10 | The solution should maintain unique error codes |
| 2.11 | Complete and comprehensive security from unauthorized access and misuse should be available along with a necessary audit trail detailing every user’s activity. Integration with onprem SIEM solution. |
| 2.12 | Password policies should be configurable in the application, and as well comply with the NSDL password policy |
| 2.13 | Passwords should be stored in the database in an encrypted format. |
| 2.14 | The system must provide Maker/Checker facility |
| 2.15 | The system must support many levels of users |
| 2.16 | The system must provide for data confidentiality/integrity |
| 2.17 | Session timeout configuration to be made available |
| 2.18 | Prevent concurrent access to the system from the same user ID |
| 2.19 | The solution should provide security of data at Rest |
| 2.20 | The solution should provide security of data in motion |
| 2.21 | The system should support industry standard APIs for integration and data exchange. Integrations to be with the following NSDL internal systems (not limited to):  1. Depository Module  2. Data Warehouse  3. Issuer Portal  4. CRM  5. HRMS  6. FPI Portal  Integrations to be with the following external systems:  1. Seamless integration with Govt. Portal for GST compliance & e-invoice  2. Integration with Payment Gateway and payment aggregator. |
| 2.22 | The application should be configured such that access to the customer information must support user-level authentication and access rights |
| 2.23 | The application should be implemented to delegate some additional functionality at the user level, e.g.: change password functionality should be given to the user |
| 2.24 | The application should be configured to enforce role-based access based on users, groups, roles, etc. The application should be configured to set up users, groups, roles, and permissions |
| 2.25 | The application should be configured to manage and provide access control to different users so that not all users should be able to access all the sub-applications |
| 2.26 | The application should be configured such that access to the customer information must support user-level authentication and access rights |
| 2.27 | The application should be configured in such that the same screens and system function shall be available with role-based access in place (i.e. a person can only access nodules for which they have permission) |
| 2.28 | The application should be configured to be deployed as a secured, managed desktop, allowing agents access to only the programs they are allowed to use |
| 2.29 | The application should connect to AD for user authentication |
| **3** | **Infrastructure** |
| 3.01 | Data retention:  Archiving: As per the NSDL’s policy  Retained online: As per the NSDL’s policy |
| 3.02 | During a disaster, the DR system should cover 100% of demands as production during the disaster. |
| 3.03 | The Solution should be deployed on the Cloud architecture which is MEITY certified with the adaptability to the on-demand up-scaling and down-scaling and seamless failover movements of the instances. It should validate all SEBI 143 cloud policy Parameters. |
| 3.04 | Service provider to provide full details of cloud service to host the solution on the cloud. |
| 3.05 | Web, application, and database components should be installed separately |
| 3.06 | SIT/UAT/DEV should be installed separately |
| 3.07 | The proposed solution should be capable to balance the load between multiple active instances. Bidder to explain how this is being achieved. |
| 3.08 | The solution should meet RTO - RPO and Availability requirements as per NSDL’s policy/ requirement. The service provider should prove how the solution can meet this requirement.  RPO: As per the NSDL’s policy  RTO: As per the NSDL’s policy |
| 3.09 | When required, the Service Provider should address end-to-end setup of the Product/Solution but not be limited to maintenance/support activities such as installation, configuration, upgrade, patch update, addressing of VAPT/Audit observations, resolving technical/performances issues, etc both at NSDL's SIT/UAT/DEV and NSDL's production environment without any additional cost to NSDL except AMC/ATS and cost of deployed resources(support personnel/developer) to NSDL. |
| 3.10 | The proposed solution must be compatible with all browsers but not limited to IE (minimum IE 11 onward), Microsoft’s Edge, Firefox, Chrome, Safari, etc |
| 3.11 | The proposed solution must be compatible with web standards but not limited to W3C (HTML, CSS, SVG, XML, Web Services), W3C-WCAG, JavaScript, etc |
| 3.12 | In the normal scenario, Bidder describes the way the configuration, log, configure parameters, or software are synchronized to other components (to HA and DR components). |
| 3.13 | The solution should be deployed on High availability architecture with a minimum of the following requirement:- Component level High availability so that the server/instance will not be affected due to failure of one disk/power/processor Node/instance level High availability so that the availability of the solution will not be affected due to the failure of one Node/instance within the same DC. Datacenter level High availability so that the availability of the solution will not be affected due to the unavailability/disaster situation at one Datacenter. Bidder to explain how the above will be achieved. |
| 3.14 | The new application/feature/patch/hotfix or any configuration changes should be synchronized across servers/instances having the same function in DC and DR. |
| 3.15 | The bidder is required to provide archiving and backup of data. Bidder to describe how it will be achieved. |
| **4** | **Security Requirements** |
| 4.01 | The solution should support the implementation of baseline security configurations for Applications/Devices/supporting firmware/drivers/SDK under the best industry practices & NSDL's approved baseline documents |
| 4.02 | Compliance with security best practices may be monitored by periodic security audits performed by or on behalf of NSDL. These audits plan to include but are not limited to, a review of access & authorization procedures, physical security controls, input/output controls, DB controls, backup and recovery procedures, network security controls, and program change controls |
