

Section VI: Schedule of Requirements

**Procurement of Design, Development and  
Implementation of the Core Application System and  
Website for National Credit Guarantee Institution Limited**  
**IFB No: NCGIL/PRO/DPC/2025/08**

NCGI Bidding Doc

## 1. Background

The National Credit Guarantee Institution Limited (NCGIL) is Sri Lanka's first public-private credit guarantee company, established at the national level with support from the Asian Development Bank (ADB). Jointly owned by the Government of Sri Lanka (GoSL) and 13 leading financial institutions, NCGIL provides collateral-free credit guarantees to its shareholder banks to help viable micro, small, and medium enterprises (MSMEs) gain better access to formal finance. NCGIL promotes entrepreneurship, economic inclusion, and sustainable growth by mitigating credit risk for financial institutions.

90% of the shareholding is owned by the Government of Sri Lanka which was funded by the Asian Development Bank through a loan of USD 50 million provided to GoSL. Currently, the remaining 10% of the shares are owned by the following Shareholding Financial Institutions (SFIs):

- Bank of Ceylon
- Peoples' Bank
- Commercial Bank of Ceylon PLC
- Hatton National Bank PLC
- Sampath Bank PLC
- National Development Bank PLC
- Nations Trust Bank PLC
- Seylan Bank PLC
- Regional Development Bank
- Sanasa Development Bank PLC
- Central Finance Company PLC
- Citizens Development Business and Finance PLC
- LB Finance PLC

The main objective of NCGIL is to provide partial credit guarantees to the Shareholder Financial Institutions (SFIs) to encourage them to provide uncollateralized lending to the MSMEs based on the viability of the projects and their cash flows.

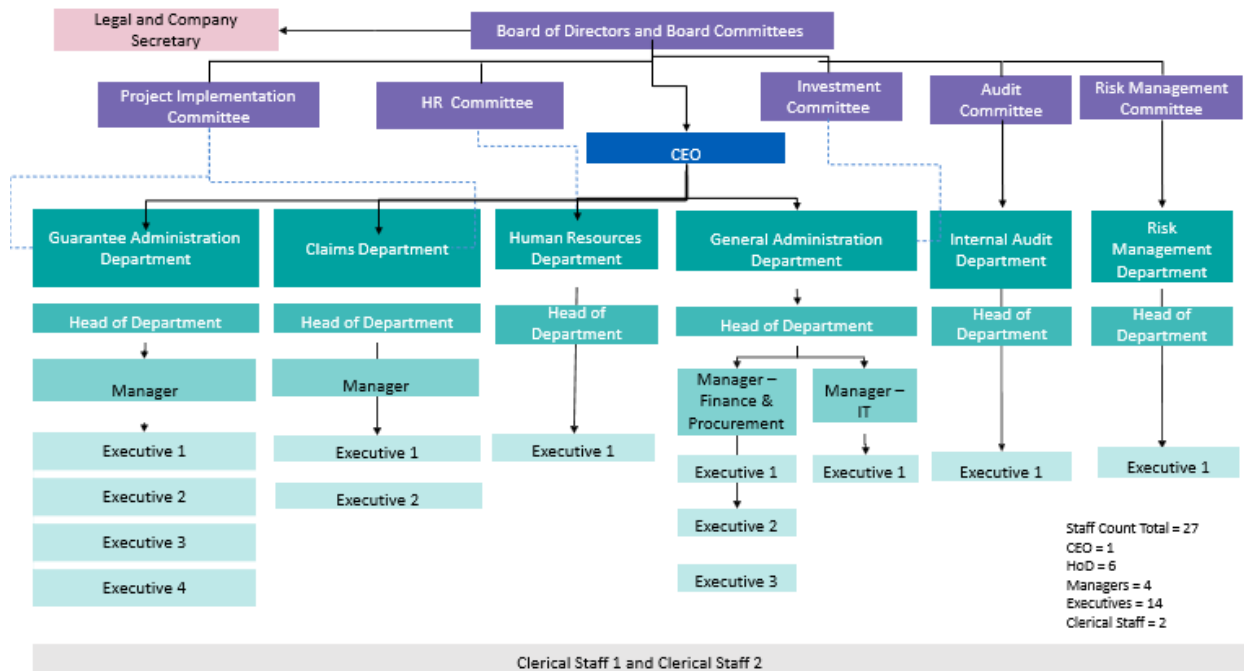
The requirement is to design, develop, implement, provide maintenance and support for a "Core Application system (Guarantee Operations System, Finance Module and Treasury Management Module) and a website for the NCGIL".

