



Ministry of Finance, Planning and Economic Development

Department of State Accounts

PROCUREMENT DOCUMENT

(Two Envelope System: Single-Stage Two Envelope Bidding Procedure)

Annexure I

Functional Requirements Specification (FRS)

**Procurement of Design, Development and Implementation
of a Payroll System for Government Organizations**

IFB No: DSA/PROC/NCB/2026/02

Employer:

Director General
Department of State Accounts
Room Number 101, 1st Floor,
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Functional Requirements Specification (FRS)

S/N	Requirement	S/C	Remarks
1. General Requirements			
1.1	Password Setup		
1.1.1.	The system shall provide a facility to define password expiry periods both as a global system-wide parameter and at the user group level. This ensures flexibility to apply different password validity durations based on user roles, security sensitivity, or organizational policies.		
1.1.2.	The system shall allow administrators to set minimum and maximum password length parameters, ensuring that passwords meet established security standards while accommodating system usability requirements.		
1.1.3.	The system should provide the ability to define alphanumeric and special character requirements for user passwords. These rules shall enforce strong password composition (e.g., inclusion of uppercase letters, lowercase letters, numbers, and special symbols) to strengthen system security and reduce susceptibility to brute-force attacks.		
1.1.4.	The system shall maintain a password history to prevent users from reusing their previous passwords within a defined number of cycles. This control enhances security by ensuring that users periodically create new and distinct credentials.		
1.1.5.	The system shall provide the ability to define a maximum number of unsuccessful login attempts. Once the threshold is reached, the system shall automatically lock the user account and require administrator intervention or secure recovery procedures to restore access.		
1.1.6.	The system shall allow users to change their own passwords at any time through a secure interface, without requiring system administrator involvement. This promotes user autonomy while maintaining compliance with password strength and validation policies.		
1.1.7.	The system shall provide a facility to disable or deactivate user IDs when required—such as in cases of resignation, suspension, or prolonged inactivity. Upon deactivation, the system shall automatically record the relevant details, including the user ID, reason for deactivation, date and time		

S/N	Requirement	S/C	Remarks
	of action, and the identity of the administrator who performed the operation. This ensures full accountability, traceability, and compliance with organizational security and access control policies.		
1.2.	One-Time Password (OTP) Authentication		
1.2.1.	The system shall support the generation of a unique, time-bound One-Time Password (OTP) for user authentication or transaction verification. The OTP shall be automatically generated by the system and securely delivered via configurable channels such as email, SMS, or mobile authenticator applications.		
1.2.2.	The system shall provide a facility to define and configure the OTP validity period (e.g., 2–10 minutes) as a global or module-level parameter, after which the OTP will automatically expire and become invalid for use.		
1.2.3.	The system shall allow administrators to define the maximum number of OTP resend and retry attempts to prevent misuse or brute-force attempts, ensuring security without compromising user accessibility.		
1.2.4.	The OTP mechanism shall be capable of being integrated as part of a Multi-Factor Authentication (MFA) process, requiring users to validate their credentials (e.g., username and password) in combination with an OTP for enhanced identity assurance.		
1.2.5.	For critical transactions (e.g., approvals, data modifications, or financial submissions), the system shall enforce OTP validation to ensure that only authenticated and authorized users can complete sensitive operations.		
1.2.6.	The system shall maintain a comprehensive audit log of all OTP-related activities, including OTP generation, delivery status, validation attempts, and expiry events. These records shall be included in the system's main audit trail for compliance and security monitoring.		
1.2.7.	All OTPs shall be encrypted during generation, transmission, and validation to prevent interception or replay attacks. The system shall ensure that OTPs are stored and verified using industry-standard cryptographic techniques in compliance with ISO/IEC 27001 and OWASP guidelines.		