| 4.03 | Security controls must be ensured to avoid malpractices and fraud attempts |
| 4.04 | NSDL/ NSDL's impaneled auditors reserve the right to audit the successful bidder's premises and platform used for ERP Solution development and its associated hardware/ software |
| 4.05 | User names and passwords must be hashed or encrypted at storage as well as before passing them over the network for authentication purposes. Encryption should conform to at least SHA2+Salt (Encryption technique- adopt internationally accepted and published security standards that are not deprecated/ demonstrated to be insecure/vulnerable) |
| 4.06 | Should support at least 256-bit encryption between web browser & web server front end (Internet & Intranet) |
| 4.07 | Encryption of the repository: support strong encryption of content stored on the file system. Database (data at rest). |
| 4.08 | The system should provide the capability to protect sensitive information e.g. (any customer-related information) that must be shared by email. Information should be protected both during and after the delivery. Email and attachments should be kept confidential and temper-proof no matter where they are distributed and stored. |
| 4.09 | Should support strong 2-factor authentication technology (adopt internationally accepted and published security standards that are not deprecated/ demonstrated to be insecure/ vulnerable) |
| 4.10 | The product should support web services standards namely WS specifications from OASIS and W3C/REST service with security standards required by NSDL/SEBI |
| 4.11 | The application should provide role-based authorization which should be enforced through proper session management or privilege check for every action |
| 4.12 | The system shall provide support for Active Directory & LDAP support for integrating with directory services |
| 4.13 | Solution and Exposed API must adhere to the Information Security(IS) requirement/policy of the NSDL/SEBI's security requirements |
| 4.14 | Service Provider must address Common Vulnerabilities and Exposures (CVE), advisories from CERT-IN, and IS's Security/audit observations as per the NSDL’s requirement without any additional cost to NSDL during the implementation/ entire contract period |
| 4.15 | Must support HTTPS with TLS v1.2 or above (with Strong ciphers - internationally accepted and published security standards that are not deprecated/ demonstrated to be insecure/ vulnerable) |
| 4.16 | The solution must adhere to Data localization norms and privacy protection norms as per our NSDL's Statutory and Regulatory requirements including laws of the land |
| 4.17 | Exposed API must support security standards OAuth / JWT etc as well as adhere to NSDL/SEBI's security guidelines/policy |
| 4.18 | The system should support for effective dual control (maker/checker) for all administrative activity and system changes level activity |
| 4.19 | The system should support session management to Log out the user after a set period of inactivity |
| 4.20 | The system should support the option to mask Customer-PII(Personally Identifiable Information) from the report/Application ( i.e. Masking Card Information etc. as applicable.) |
| 4.21 | Controls should be in place to prevent Data Leakage and to ensure the confidentiality and integrity of the NSDL's data |
| 4.22 | Critical Fields must be secured using a strong crypto algorithm (Encryption technique- adopt internationally accepted and published security standards that are not deprecated/ demonstrated to be insecure/ vulnerable) during all phases of data - at rest, in motion, in use |
| 4.23 | For Cloud-based deployment models, the vendor has to provide all the Audit Certifications as required by NSDL on data center, solution, data security, and access control. Further, any additional document required by the NSDL in terms of data privacy, information security, or geographic locations needs to be made available. This would not be construed as an alternative to NSDL/Regulator’s right to audit. |
| 4.24 | Bidder must comply with all applicable legal and regulatory requirements. Bidder should also provide necessary support to NSDL to comply with legal and regulatory requirements applicable to NSDL for availed service. |
| **5** | **Cloud Deployment** |
| 5.01 | Currently, NSDL is looking for a cloud-based deployment of the proposed solution, however, the proposed solution should offer flexibility to support both cloud and on-premise deployment. Bidders are to provide their description of the possible cloud offerings for the proposed solutions in detail as part of their proposal. |
| 5.02 | The proposed solution should provide capabilities to monitor critical application service availability and alert the servers hosted on the private/public cloud |
| 5.03 | The solution should be capable of intelligent placement for workloads on the cloud setup so that the load gets distributed dynamically without any manual intervention and get efficient performance. This should be an integral part of the solution and should not insist on any specific hardware make or model. |
| 5.04 | The product should have been developed using a secure development lifecycle and appropriate proof of recent Security/penetration testing results should be provided. |
| 5.05 | Bidder should provide information on the data protection policies and data privacy policies of the product |
| 5.06 | Bidder should provide information on how and where the primary data is stored as well as where is secondary back up done |
| 5.07 | Bidder to specify in detail how the data is encrypted both in motion, in Use, and at rest - standards used for encryption should be specified |
| 5.08 | Bidder should segregate NSDL data from the others in a public cloud environment. Bidder to mention how this is being achieved. |
| 5.09 | The platform should support the ability to access application instance logs. If there is a lead time bidder mention the same. |
| 5.10 | Bidder should provide a list of the latest security certification of their private/public Cloud service provider (CSP) and their validity - NIST, CSA, PCI DSS, IT ACT 2008 and amendments, India Data Privacy Bill, MEITY certification |