### 1.1 Legal requirements to be met by the System

- Personal Data Protection Act (PDPA), No. 9 of 2022
- Electronic Transactions Act No. 19 of 2006
- Computer Crimes Act No. 24 of 2007
- Information Communication Technology Act No. 27 of 2003 (amended)
- Right to Information Act No. 12 of 2016

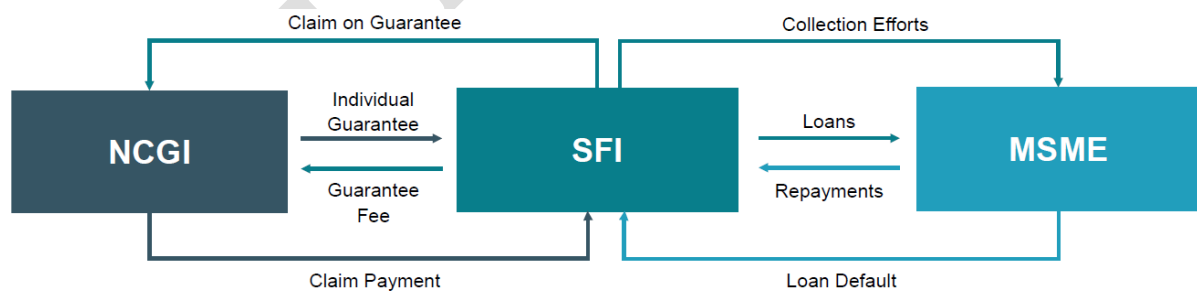
## 2 Overview of the National Credit Guarantee Institution Limited

### 2.1 Organizational Structure



### 2.2 Operational Structure of the NCGIL

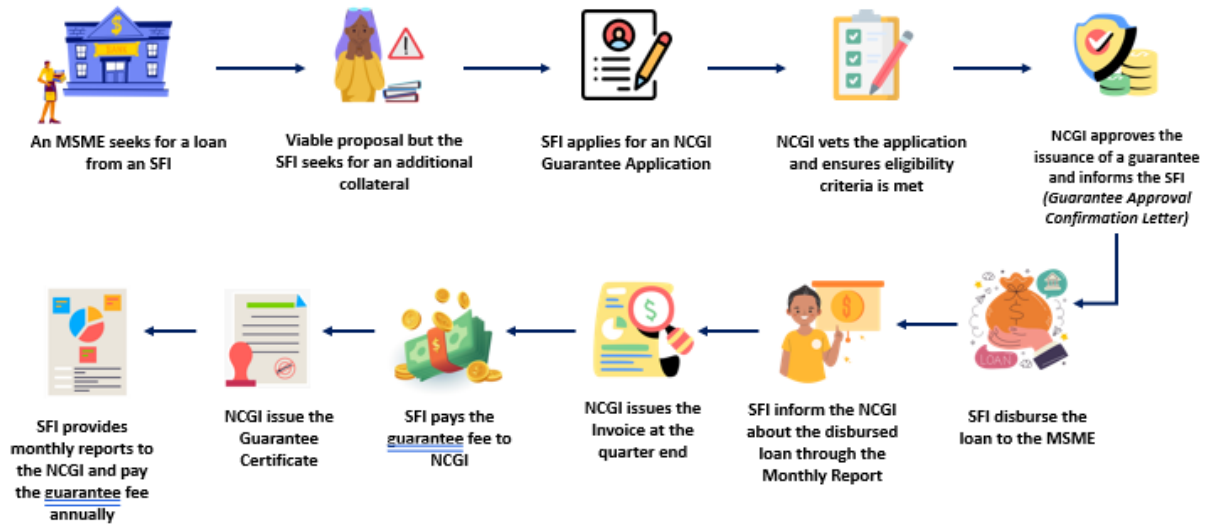
The operational structure of the NCGIL is as follows:



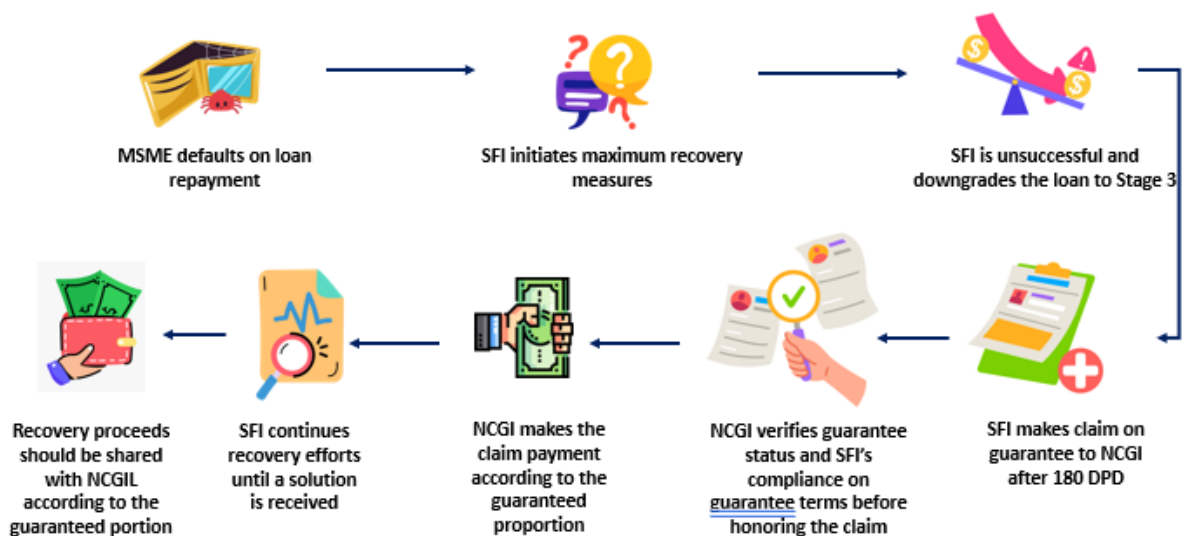
- NCGI** The **National Credit Guarantee Institution Limited (NCGI)** supervises the management of credit guarantees.
- SFI** The **Shareholding Financial Institution (SFI)** utilizes the NCGI framework to provide access to finance for underserved MSMEs.
- MSME** **Micro, Small and Medium Enterprises (MSMEs)** qualify as the eligible borrowers under the NCGI framework and are exclusively permitted to seek loans from SFIs.

The high-level processes of the NCGIL are shown below:

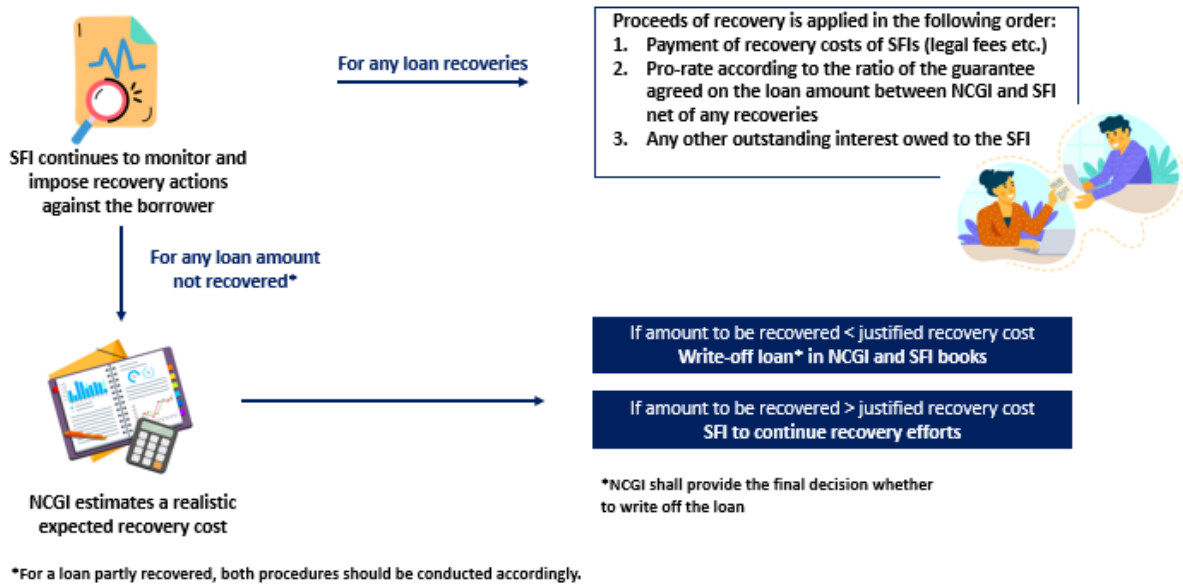
## Guarantee Application Process



## Guarantee Claim Process



# Guaranteed Loan Recovery Process



## 2.3 Overview of the Current Information Systems

Currently, NCGIL's critical operations are conducted manually using excel, including guarantee application processing, claims processing, client data management, document verification, reporting, and performance tracking.