S/N	Requirement	S/C	Remarks
1.3.	Audit Log		
1.3.1.	The system shall maintain a comprehensive and tamper-evident audit log recording all additions, modifications, and deletions made to any data stored within the system. Each log entry shall capture key details including the user ID, timestamp, nature of the change, and the affected data element. This ensures full traceability of all system transactions and administrative activities.		
1.3.2.	The system shall maintain audit logs of all instances where sensitive or classified data (as defined by the organization's data classification policy) is viewed, queried, or exported by any user. Each access event must be logged with user identification, time of access, and the specific data viewed to ensure compliance and accountability.		
1.3.3.	The ability to alter, archive, or delete audit logs or individual log entries shall be strictly restricted. Such actions shall only be permitted through the joint authorization of multiple designated officers (e.g., Chief Information Officer and Security Administrator) and shall never be allowed to a single individual. This control prevents unauthorized tampering and preserves the evidentiary value of audit records.		
1.3.4.	All audit logs shall form an integral part of the system's daily backup process. Backup procedures must ensure that audit logs are securely stored, encrypted if required, and recoverable for forensic or compliance verification purposes in the event of system restoration or incident investigation.		
1.4.	Application Administration		
1.4.1.	The system shall allow administrators to publish system-wide messages or memos displayed to users upon login, with the ability to update or replace messages as needed.		
1.4.2.	The system shall provide a facility for the administrator to view real-time user session information at any given point. This shall include details such as the number of users currently logged in, their login and logout times, session status (active/inactive), and network identifiers such as IP address and/or MAC address. This feature shall support effective system monitoring, audit, and security oversight.		

S/N	Requirement	S/C	Remarks
1.5.	Classification of information		
1.5.1.	The system shall provide a facility to classify documents as “Internal”, ensuring such documents are restricted to internal use only and not shared with any external parties, except authorized Government representatives.		
1.5.2.	The system shall allow documents to be classified as “Confidential”, making them accessible only to the document owner or designated group of owners, and to any additional users explicitly approved by the owner. This ensures strict confidentiality and controlled information sharing within the system.		
1.6.	Interfacing with External Systems		
1.6.1.	External Data Exchange – Inbound Communication The system shall be capable of receiving information from any external system through the use of open and industry-standard communication protocols (e.g., RESTful APIs, SOAP, XML, JSON, or other approved standards). This ensures seamless data interoperability and future system expansion.		
1.7.	External Data Exchange – Outbound Communication		
1.7.1.	The system shall be capable of transmitting information to other Government systems or agencies (such as the Treasury, Department of Customs, or similar entities) using recognized open communication standards. This capability shall support secure, reliable, and real-time data sharing between systems.		
1.7.2.	The system shall provide facilities to integrate or interface with external applications without requiring any modifications to the core application. All integrations should be handled through configurable APIs, adapters, or middleware layers to preserve core system integrity and maintainability.		
1.8.	File Uploads		
1.8.1.	The system shall support the upload and import of information from widely used proprietary formats such as Microsoft Office (Word, Excel, Access) and as well as open standard formats including Unicode text files, ASCII text files, and HTML documents, Open Standards, etc.		

S/N	Requirement	S/C	Remarks
1.8.2.	The system shall provide facilities to upload and process data from structured text files provided in known record formats—for example, comma-separated values (CSV) or other delimited record sets—allowing seamless data migration and integration from external sources. This will identify in the Discovery session in detail.		
1.9.	Language Requirements		
1.9.1.	The system shall support data entry and display of selected information within the eGovernment Payroll System (eGPS) application in all three national languages (English, Sinhala, and Tamil) This capability ensures inclusivity and compliance with the Official Languages Policy of Sri Lanka, enabling users from different linguistic backgrounds to operate the system effectively. During the requirement-gathering and configuration phase, the project team shall identify and finalize the specific modules, fields, and functional areas that require multi-language enablement. This process will ensure that language support is applied only where operationally necessary and contextually relevant, optimizing both usability and system performance.		
1.9.2.	The multi-language configuration shall also include: • Support for Unicode-compliant data entry and rendering, ensuring proper display of Sinhala and Tamil characters. • Field-level language mapping for key master data (e.g., item descriptions, organization names, tender titles). • Seamless switching between languages within user interfaces and reports.		
1.9.3.	The system shall support the translation of selected master data (e.g., organization names, payroll categories, item descriptions) and transactional data fields where multi-language input is required. Translated text shall be stored alongside the original content to ensure consistency in reporting and search functions.		
1.10.	Definition of Workflow		
1.10.1.	The system shall provide a facility to define and configure standard workflows governing all related activities handled within the application. This configuration shall support the		