| 5.11 | Bidder and CSP should be compliant with the law of India and a contract will be signed with India Entity. |
| 5.12 | Bidder to confirm that it acquires no rights or licenses, including without limitation intellectual property rights or licenses, to use the data for its purposes under the transaction |
| 5.13 | Bidder to mention how data is isolated and purged in case the solution is deployed in a multi-tenant environment |
| 5.14 | The bidder should provide information about how security patches and upgrades are applied to the product. |
| 5.15 | Bidder to specify how the data can be archived in the NSDL premises |
| 5.16 | Cloud Service Providers should be STQC audited and empaneled and offer all services from India as per guidelines of Meity |
| 5.17 | The Primary and DR Data Centre (Cloud) shall be physically located in India. The proposed Datacenter for DR should be in different seismic zones. The data should not be transferred outside of the country’s boundary by any means. |
| 5.18 | The Bidder’s/Bidder’s CSP-Data Center should conform to at least Tier III standard (preferably certified under TIA 942 or Uptime Institute certifications by a 3rd party) and implement tool-based processes based on ITIL standards |
| 5.19 | The Bidder’s/Bidder’s CSP should comply with the latest Cloud Security ISO Standard ISO 27017:2015 and Privacy Standard ISO 27018:2015 |
| 5.20 | The NOC and SOC facility must be within India for the Bidder’s Cloud Environments |
| 5.21 | Cloud services under the SaaS model shall only be offered from Data Centers audited and qualified by STQC under the Cloud Services Empanelment process. |
| 5.22 | The Bidder’s/Bidder’s CSP shall be responsible for ensuring that all data functions and processing are performed within the boundaries of India |
| 5.23 | The Bidder’s/Bidder’s CSP shall be responsible to ensure that the services offered from SaaS provide a mechanism to authenticate and authorize users |
| 5.24 | SaaS solutions/services offered to NSDL shall have in-built functionality to integrate with existing authentication mechanisms like Active-Directory |
| 5.25 | The Bidder’s/Bidder’s CSP shall ensure that any service offered from SaaS is monitored, controlled, and administered using a web-based tool with visibility to NSDL |
| 5.26 | The Bidder’s/Bidder’s CSP shall ensure that services offered under SaaS are available with automatic scale-up (adding more resources to handle demand) and scale-out (adding more systems to handle demand) to meet NSDL’s performance requirements. |
| 5.27 | The Bidder’s/Bidder’s CSP shall ensure that services offered under SaaS are enabled with data loss prevention tools and the capability to monitor data flow. |
| 5.28 | The Bidder’s/Bidder’s CSP shall ensure that services offered under SaaS provide tools/capability for encryption of data-at-rest, data-in-processing/use, and data-in-transit. |
| 5.29 | The Bidder’s/Bidder’s CSP shall ensure that services offered under SaaS support encryption algorithms like AES256 and higher |
| 5.30 | The Bidder must provide the data along with audit trails periodically as per NSDL’s requirements |
| 5.31 | Bidder to support in deporting data from the cloud due to regulatory/statutory mandates at no additional cost to NSDL |
| 5.32 | Bidder to support in transition process post notice by NSDL and support in data migration at no additional cost to NSDL |
| 5.33 | Bidder to mention the mechanism to make sure that the NSDL’s data is erased properly post-transition. |
| 5.34 | Bidder must comply with applicable controls under Framework for Adoption of Cloud Services by SEBI Regulated Entities (REs)-  **Circular No.:** **SEBI/HO/ITD/ITD\_VAPT/P/CIR/2023/033 dated 6th March 2023** |
| **6** | **Hardware Requirements** |
| 6.01 | Detailed specifications for detailed hardware should be provided |
| 6.02 | Specify the configurations including the core, memory, and storage required along with any other specific configurations for the VM/ Physical server |
| 6.03 | Specify the suitable hardware and supporting software that shall deliver the best throughput and performance considering the present volumes and the sizing proposed. Algorithms used for capacity sizing need to be shared |
| **7** | **Database** |
| 7.01 | The database should support horizontal and vertical scalability to support future increases in transaction volumes and increase in the number of concurrent users |
| 7.02 | To support high availability and performance, the system should support active/active as well as active/passive clustering. It should also support adding additional nodes to the cluster |
| 7.03 | Should support tiering of data as per data availability and performance requirements. Most critical and frequently accessed data should be available in tiers that support high performance and so on. |
| 7.04 | Should support compression tiering so that colder (Less frequently accessed) data is compressed to a greater level than actively accessed data in storage |
| 7.05 | Should support parallel backup and recovery operations |
| 7.06 | Should support compressed backup |
| 7.07 | Support full, incremental, and partial backups |
| 7.08 | Support full and partial recovery |
| 7.09 | Support point in time recovery |
| 7.10 | Automatic/Manual tools for Backup and Recovery operations |
| 7.11 | Should support set up of retention period for different types of data |
| 7.12 | Should support manual/automatic archival of data as per defined intervals |
| 7.13 | Should support authentication of users |
| 7.14 | Should support repository-level as well as file-level encryption/Decryption |
| **8** | **Application Performance & Scalability** |
| 8.01 | Ability to process increasing volume of invoices year on year w.r.t. Annual Billing. Current annual billing volume stands at 50k approx. increasing to 75-80k in the following year followed by 100k invoices in 2-3 years of duration |
| 8.02 | Capacity to handle increasing monthly volume of invoices with atleast 10k/month (daily volume may vary) in the current year increasing to 20-25k invoices in the next 2-3 years for the remaining months of the year |
| 8.03 | Ability to handle 50 concurrent users |
| 8.04 | What is the benchmark value of TPS for invoice generation in the proposed application |
| 8.05 | Ability to handle the large volume of emails to be sent from the application |