In addition, Finance and Treasury functions are also covered using excel. There is a website developed with limited functionalities (<https://www.ncgil.lk/>).

### *Transaction Volumes*

The current transaction volumes (number of guarantee applications) are on average 300 per month.

## 3 Objectives of Implementing a Core Application System and Website of NCGIL

The key objectives of implementing a core application system are:

- **Streamline Processes:** A system can automate routine tasks, reduce manual data entry, and eliminate redundant processes, leading to more efficient operations. By integrating multiple departments and functions, the system ensures a seamless flow of information, minimizes errors, and establishes standardized workflows across the organization. This promotes consistency, regulatory compliance, and transparency in all operations.
- **Improve Decision Making:** A system provides access to real-time data and advanced analytics, enabling informed and timely decision-making. It supports forecasting,

budgeting, and strategic planning by providing accurate insights into operational trends, financial performance, and resource utilization. Additionally, tracking key performance indicators (KPIs) within the system helps identify bottlenecks, monitor progress, and prioritize areas for improvement.

- **Increase Productivity and Cost-Effectiveness:** A system can automate repetitive tasks, freeing up employees to focus on higher-value activities. By streamlining processes, optimizing resource utilization, and minimizing errors, a system can reduce operational costs. Furthermore, it can provide a scalable platform that can accommodate increased demand and complexity, supporting organizational growth.
- **Enhance Collaboration and Information Sharing:** With centralized data and integrated modules, a system fosters collaboration across departments, enabling teams to share information seamlessly. This reduces communication gaps, enhances coordination, and supports a unified organizational strategy.

The key objectives of an interactive website:

- **Establishing Brand Identity and Credibility:** A primary objective of the proposed website is to serve as a digital storefront that validates a business's existence. In a competitive market, the website must communicate professionalism and trust through high-quality UI/UX design and consistent branding. This objective is met when a visitor immediately understands who the Institute is, what they value, and why they are an authority in their specific field.
- **Providing Information:** The proposed websites often function as a centralized knowledge hub to educate the target audience.
- **Enhancing User Engagement and Retention;** The proposed website aims to keep users coming back by providing interactive value. The goal is to increase the "stickiness" of the site, ensuring that the user views the platform as an essential part of their daily workflow or decision-making process.

## 4 Scope of Work

The scope of work is to design, develop and implement a core application system which includes the following:

- Guarantee Operations System
- Finance Module
- Treasury Management Module

and a website for NCGIL.

This section provides a brief overview of the scope of work:

No	Activity	Key Scope / Sub-Activities	Deliverables
1	<b>Project Planning &amp; Governance</b>	<ul style="list-style-type: none"> <li>•Prepare Initial Project Plan with methodology, infrastructure requirements, transition approach, customization plan, site preparation and support required from NCGIL.</li> <li>•Prepare Detailed Project Implementation Plan including task duration, start/end dates, resources, responsible parties, man-days, and critical path.</li> <li>•Work Breakdown Structure (WBS) with sequencing and timelines.</li> <li>•Define project organization structure and responsibility matrix for Contractor and NCGIL.</li> <li>•Define project management tools, communication plan, and review schedules.</li> <li>•Establish steering committee and governance structure.</li> <li>•Establish escalation procedures and risk management framework.</li> <li>• Finalize project plan with NCGIL and obtain formal sign-off before execution.</li> </ul>	<ul style="list-style-type: none"> <li>• Signed Detailed Project Implementation Plan</li> <li>• Risk Management Plan</li> </ul>