S/N	Requirement	S/C	Remarks
	automation of business processes, ensuring consistency, traceability, and compliance with organizational procedures.		
1.10.2.	The system shall allow administrators to assign specific users with authority to perform designated tasks as defined in the workflow configuration.		
1.11.	Group - Level Authorization		
1.11.1.	The system shall also enable the assignment of entire user groups or roles with authority to perform specific workflow tasks, ensuring flexibility and alignment with role-based access control (RBAC) principles.		
1.11.2.	For each standard procedure defined in the workflow, the system shall allow the configuration of initiation points, identifying the users or roles authorized to initiate the process.		
1.11.3.	The system shall provide the ability to define multiple sub-tasks within a standard workflow procedure, allowing for a detailed breakdown of process stages and responsibilities.		
1.11.4.	For each sub-task, the system shall enable the definition of the user level or designation permitted to perform the activity.		
1.11.5.	The system shall allow administrators to define the order and dependencies of workflow tasks by specifying predecessor and successor relationships. This will enable controlled task progression and validation of completion prerequisites.		
1.11.6.	The system shall provide flexibility to allow, for certain functions, the user to select an appropriate route or path within the workflow, based on operational or decision-making requirements.		
1.11.7.	The system shall support the definition of task deadlines and priority levels, and be capable of tracking whether tasks have been accepted, rejected, delegated, or completed. It shall also automatically generate context trails linking objects and actions to maintain full process traceability.		
1.11.8.	Users shall be able to query and monitor assigned tasks and receive notifications or alerts when scheduled deadlines are not met. The system shall be configurable to automatically		

S/N	Requirement	S/C	Remarks
	reassign or redirect overdue tasks to alternate users or supervisors based on pre-defined escalation rules.		
1.11.9.	The system shall maintain and clearly identify the latest approved or active version of each document or record for operational use, while retaining all historical versions for audit and reference purposes.		
1.11.10.	The system shall provide a dedicated facility within the workflow module for authorized government officers to record minutes, comments, and observations directly into the corresponding electronic file during the processing of any transaction or approval workflow. This feature ensures that all official communications and decisions are systematically documented and traceable within the system.		
1.11.11.	Each minute or remark entered in the file shall automatically capture and store the following metadata: ○ Name and designation of the officer entering the minute or remark. ○ Date and time of entry. Linked workflow activity or stage where the minute was recorded. This ensures complete transparency and accountability in documenting administrative actions and decision trails.		
1.11.12.	The system shall support the entry of minutes and remarks in all three official languages of Sri Lanka — Sinhala, Tamil, and English. Officers shall have the option to type directly in any of these languages or select the preferred input language at the time of entry. This ensures inclusivity, compliance with the Official Languages Policy, and uniform communication across diverse administrative units.		
1.11.13.	All recorded minutes and remarks shall be displayed within the file view in chronological order, along with officer details and timestamps. The system shall allow users to filter, search, and print minutes based on language, officer, or date range for audit or reporting purposes.		
1.11.14.	All minute entries shall be read-only once saved and shall be included in the system audit log. Any modification or deletion shall require authorized approval and shall be fully traceable to maintain document integrity and authenticity.		

S/N	Requirement	S/C	Remarks
1.11.15.	System should allow the super-user from the MoF to modify workflows or add users for a role in the workflow.		
1.11.16.	Alerts should be sent to users when a task is assigned or pending in their respective task list.		
1.11.17.	System shall facilitate defining the timelines for completion of a given activity in the workflow and enable time tracking based escalation in case of delays at any stage of approval.		
1.11.18.	The system should allow the user to set reminders for a task in which case an auto generated mail/alert should be sent on the specified date.		
1.12.	Document Classification and Security		
1.12.1.	A Hybrid Cloud Architecture will be used. All data classified as "Secret" will be hosted on-premise, while other components may be cloud-hosted, connected via a secure API Gateway.		
1.12.2.	Document Security: ○ Virus Scanning: All file uploads must be scanned by an integrated anti-virus engine. ○ Watermarking: All sensitive documents must be dynamically watermarked upon view or download with the user's ID, IP address, and timestamp.		
1.13.	Accessibility, Browser Compatibility, and Mobile Responsiveness		
1.13.1.	The system shall be designed and developed in full compliance with recognized international accessibility standards, ensuring equal access and usability for all users, including those with disabilities. Key requirements include: ○ Compliance with WCAG 2.1 Level AA (Web Content Accessibility Guidelines) or higher. ○ The system shall maintain a minimum contrast ratio of 4.5:1 for text and interface elements. ○ Provide options for text resizing, zooming, and alternative text (alt tags) for images and multimedia elements. All error messages and notifications shall be clearly descriptive and accessible via screen readers.		