| 8.06 | Ability to integrate with existing API of Notification engine for sending Emails & Invoices |
| **9** | **Logging, Monitoring, and Reporting** |
| 9.01 | Ability to generate On the Fly/Dynamic Reports from Applications through GUI |
| 9.02 | Ability to generate reports in Application via SSRS Services or using SQL Query from Backend |
| 9.03 | Ability to export the reports to Excel, csv, pdf, docx formats |
| 9.04 | Ability to drill down the Reports |
| 9.05 | Ability to generate a summarized report from an existing report by normal users |
| 9.06 | Ability to incorporate Graphical Representation in Reports. |
| 9.08 | Ability to fetch the result set from other Databases and use it for generating reports by combining it with the data available in ERP Databases |
| 9.09 | Facility to create Reports from the Tool by NSDL IT team using SQL Queries/any Scripting Language/GUI Based Platform or another Object-Oriented Language. |
| 9.10 | Capability to generate comprehensive reports for all services and activities in ERP with drill-down options and graphical dashboards. |
| 9.11 | The capability of the system to restrict report module access based on users' roles and authorization. Reports shall be dynamically changed based on user role/team. |
| 9.12 | Capability to provide industry standard reports like Revenue Analysis Reports, Accounts Receivable Aging Reports, Collection Efficiency Reports, Denial Analysis Reports, etc. |
| 9.13 | Capability to schedule auto-generation of reports in ERP and sending the reports in different formats like HTML, Docx, CSV, Excel, and PDF formats as mail to ERP users/specific email ids with a configurable option to admin role users. |
| 9.14 | Capability to customize Report Layout for existing OOB reports in the solution and to create new Report Layout/Dashboard/Graphical Drill Report layouts |
| 9.15 | Capability to monitor the Report Generation, schedule the report, and provide email/SMS notification to admin users in case of any exception |
| 9.16 | Capability to keep track of each user logging in & out of the system with all values such as time of login, duration, IP, Mac address, etc. |
| 9.17 | The proposed solution should be able to log;  All actions were taken by any individual with root or administrative privileges. Access to all audit trails.  All elevation of privileges.  All changes, additions, or deletions to any account with root or administrative privileges. |
| **10** | **Documentation & Training Requirements** |
| 10.01 | Ability to create a Central repository for sales, service, and other teams |
| 10.02 | The capability of creating a knowledge management system to be used for Sales & Service Agents in the solution using the data present in the Data Repository |
| 10.03 | Ability to create a content Repository for all Modules. |
| 10.04 | The ability for Keyword based content tagging - searchability |
| 10.05 | Ability to search within the content of PDF, Word, Excel, CSV, or Text files |
| 10.06 | Ability to create Content groups |
| 10.07 | Document deliverables include but are not limited to: • Project plan, technical design document, and product specifications • Test plan, test specifications, and test reports • Training Guide • Standard product manual including software media and license materials. • Standard operating procedure documents should be provided. • Detailed installation documents should be included in the documents • Issue tracker during overall project implementation. |
| 10.08 | Detailed technical design document to be created for the development phase and proper test documentation along with approved test results to be shared with the NSDL along with the UAT build. |
| 10.09 | Source code Audit certificate, OEM declaration that the application is devoid of any malicious code, or covert channels, and free from any known bugs at the time of delivery and all subsequent releases of the proposed solution. |
| 10.10 | All works related to the assignment handled are to be well documented and will form part of the deliverables. They should be delivered both in hard copy and soft copy at the end of each stage. |
| 10.11 | Ability to provide free training and educational materials for all items supplied, to the NSDL’s technical staff, on system/application administration, configuration, and entire operations of the proposed solution |
| 10.12 | Training must be provided in all functional areas and should be of sufficient duration – to the User’s satisfaction. User feedback is to be collected and submitted to NSDL. |
| 10.13 | The service provider will be responsible to develop training and reference materials for all the functionality of the software. Training materials should comprehensively cover all graphs, process flows, screenshots of the actual system functionality, etc. |
| 10.14 | All training must be conducted at the NSDL’s Office unless prior approval is given by the NSDL. All training sessions must be conducted before the production launch. |
| 10.15 | Training should be of vendor/OEM certification level standard on the delivered solution with certification training materials. |
| 10.16 | The training should at least cover the following areas: • Functionality available in the solution including logic and methodology of the same • Customization using SDK Toolkit or any other IDE • Customization / Parameterization. • Techniques for slicing and dicing data, information, and output. • Advanced troubleshooting techniques if any. • Deployment of application and identification procedures, application controls, and analysis procedures provided as part of the solution. • Monitoring & management of Webservers, Middleware, and Database as part of the solution • Techniques of customization, development, and configuration required for the solution provided. • System and application administration such as creation/modification and deletion of users, user groups, user privilege settings, user license management, team creation, workflow creation, data import management, email configuration management, Product Configurations, analysis of application & database logs, document repository management, GUI Creation/Modification, Relationship creation for objects in ERP, System Information Security Settings, etc. |