2	<b>Verification and Validation of Requirements</b>	<ul style="list-style-type: none"> <li>• Verify Functional Requirement Specifications (FRS) and Non-Functional Requirements (NFR).</li> <li>• Ensure alignment between operational manuals, business processes, and system requirements.</li> <li>• Validate completeness and accuracy of requirement documents.</li> <li>• Address stakeholder feedback and revise documentation.</li> <li>• Obtain formal approval and sign-off from NCGIL.</li> </ul>	<ul style="list-style-type: none"> <li>• Signed-off FRS and NFR documents</li> </ul>
3	<b>Solution Design and Architecture</b>	<ul style="list-style-type: none"> <li>• Design overall system architecture covering application, database, infrastructure, hosting, and Disaster Recovery (DR).</li> <li>• Design system functions, screens, data formats and methods for data entry.</li> <li>• Design workflows, approval hierarchies, alerts and notification mechanisms.</li> <li>• Develop web-based architecture compatible with major browsers and devices.</li> <li>• Design modular system architecture allowing independent module deployment and maintenance.</li> <li>• Define integration methods, interfaces and security controls with external systems.</li> <li>• Design user-friendly UI/UX ensuring usability and operational efficiency.</li> </ul>	<ul style="list-style-type: none"> <li>• Solution Design Document</li> <li>• System Architecture Blueprint</li> </ul>

		<ul style="list-style-type: none"> <li>•Prepare complete solution design blueprint and obtain stakeholder sign-off.</li> </ul>	
4	<b>Supply, Installation, Customization and Commissioning of Core Application System</b>	<ul style="list-style-type: none"> <li>•Develop/customize modules including Guarantee Operations System, Finance Module, and Treasury Management Module.</li> <li>•Implement workflows, validation rules, security roles, approval hierarchies and configuration settings.</li> <li>•Integrate Finance and Treasury modules with Guarantee Operations System.</li> <li>•Install and configure integration systems for data exchange.</li> <li>•Conduct internal module testing and defect resolution.</li> <li>•Perform Quality Assurance including unit testing, integration testing, performance testing, and security testing.</li> <li>•Facilitate User Acceptance Testing (UAT) with stakeholders and resolve feedback issues.</li> <li>•Prepare technical, functional and operational documentation.</li> <li>•Address independent security review conducted by CERT prior to go-live on the planned go- live environment.</li> <li>• Obtain sign-off for UAT.</li> </ul>	<ul style="list-style-type: none"> <li>•QA Test Plans, Test Cases and QA completion Reports</li> <li>•UAT Plan, Test Scenarios and Execution Reports</li> <li>•UAT Sign-off Document</li> </ul>
5	<b>Data Migration</b>	<ul style="list-style-type: none"> <li>• Assess existing data sources (Excel files and hard-copy records).</li> <li>•Define migration requirements and specifications.</li> </ul>	<ul style="list-style-type: none"> <li>• Data Migration Completion and Sign-Off Report</li> </ul>

		<ul style="list-style-type: none"> <li>•Provide data templates and validation formats for NCGIL.</li> <li>•Coordinate digitization of hard-copy records provided by NCGIL.</li> <li>•Convert and migrate data into system-compatible formats.</li> <li>•Validate data accuracy and completeness prior to go-live.</li> </ul>	
6	<b>Training of Staff and Stakeholders</b>	<ul style="list-style-type: none"> <li>• Conduct training needs assessment and identify user groups.</li> <li>•Develop training materials including manuals, guides, presentations and recorded videos.</li> <li>•Provide technical training on administration, configuration, monitoring, troubleshooting, security, and backup.</li> <li>•Conduct hands-on training sessions.</li> <li>•Provide end-user functional training on system usage and workflows.</li> </ul>	<ul style="list-style-type: none"> <li>•End-User Training Manuals</li> <li>•Technical and Administrative Guides</li> <li>•Training Presentations</li> <li>• Recorded Training Videos</li> <li>•Training Completion (Functional and Technical) and Knowledge Transfer Report</li> </ul>
7	<b>Final Preparation and Go-Live</b>	<ul style="list-style-type: none"> <li>• Perform final configuration, integration testing, volume and stress testing.</li> <li>• Complete data migration and system setup.</li> <li>• Establish central helpdesk support.</li> <li>•Switch system to production environment.</li> <li>• Monitor system performance and resolve initial operational issues.</li> </ul>	<ul style="list-style-type: none"> <li>•Fully deployed system in production</li> <li>•Configured user roles and security permissions</li> <li>•Final Deployment Report and Go-Live Sign-off</li> <li>•System Monitoring and Optimization Plan</li> </ul>
8	<b>Post Go-Live Operational Acceptance Testing</b>	<ul style="list-style-type: none"> <li>• Provide Operational Acceptance) support for 3 months after go-live.</li> </ul>	<ul style="list-style-type: none"> <li>• Sign-off of the Operational Acceptance Testing and Issuance of the Operational</li> </ul>