S/N	Requirement	S/C	Remarks
1.13.2.	The system shall be fully functional and visually consistent across all major, modern web browsers commonly used in government and public environments. The solution shall be tested and optimized for: ○ Google Chrome (latest stable version) ○ Mozilla Firefox (latest stable version) ○ Microsoft Edge (latest stable version) ○ Apple Safari (for macOS and iOS users) Key requirements include: ○ Uniform rendering of interface elements and layouts across browsers. ○ No dependency on browser-specific plugins (e.g., Flash, Silverlight). ○ Use of HTML5, CSS3, and JavaScript standards to ensure interoperability. Graceful degradation or progressive enhancement for browsers with limited features.		
1.13.3.	The system shall be accessible through mobile devices, including smartphones and tablets, to facilitate on-the-go access to information.		
1.14.	Performance and Compatibility		
1.14.1.	The solution shall comply with all performance indicators and benchmarks defined by the Ministry or the designated Government IT regulatory authority. All System Implementation Plan (SIP) activities and deliverables shall be fully aligned with the approved Service Level Agreement (SLA) to ensure measurable performance, availability, and response time commitments are consistently met.		
1.15.	Backup and Contingency Planning		
1.15.1.	The system shall include a fully automated data backup mechanism designed to protect against data loss, corruption, or system failure. The backup process shall operate on a scheduled basis, performing backups at the following intervals: ○ Daily backups – to capture all transactional and configuration changes made within the day.		

S/N	Requirement	S/C	Remarks
	○ Weekly backups – to maintain periodic system snapshots for medium-term recovery. ○ Monthly backups – to provide long-term archival copies for compliance, audit, and disaster recovery purposes. ○ Backups shall include application data, configuration files, database content, and system logs, ensuring full recoverability of both functional and operational states. ○ The bidder needs to explain in their proposal in detail. ○ Refer to the 6.1 for the current infrastructure mention in the Bid Document (Volume 2).		
1.15.2.	The SIP shall explain the replication process in the proposal. Refer to the 6.1 for the current infrastructure mention in the Bid Document (Volume 2)		
1.16.	User-Friendliness and Interface Design		
1.16.1.	The solution shall feature a clean, intuitive, and visually consistent interface that enables users to perform tasks efficiently with minimal effort. The interface shall follow modern usability principles, focusing on clarity, consistency, and ease of navigation across all modules.		
1.16.2.	The system shall be designed to minimize the number of clicks, steps, and screen transitions required to complete common transactions. Users should be able to perform frequently used operations (e.g., data entry, approvals, searches) within three to five actions wherever feasible. Context-based shortcuts, auto-suggestions, and pre-filled data shall be used to reduce manual effort.		
1.16.3.	All screens, forms, and dialog boxes shall follow a standardized layout and uniform color scheme across the application. Placement of buttons (e.g., “Save,” “Cancel,” “Submit”) and input fields shall remain consistent throughout the system. Icons and labels shall be meaningful, self-explanatory, and aligned with government UI/UX guidelines.		