## 6.3. Service Level Agreements

The Vendor understands that the financial ERP implementation is of substantial magnitude and that it would require a tremendous commitment of financial and technical resources for the same, for the tenure of Contract under this RFP. The Vendor, therefore, agrees and undertakes that an exit resulting due to expiry or termination of Contract under this RFP or for any reason whatsoever would be a slow process over six (6) months, after the completion of the notice period, and only after completion of the Vendors obligations under a reverse transition mechanism. During this period of Reverse Transition, the Vendor shall continue to provide the Deliverables and the Services under the contract under this RFP and shall maintain the agreed Service levels. The Company shall make payment for these services as per the terms.

The Company expects the successful Vendor to adhere to the following minimum Service Levels:

1. Any fault/ issue/ defect failure intimated by the Company through any mode of communication like call/e-mail/fax etc. to be acted upon, to adhere to the service levels. Business/ Service Downtime and Deterioration shall be the key considerations for determining “Penalties” that would be levied on the Successful Vendor.
2. The Vendor should have 24X7 monitoring, escalation, and resolution infrastructure.
3. A time-bound problem addressing team (onsite/offsite) for the complete contract period.
4. Vendor to arrange for updation required in the system to meet the changes suggested by RBI/ Govt. of India/ regulatory authorities towards compliance as part of ATS at no extra cost to Company for the entire contract period. Any delay in meeting the timelines would result in a penalty.

The vendor will have to guarantee a minimum uptime of 99.9%, calculated every month. Application (As a whole / any module of the application) availability will be 99.9% 24x7x365. The penalty will be calculated as per the details given below.

**Uptime percentage** - 100% less Downtime Percentage

**Downtime percentage** - Unavailable Time divided by Total Available Time, calculated every month.

**Total Available Time** – 24 hrs per day for seven days a week excluding planned downtime

**Unavailable Time** - Time involved while the solution is inoperative or operates inconsistently or erratically.

|  |  |  |
| --- | --- | --- |
|  | **Uptime Percentage** | **Penalty Details** |
| 1 | A >= 99.9% | No penalty |
| 2 | 99% =< A < 99.9% | 2% of the cost of monthly (Application Technical Support) ATS cost & support management charges (if any) |
| 3 | 98% =< A < 99% | 5% of the cost of monthly ATS & support management charges (if any) |
| 4 | A < 98% | Penalty at an incremental rate of 1% (in addition to a base of 5%) of the cost of monthly maintenance charges for every 0.1% lower than the stipulated uptime |

**Note:**

1. The uptime percentage would be calculated every month based on 24x7 availability and the calculated amount would be adjusted from every subsequent quarter payment. The SLA charges will be subject to an overall cap of 10% of the ATS & support management charges (if any) and thereafter, NSDL has the discretion to cancel the contract. In case there are no pending invoices to be paid by the NSDL to the bidder, the bidder must submit a pay order/cheque payable at Mumbai in favor of NSDL for the same within 15 days from the notice period from NSDL.
2. Availability Service Level Default
   1. Availability Service Level will be measured monthly.
   2. A Service Level Default will occur when the bidder fails to meet Minimum uptime (99.9%), as measured monthly
3. Downtime = Time involved while the application is inoperative or operates inconsistently or erratically.

**Availability Service Level Default**

Availability Service Level will be measured monthly.

A Service Level Default will occur when the vendor fails to meet Minimum uptime (99.9%), as measured monthly.

|  |  |  |
| --- | --- | --- |
| **Severity Level** | **Number of users impacted** | **Effective Downtime** |
| Severity 1 | Any problem where > 20% of the users of the application are affected | 100% |
| Severity 2 | Any problem <= 20% of the users and > 10% of the users of the application are affected | 90% |
| Severity 3 | Any problem where <= 10% of the users of the applications are affected | 80% |

**SLA Penalty Calculation**:

E.g. - There is an incident that occurs under Severity Level 2 for which the downtime is for 5 hours in a month. Therefore, the effective downtime for the month would be:

5 hours x 90% = 4.5 hours

Therefore, the downtime of 4.5 hours would be considered due to this incident while computing the availability of the application.