		<ul style="list-style-type: none"> <li>•Deploy one functional consultant onsite/available during Operational Acceptance.</li> <li>• Provide on-call technical consultant support (DBA/system admin).</li> <li>• Monitor system performance and optimize operations.</li> <li>• Conduct knowledge transfer and operational handover.</li> </ul>	Acceptance Certificate
9	<b>Website Design, Development and Deployment</b>	<ul style="list-style-type: none"> <li>•Conduct website requirements analysis aligned with NCGIL objectives and branding.</li> <li>•Tri-language capability</li> <li>•Unicode compliance for Sinhala/Tamil</li> <li>•Design website architecture, navigation structure, and responsive UI/UX.</li> <li>•Develop website functionalities and integrate Content Management System (CMS). <ul style="list-style-type: none"> <li>- Role based access control</li> <li>- Audit log for user activities</li> </ul> </li> <li>•Ensure cross-browser compatibility and multi-device responsiveness.</li> <li>•Implement security controls and applicable standards compliance. <ul style="list-style-type: none"> <li>- SSL HTTPS enforced</li> <li>- WAF</li> <li>- Secure authentication for admin (2FA/MFA)</li> <li>- VAPT before go-live</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Sign-off for the design document of the NCGIL website.</li> <li>• Sign-off for the fully functional NCGIL website with CMS.</li> </ul>

		<ul style="list-style-type: none"> <li>•Conduct testing including functional, performance, security and compatibility testing.</li> <li>•Deploy and stabilize the website after go-live.</li> </ul> <p>The following functions are required but not limited to:</p> <p>(i) Design of an interactive website</p> <ul style="list-style-type: none"> <li>• Clear and modern UI/UX</li> <li>• Responsive design (mobile, tablet, desktop)</li> <li>• Branding alignment (colors, logo, fonts)</li> </ul> <p>(ii) Websites development</p> <ul style="list-style-type: none"> <li>• Frontend and backend development using open source</li> <li>• CMS integration</li> <li>• Page creation (Home, About, Services, Contact, etc.) where the content would be provided by NCGIL</li> <li>• Integration of forms and interactive features</li> </ul> <p>(iii) Content Management</p> <ul style="list-style-type: none"> <li>• Easy-to-use admin panel</li> <li>• Content upload and formatting</li> <li>• SEO-friendly structure</li> </ul> <p>(iv) Basic features</p> <ul style="list-style-type: none"> <li>• Contact form with email notifications</li> <li>• Social media integration</li> <li>• Search functionality</li> <li>• Security features (SSL, data protection)</li> <li>• Analytics integration (e.g., Google Analytics)</li> </ul>	
10	<b>Annual Maintenance Contract (AMC) Support for the</b>	<ul style="list-style-type: none"> <li>•Provide application maintenance support for five (5) years after the completion of the Operational Acceptance Testing.</li> </ul>	<ul style="list-style-type: none"> <li>• Sign-off for the satisfactory services provided for each quarter under AMC and LMC</li> </ul>

	<b>core application system and Annual License Maintenance Contract (LMC)</b>	<ul style="list-style-type: none"> <li>• Provide License Maintenance support for five (5) years after go-live.</li> <li>•Rectify defects and malfunctions at no additional cost.</li> <li>•Provide support based on the Service Level Agreement. (SLA)</li> <li>•Transfer knowledge to NCGIL team to enable independent operations.</li> </ul>	
11	<b>Initial Cloud Set-up, Pre- Go Live Hosting and Hosting Support for the core application system, website backup and disaster recovery.</b>	<ul style="list-style-type: none"> <li>• NCGIL would provide these environments on the Local Government Cloud (LGC)</li> <li>• The contractor should install commission the core application system and the website on the LGC.</li> </ul>	Issuance of the Installation Certificate on completion of the Initial Cloud Setup for the core application system, disaster recovery and website

### Expected Number of Users

The following table provides the current core application users.

Type of User	Module	Number of Users
Internal Users	Guarantee Operations System	15
	Finance Module	5
	Treasure Management Module	5
External User (Shareholding Financial Institution)	Guarantee Operations System	25

The Core Application System should be able to handle large volumes of data and accommodate the growing needs of National Credit Guarantee Institution Limited. The Contractor should consider the volumes mentioned in the Overview of the National Credit Guarantee Institution Limited. It is estimated that these volumes would grow by approximately 100% annually during the first three years post implementation and thereafter 50% and 25% respectively. The proposed Core Application System should be capable of scaling up to the above-mentioned growth.