S/N	Requirement	S/C	Remarks
1.16.4.	The system shall provide on-screen guidance, tooltips, and contextual help messages to assist users in completing forms or workflows without requiring external documentation. Step-by-step wizards shall be provided for complex processes (e.g., tender creation or evaluation). Real-time validation messages shall prevent errors before submission.		
1.16.5.	The interface shall comply with WCAG 2.1 Level AA accessibility standards, ensuring that text, icons, and form elements are readable, scalable, and accessible to all users, including those with visual or physical impairments.		
1.16.6.	Users shall have the option to switch between Sinhala, Tamil, and English interfaces without re-login. The system shall remember each user's preferred language and layout preferences.		
1.16.7.	All system messages, confirmations, and error prompts shall be clear, descriptive, and non-technical. In case of errors, users shall be informed of what went wrong and how to correct it, without losing previously entered data.		
1.17.	Technology and Maintenance		
1.17.1.	The system shall be developed using the most advanced, modern and stable technology stack available at the time of implementation, ensuring long-term sustainability, scalability, and maintainability. The selected technology framework shall: ○ Support continuous enhancement and modular upgrades without requiring a complete system redevelopment or technology replacement. ○ Be open, widely supported, and vendor-independent, ensuring long-term community and industry support. ○ Enable the incorporation of new functional modules and performance improvements with minimal disruption to existing operations. ○ Support interoperability with other government systems through open standards and APIs. This approach ensures that the system can evolve with emerging technologies and adapt to future business, policy, or technical requirements without significant redevelopment costs.		

S/N	Requirement	S/C	Remarks
1.18.	Search Engine		
1.18.1.	The system shall include a high-performance, configurable search engine capable of retrieving data quickly and accurately across all major modules. Administrators shall have the ability to define and customize search parameters and filters based on multiple criteria such as document type, date, status, reference number, user, or transaction category. The search engine shall utilize optimized indexing and query caching mechanisms to deliver fast response times even in large-scale databases.		
1.18.2.	The system shall provide the ability to perform searches across multiple data fields within the database, allowing users to locate records using partial or incomplete information. The system shall support wildcard searches (e.g., using “*” or “%” operators) and fuzzy matching, enabling users to find relevant results even when the exact text or spelling is unknown. Search results shall be ranked or filtered based on relevance, date, or category, as configured by the system administrator.		
1.18.3.	The search facility shall be fully integrated with all primary forms and functional areas of the application. Users shall be able to initiate searches directly from within the form or module they are working on (e.g., payroll records, approvals, vendor information, or financial transactions) without navigating away from the active screen. Search results shall support quick navigation to related records or actions (e.g., view details, edit, approve, or download).		
1.18.4.	The search engine shall be capable of displaying context-related notifications linked to the workflow and task progress. For example, when a user searches for a file, record, or transaction, the system shall display: ○ Any pending approvals or review tasks related to that record. ○ Notifications of delays or overdue actions in the workflow.		

S/N	Requirement	S/C	Remarks
	Status indicators (e.g., “Under Review,” “Approved,” “Returned for Correction,” “Pending Submission”). This ensures that users not only locate records but also gain immediate visibility into their current workflow status, improving operational efficiency and decision-making.		
1.18.5.	The search engine shall be optimized for high-speed performance and minimal query latency, even under heavy concurrent usage. All searches shall comply with user access rights and permissions, ensuring that users can only view results for data they are authorized to access. All search queries shall be logged for audit and monitoring purposes in accordance with system security policies.		
1.19.	System Dashboards and Notifications Engine		
1.19.1.	Role-Based Dashboards: Upon login, each user shall be presented with a dashboard tailored to their role and current tasks.		
1.19.2.	Automated Notifications: The system's notification engine shall automatically generate and send alerts via email and/or in-system messages for critical events and deadlines.		
2. Government Organization Structure			
2.1.	Organization Structure		
2.1.1.	The system shall provide comprehensive functionality to establish, configure, maintain, and manage the full hierarchy of government organizational structures within Sri Lanka. This includes the central government, provincial councils, statutory bodies, public enterprises, and all associated subordinate administrative levels such as provincial, district, and divisional offices. The system shall support the creation of a standardized organizational framework that reflects official government administrative boundaries and reporting relationships. Authorized users shall be able to define, update, activate, deactivate, and restructure organizational entities while maintaining historical records for audit and reference purposes.		