## 6.4. Training

1. The Vendor will be responsible for training the NDSL employees in the areas of implementation, operations, management, error handling, system administration, etc. The vendor needs to provide a comprehensive training methodology document.
2. The Vendor will be responsible to train all users as identified by the NSDL. There will be no limit on the number of these employees to be trained or the number and size of the batches to be conducted.
3. The Vendor is expected to conduct an Executive Awareness Program for the senior-level management team of NSDL for 2 days.
4. The Vendor is expected to train 30 NSDL personnel as a part of the Core/Technical Team in 3 batches which will be core technical training on the application.
5. The Vendor can use the NSDL’s identified training center or its own. NSDL expects the vendor to set up the required solutions (including the client desktops) for training. NSDL shall not pay any additional amounts to the vendor to create the training environment. However, the NSDL expects the core team training to be conducted from the vendor’s premises.
6. The Vendor will be responsible for installing the required Applications/systems and training server and also ensuring connectivity to the training server, for training at the training centers.
7. The Vendor will be responsible for providing the users with the requisite training material in both hard and soft copies at least for the core team / technical training and end-user training. The onus of preparing the training material will be on the vendor. Training videos with actual walkthrough of enterprise software are preferred to be made available for future references.
8. The Vendor will be responsible for preparing, circulating, and collecting training feedback forms from the participants.
9. The feedback forms will be prepared by the vendors, reviewed, and given to NSDL. The changes, if any, suggested by NSDL or its consultants, should be incorporated and implemented by the Vendor as per the defined change management process
10. The Vendor will be responsible for providing ongoing training at defined intervals to the identified NSDL personnel.
11. The Vendor shall also impart training on 3rd party products proposed to be implemented.
12. The Vendor will provide a detailed training methodology & schedule to NSDL for review and sign–off before the commencement of the training. A proposed training schedule as per the below table

# Deliverable

The scope of this engagement will be development and deployment of an accounting ERP module for NSDL.

The deliverables under the scope of this RFP are mentioned in the following modules:

1. **Vision**:
   1. **Project Plan**: Assessment of the current As-is structure of the processes and matching with the business best practices. A detailed document outlining the functional requirements of the accounting ERP software. This document should cover modules such as general ledger, accounts payable, accounts receivable, fixed assets, cash management, financial reporting, and budgeting.
   2. **Enterprise Software**: A comprehensive system architecture design that illustrates how the accounting ERP software will be structured, including the hardware and software components, network infrastructure, and integration points with other systems. A description of how the accounting ERP software will integrate with other systems already in use by the client, such as CRM (Customer Relationship Management) software, payroll systems, or inventory management systems. This should include details about data exchange, APIs, and any middleware or connectors required.
   3. **Data Migration strategy**: A plan detailing how existing data from the client's legacy accounting systems will be migrated to the new ERP software. This includes data extraction, cleansing, transformation, and loading processes to ensure a smooth transition with minimal disruption to operations.
2. **Validate**:
   1. **Fit/Gap Analysis**: A clear outline of the customization and configuration capabilities of the accounting ERP software offered by the vendor. Specify whether the system can accommodate client-specific business processes, workflows, reporting requirements, and any additional modules or features that may be required. These additional modules if covered in customizations should be mentioned.
   2. **Process Design Documents**: A detailed document outlining the functional requirements of the accounting ERP software basis the current business requirement. A clear outline of the customization and configuration capabilities of the accounting ERP software. Specify whether the system can accommodate client-specific business processes, workflows, reporting requirements, and any additional modules or features that may be required.
   3. **Development Tracker**: A detailed project plan with key milestones, tasks, and estimated timelines for implementing the accounting ERP software. This will give the client a clear understanding of the project scope, duration, and dependencies.
3. **Construct**:
   1. **Functional Specifications**: The delivery requirement for the accounting ERP software shall include the creation of a comprehensive Functional Specification Document (FSD) encompassing the existing requirements as well as any desired customizations beyond the vendor's standard offerings. The FSD will detail all necessary integrations with the organization's current systems, specifying the methods of data exchange, APIs, and any middleware or connectors that may be required. The document should provide a clear roadmap for the development and implementation of the software, ensuring seamless integration and efficient functionality.
   2. **Test Scripts**: The ERP solution shall include a comprehensive set of test scripts that cover all relevant functional, performance, and reliability aspects of the system. These test scripts shall be designed to simulate real-world scenarios and user interactions and shall provide detailed instructions for executing the tests. The test scripts should encompass various areas of the ERP software, including user interfaces, data input and output, system integrations, error handling, and performance benchmarks. The purpose of the test scripts is to ensure thorough testing of the ERP solution, validate its compliance with defined requirements, and identify any defects or inconsistencies. The test scripts shall be documented and made available to the testing team, enabling them to systematically execute and report the test results.
4. **Deploy**:
   1. **Application Configuration Document**: The accounting ERP solution shall include a comprehensive application configuration document that provides detailed instructions and guidelines for configuring and customizing the system based on specific requirements. This document shall cover the following areas: system settings, including language preferences and time zone configurations; user settings, including interface themes and notification preferences; security settings, including user roles, permissions, and authentication methods; integration settings, specifying configurations for seamless data exchange with external systems or APIs; database configuration settings, including connection details and table structures; and customization options, allowing for modifications of features or modules to align with unique business needs. The application configuration document shall serve as a reliable reference for system administrators and stakeholders, ensuring consistent and accurate configuration across different deployments of the accounting ERP solution.
   2. **Technical Specifications**: The deployment of the accounting ERP solution shall be supported by comprehensive technical specifications that outline the necessary hardware, software, and infrastructure requirements. These specifications shall include details regarding the recommended server specifications, storage requirements, and network infrastructure needed for optimal system performance. Clear instructions shall be provided for the installation and configuration of the ERP software, ensuring proper setup of the database and system settings. The technical specifications shall also address data migration and conversion procedures, ensuring the smooth transition of existing data from legacy systems. Security measures, including access controls and secure communication protocols, shall be defined to safeguard sensitive financial data. Furthermore, the technical specifications shall outline backup and disaster recovery procedures, ensuring the availability and integrity of the ERP system. The specifications shall provide guidance for conducting system testing and validation to ensure that the deployed accounting ERP solution meets the defined requirements. By adhering to these technical specifications, the deployment process shall be streamlined, risks minimized, and the accounting ERP solution successfully implemented in a production environment.
   3. **Final Cutover Plan**: The final cutover plan for deploying the accounting ERP solution encompasses the necessary activities and timelines to transition from the current system to the new ERP system smoothly. It includes procedures for migrating data, specifying the cut-off point for system switch-over, conducting user training, managing change, and ensuring thorough testing and validation. The plan also includes a back-out strategy as a contingency measure and outlines post-cutover support to address any issues. By following the final cutover plan, the deployment team can ensure a successful and streamlined transition to the accounting ERP system while minimizing disruptions and maintaining data integrity.