## 5 Implementation Schedule

The proposed implementation schedule of the NCGIL's core application system is as follows:

Item	Milestones & Module Description	Duration
1	Acceptance of the following: <ul style="list-style-type: none"> <li>Signed-off Detailed Project Implementation Plan</li> <li>Signed-off FRS and NFR documents</li> </ul>	<i>T+ 2 Months</i>
2	Acceptance of the Solution Design Document and Architecture Blueprint	<i>T+ 4 Months</i>
3	Go-Live of the Guarantee Operations System Acceptance of the following: <ul style="list-style-type: none"> <li>QA Test Plans, Test Cases and QA Completion Reports</li> <li>UAT Plan, Test Scenarios and Execution Reports</li> <li>UAT Sign-off Document</li> <li>Fully deployed system in production</li> <li>Configured user roles and security permissions</li> <li>Final Deployment Report and Go-Live Sign-off</li> <li>System Monitoring and Optimization Plan</li> </ul>	<i>T+ 8 Months</i>
4	Go-Live of the Finance and Treasury Management Module Acceptance of the following: <ul style="list-style-type: none"> <li>QA Test Plans, Test Cases and QA Completion Reports</li> <li>UAT Plan, Test Scenarios and Execution Reports</li> <li>UAT Sign-off Document</li> <li>Fully deployed system in production</li> <li>Configured user roles and security permissions</li> <li>Final Deployment Report and Go-Live Sign-off</li> <li>System Monitoring and Optimization Plan</li> </ul>	<i>T+ 9 Months</i>
5	Go-Live Data Visualization Acceptance of the following: <ul style="list-style-type: none"> <li>QA Test Plans, Test Cases and QA Completion Reports</li> <li>UAT Plan, Test Scenarios and Execution Reports</li> <li>UAT Sign-off Document</li> <li>Fully deployed system in production</li> <li>Configured user roles and security permissions</li> <li>Final Deployment Report and Go-Live Sign-off</li> <li>System Monitoring and Optimization Plan</li> </ul>	<i>T+ 9 Months</i>

## 6 Proposed Future State

Refer the attached Functional Requirements Specification and Non-Functional Requirements Specification in Annexure 1 and Annexure 2.

## 7 Technical Requirements

Under the technical requirements the following basic criteria should be covered by the Contractor.

### 7.1 Software Requirements

The proposed software should have the capability of operating on the cloud.

### 7.2 Software Security and Compliance

The Contractor should implement robust security techniques, including, but not limited to, user authentication, authorization, backups and disaster recovery. The software shall comply with all applicable security standards and regulatory requirements of the banks, ensuring suitability for deployment in banking environments.

### 7.3 Interoperability

The proposed Guarantee Operations System should be able to interact with the Finance and Treasury Management Module. It should support standard data formats, messaging protocols, and APIs (Application Programming Interfaces) to ensure smooth integration and interoperability with these external systems.

### 7.4 Data Management

The Core Application System should have robust data management capabilities to handle large volumes of data. This includes efficient data storage, retrieval, indexing, and querying mechanisms. Additionally, data quality controls, data validation, and data synchronization functionalities are crucial for maintaining accurate and consistent information.

### 7.5 Performance and Reliability

The proposed Core Application System should be highly efficient and reliable to ensure smooth operations within National Credit Guarantee Institution Limited. It should be capable of handling real-time data processing, supporting concurrent user interactions, and delivering prompt responses. The system should also have mechanisms in place to ensure high availability, fault tolerance, and disaster recovery to minimize downtime and ensure uninterrupted services.

The following SLAs should be maintained during the Operational Acceptance Testing and Support and Maintenance Period. The expected SLAs should be different based on the severity or the priority of the issue:

- Critical – A production issue that causes complete business stoppage or major risk
- High – A serious issue causing major degradation, but the system is still partially usable
- Medium – A non-critical issue causing inconvenience, limited impact, or affecting a smaller group
- Low – A minor issue with little business impact

	Critical	High	Medium	Low
Response Time	15- 30 minutes	30 minutes – 1 hour	2-4 business hours	1 business day
Resolution Time	4-8 hours	1- 2 business days	3 – 5 business days	5 - 10 business days