S/N	Requirement	S/C	Remarks
	The system shall enable hierarchical linking between parent and child institutions, allowing clear representation of administrative chains of authority and financial accountability. Each organizational unit shall be uniquely identifiable and associated with relevant attributes such as institutional codes, budget classifications, geographic location, reporting authority, and operational status. The system shall ensure that payroll processing, employee assignment, financial reporting, and approval workflows are aligned with the defined organizational hierarchy. Changes to organizational structures shall be controlled through role-based permissions and logged for audit tracking. The system shall support scalability to accommodate future administrative reforms, newly created institutions, or structural changes without disrupting existing payroll data integrity.		
2.1.2.	The system shall support the definition and enforcement of an organizational hierarchy specifically structured to enable accurate payroll execution, cadre management, budgeting control, and statutory reporting across all government institutions. The hierarchy shall reflect official administrative relationships and financial accountability structures as mandated by government regulations. The system should need to link with the Government Chart of Accounts Structure.		
2.1.3.	The system shall allow organizational units to be mapped to payroll entities so that salary processing, allowances, deductions, and approvals are executed according to the correct institutional authority and reporting chain. Each level of the hierarchy shall support role-based access to ensure that payroll activities are performed only by authorized officers within their designated organizational scope.		
2.1.4.	For cadre management, the system shall associate approved staff positions, grades, and employment categories with the relevant organizational units. It shall enable monitoring of sanctioned cadre strength, current occupancy, and vacancy positions in alignment with approved government establishment records.		
2.1.5.	For budgeting purposes, the hierarchy shall support linkage between payroll expenditure and institutional budget allocations. The system shall allow payroll costs to be tracked by ministry, department, province, district, and		

S/N	Requirement	S/C	Remarks
	division to ensure financial accountability and compliance with treasury controls.		
2.1.6.	For statutory reporting, the system shall aggregate payroll and employee data according to the organizational structure to generate institution-level and consolidated government reports required by treasury, audit authorities, and statutory agencies. All hierarchical configurations and changes shall be logged and maintained with version history to preserve audit integrity and historical reference.		
2.1.7.	The system shall provide a dynamic and flexible organizational chart framework capable of supporting the evolving structure of government institutions. The organizational model shall allow special spending units, ministries, departments, statutory bodies, and other public institutions to maintain varying numbers of subordinate offices without predefined or hardcoded structural limits. The system shall support continuous expansion, restructuring, merging, and splitting of organizational entities in response to administrative reforms or policy changes, while preserving historical records for audit and reporting purposes.		
2.2.	Dynamic Node Creation		
2.2.1.	Authorized users shall be able to create, modify, activate, deactivate, merge, or split organizational nodes dynamically through controlled administrative functions. All changes shall be governed by role-based permissions and approval workflows.		
2.2.2.	The system shall support unrestricted hierarchical branching, allowing any organizational unit to maintain multiple levels of sub-offices without system-imposed limitations.		
2.2.3.	Organizational relationships shall be maintained using structured parent-child mapping rules. The system shall ensure data integrity by enforcing consistent hierarchical linkage and preventing orphan or circular structures.		
2.2.4.	The system shall allow authorized administrators to define, configure, and maintain the depth of the hierarchy based on evolving government administrative needs. Organizational structures shall remain flexible to accommodate policy		

S/N	Requirement	S/C	Remarks
	changes, new institutions, or restructuring initiatives without requiring system redesign.		
2.2.5.	The system shall support multiple hierarchy views to satisfy different operational and reporting requirements. These views may include payroll processing structures, financial reporting hierarchies, cadre management hierarchies, and statutory reporting perspectives. Each view shall reference the same underlying organizational data while presenting alternative structural arrangements for authorized purposes.		
2.2.6.	Each organizational unit within the hierarchy shall maintain a standardized set of metadata attributes to ensure traceability, reporting accuracy, and administrative control. At a minimum, the system shall store: ○ Unit Name ○ Unique Unit Code ○ Parent Organizational Unit ○ Effective Date of Establishment or Change ○ Operational Status (Active / Inactive) Additional metadata fields may be configured as required by treasury or administrative regulations.		
2.2.7.	The system shall implement a comprehensive role-based access control (RBAC) framework to ensure that organizational data is managed securely and in accordance with administrative authority levels. Each institution shall be permitted to manage only its own organizational structure and related records, while designated higher authorities (such as central supervisory bodies or treasury oversight units) shall retain full cross-organizational visibility, monitoring capability, and approval authority. Access rights shall be strictly governed by assigned roles, ensuring that users can only view, modify, or approve data within their authorized scope. The system shall enforce organizational boundaries to prevent unauthorized access to structures belonging to other institutions.		
2.2.8.	Higher authorities shall be granted elevated privileges to monitor, review, audit, and approve organizational structures across multiple entities. Such authorities shall have cross-institutional reporting access while maintaining audit accountability for all actions performed.		
2.2.9.	All roles, permissions, and access privileges shall be configurable through administrative tools without requiring vendor intervention. Authorized system administrators shall		