The following will be the deliverable:

1. Functional Specification document (FSD)
2. Application and Security architecture
3. Non-functional requirements covering detailing of non-functional requirements like – exception handling, logging, archiving, monitoring, etc.
4. Integration Requirement Document (IRD)
5. Interface design document and mapping specifications document
6. Technical design document preparation
7. Testing plan, test cases, test scenarios, test scripts, gaps, bugs, fixes, etc. as a part of quality assurance
8. User Training Manuals
9. All documentation including technical, operations, like license terms, user manuals, training manual, technical manual, standard operating procedures, solution architecture and design, system flow document, data dictionary and other necessary documents etc.
10. User Training to NSDL employees (Including Function & Administration)
11. Statement of Work (SOW), Project Plan, Quality Plan, Test Plan, Requirement traceability Matrix, Design Document, Report Design, Test Cases, Test Result, Delivery Notes documents, etc.
12. System maintenance and support
13. System performance monitoring
14. Highest level of support from OEM/reseller & unlimited number of SR during & post implementation.
15. System tuning
16. The Bidder shall also provide the MIS reports as per requirements of NSDL. Any level/ version changes and/or clarification or corrections or modifications in the above-mentioned documentation should be supplied by the bidder to NSDL, free of cost in a timely manner.
17. User Acceptance Testing Plan
18. Release Notes for NSDL specific Instance of the software
19. SLAs

# Timelines for delivery

The bidder is supposed to submit the implementation plan with the Kick off date as 15th October, 2024 and the GoLive of all the modules in a phased manner by 31st March, 2025.

**Please note:**

The selected bidder will provide support as per the scope of the RFP till the tenure of the contract. The bidder should note that the installation of tools must not impact the functioning of the NSDL’s existing solutions.

The implementation plan should provide clear visibility on the resources being deployed including on-site and off-site deployment along with their credentials. It is expected that for Steering Committee and other Management Meetings, appropriately senior personnel are present in person unless otherwise notified by NSDL.

# Commercial Proposal

The commercial proposal will be on the basis of five-year Total Cost of Ownership (TCO). The user details and the TCO template are provided in **Annexure 3 – Total Cost of Ownership** attached with this document. The bidders will need to provide their responses in the format attached in Annexure 3. Other formats will not be considered.

**Please note:**

Once the implementation timeline is agreed on, the selected Partner is expected to adhere to timelines. Penalty will be charged @0.5% of the value of the project for per week delay in Go-live subject to maximum 10% of the order value.

The payment terms and conditions will be discussed and finalized with the bidder to whom the contract is awarded and will be for the following components:

1. License cost
2. Implementation cost
3. Maintenance and support cost

The bidder shall submit a draft of the agreement covering all commercial and legal clauses along with the bid for consideration of NSDL.

# Evaluation Process

The evaluation shall be a two-step process as defined:

1. **Eligibility and technical assessment**

The documents provided by the bidder along with the responses in Annexure 1 and Annexure 2 will be considered for evaluation. Additionally, the quality demonstrated in the demonstration and reference shall be considered. Basis the above factors, all eligible bidders will be shortlisted for commercial negotiations.

1. **Commercial negotiations**

Shortlisted bidders will be invited for commercial negotiations. Basis the negotiations, the contract shall be awarded to the selected bidder.

# Key Instructions for Bidders

## 11.1. Submission of Bid

The bidders are expected to submit the techno-commercial bid electronically to the mail ID provided in Table 1. The mail should contain two files – the Technical Bid covering responses for section 4 to 8 and the Commercial Bid covering response to section 9 other than the draft agreement. The draft agreement will be provided to NSDL in a separate mail. The language for the response will be English. The submission to include relevant word, pdf and excel formats for reviews.

## 11.2. Language of the Bid

The bid prepared by the Bidder, all correspondence and documents relating to the bid exchanged by the Bidder & NSDL shall be written in English.

## 11.3. Validity of the Bid

Bid shall remain valid for 90 days from the date of opening of Commercial Bid.

## 11.4. Late Bid

Any bid received by the NSDL after the deadline for submission of bids prescribed by the NSDL, in Request for Proposal, will not be considered. NSDL may at its discretion consider a bid submitted within maximum three working days after the aforesaid deadline.

## 11.5. Preliminary Examination

1. NSDL will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished and whether the bids are generally in order.
2. Arithmetical errors if any will be rectified on the following basis:
   1. If there is discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
   2. If there is a discrepancy between words and figures, the amount in words will prevail.
3. If the bidder does not accept the correction of errors as per clause 11.5.2, the bid will be rejected.
4. NSDL, at its discretion, may waive any minor informality, non-conformity or irregularity in a Bid, which does not prejudice or affect the relative ranking of any Bidder. This shall be binding on all bidders and NSDL reserves the rights for such waivers.
5. Prior to the detailed evaluation, NSDL will determine the substantial responsiveness of each bid to the RFP. For purposes of these clauses, a substantially responsive bid is one, which conforms to all the terms & conditions of the RFP without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Performance Security, Applicable Laws and Taxes & Duties will be deemed to be material deviation. NSDL’s determination of a Bid’s responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.
6. If a Bid is not substantially responsive, it could be rejected by NSDL and may not subsequently be made responsive by the bidder by correction of the non-conformity.

## 11.6. Liability and Costs

NSDL shall not incur any liability or be liable to any bidder in any manner whatsoever in relation to RFP irrespective of any dispute or disagreement between NSDL and the bidder. The Bidder shall be solely responsible for any cost or expenses incurred by it for submission of its bid pursuant to the RFP.

## 11.7. Jurisdiction and Governing Laws

The competent courts of law at Mumbai alone shall have jurisdiction in respect of all matters connected with the RFP. Arbitration or any legal proceedings shall be held in Mumbai, India.

This RFP shall be governed by and construed and interpreted in accordance with the laws of India.

## 11.8. Bidder’s Obligations

The bidder is obliged to work closely with the NSDL’s employees, officers, consultants, agents’ staff, act within its own authority and abide by directives issued by the NSDL and implementation activities.

The bidder is responsible for managing the activities of its personnel or its representatives and will hold itself responsible for any misdemeanors. The bidder is under obligation to provide consultancy services as per the contract / RFP.

The bidder will treat as confidential all data and information about NSDL, obtained in the execution of their responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of the NSDL.

The bidder shall not use any intellectual property right of NSDL without prior written consent of NSDL including but not limited to marketing, publicity or any such purpose.

The bidder undertakes to provide true and correct information in the bidding process under the RFP and understands that in case of any false or misleading information can lead to blacklisting of such entity and its related parties.

The bidder understands that the relationship between the parties is principal to principal and shall not be construed to be principal to agent relationship.

## 11.9. Use of Contract / RFP Documents and Information

The bidder shall not, without the NSDL’s prior written consent, disclose the Contract / RFP or any provision thereof or any specification, plan, drawing, pattern or information furnished by or on behalf of the NSDL in connection therewith, to any person other than a person employed by the bidder for submission of bid under the RFP in the performance of the Contract / RFP. Disclosure to any such employed person shall be made in confidence & shall extend only as far as may be necessary for purposes of such performance.

The bidder shall not, without the NSDL’s prior written consent, make use of any document or information except for purposes of submission of bids under this RFP or performing the Contract / RFP.

# Annexures

The bidder should send the responses with a copy of supporting documents signed by the authorized signatory of the bidder to the following annexures as per instructions below:

1. **Annexure 1 –** Responses in Column F and G in the “*Eligibility Criteria”* worksheet. In Column F, response to be given whether compliant to the eligibility criteria in *“Yes”* or *“No”.* Remarks if any to be added in Column G. References to be given in the *“References”* worksheet as per the format provided.
2. **Annexure 2** 
   1. Responses to be given inColumn G, H, I, J, K and L in the “*Functional Scope”* worksheet. For functional scope capability to be responded *“Yes”* in any one of the columns out of G, H, I or J. Approx. Effort Required (in mandays) in case not “off the shelf”) to be added n column K and Remarks to be added in Column L.
   2. Responses in Column E and F in the “*Technical Specification”* worksheet. In Column E, either *“Responses to the requirement”* or *“Compliant to the required technical application Yes/No”* *to* be provided. Remarks if any to be added in Column F.
   3. SLAs given in the *“SLA”* worksheet are to be adhered to, no exceptions or other interpretations
   4. Training Requirement as given in the *“Training”* worksheet, remarks to be given by the vendor, it the same is acceptable or any better methodology will be followed
3. **Annexures 3 –** Total cost of ownership.
4. **Annexure 4 –** Responses from the bidder against each of the points mentioned in the “Compliance checklist SEBI Cloud Framework”*.*
5. **Other documents to be provided**
   1. **Technical Presentation on the following points**
      1. Reference Architecture including BCP
      2. RTO & RPO parameters
      3. Replication methodology
      4. Infra Monitoring Mechanism in case of cloud deployment
      5. SOC Integration
   2. **Service Support**
      1. Post implementation – Service Support model including escalation matrix
      2. SLAs offered for uptime
      3. Warranties and ATS