S/N	Requirement	S/C	Remarks
	be able to create, modify, or revoke roles dynamically in response to policy or governance changes.		
2.2.10.	The system shall allow authorized users (DSA) to create, modify, or deactivate organizational units while ensuring historical structure is preserved for audit purposes. • Organizational units shall not be physically deleted. • Historical organizational structures shall remain accessible for payroll history validation. • The system shall prevent payroll processing against inactive units unless explicitly permitted. • Deactivation shall require: ○ Reason Code ○ Effective Date ○ Approval Workflow		
2.2.11.	The system shall allow bulk uploading or modifications of organizational structures (e.g., restructuring of ministries after cabinet reshuffle). • Bulk upload formats shall include Excel, CSV, XML or any other suitable file format • Upload validation shall detect: ○ Duplicate Codes ○ Invalid Parent References ○ Missing Mandatory Fields • Bulk updates shall require approval prior to activation.		
2.2.12.	The system shall support integration and separation of payroll in accordance with the changes in the organizational structure due to the government policy decision and changes are automatically update in the organization chart. • Payroll organizations/ units shall be re-mapped automatically • Structural changes shall not disrupt ongoing payroll cycles		
2.2.13.	The system shall allow temporary organizational structures for project units, task forces, or special government programs, with start and end dates. • Temporary units shall automatically expire upon end date. • Payroll assignments shall be allowed only within valid time periods.		

S/N	Requirement	S/C	Remarks
	Temporary structures shall remain archived for audit purposes.		
2.2.14.	The system shall maintain organizational codes aligned with government standards (Treasury Codes, Provincial codes, etc.). - Code structures shall be configurable and validated. - Codes shall be mandatory for payroll reporting and remittances. - Duplicate code creation shall be prevented.		
2.2.15.	The system shall synchronize organizational structure changes with employee master records so that updates reflect immediately. - Structure changes shall automatically update employee organizational assignment. - Payroll processing shall follow the new unit hierarchy. - Real-time synchronization shall be supported.		
2.2.16.	The system shall automatically update organizational charts whenever employee movement (promotion, transfer, acting, etc.) occurs.		
2.2.17.	The system shall provide supportive information for preparation of the budget according to budget classification structures and Chart of Accounts. - Payroll expenditure forecasts shall be generated by institution. - Cadre-based salary projections shall support annual budget planning. - Reports shall integrate with Treasury budgeting systems		
2.2.18.	The system shall allow organizations to be categorized based on type (central, provincial, district, municipal, statutory, etc.) for reporting purposes. - Category-based reporting shall be supported. - Different policy rules may apply based on category type		
2.2.19.	The system shall generate automated organizational structure reports, including full hierarchy, position charts, and cadre utilization. - The system shall support scheduled report generation. - Reports shall be exportable in standard formats.		

S/N	Requirement	S/C	Remarks
2.2.20.	The system shall provide a dashboard displaying real-time cadre status, number of approved and actual (filled) positions, vacant and excess positions, and upcoming retirements per institution, staffing trends, etc.		
2.2.21.	The system shall support exporting organizational structures in multiple formats (PDF, Excel, CSV, printable organizational charts).		
2.2.22.	The system shall maintain an audit trail for all changes to the organizational structure, including user ID, date, time, and change description and approval reference. • Audit logs shall be immutable. • Logs shall support compliance investigations and audits		
2.2.23.	The system shall support the display of both current and historical organizational hierarchies for audit, inquiry, and reference purposes.		
2.2.24.	The system shall enable authorized administrators to modify earning and deduction rates, fixed values, and other payroll parameters through the system configuration.		
2.3.	Cadre Mapping		
2.3.1.	The system shall support mapping employee positions to organizational units, including position type, grade, Classes and approved cadre strength. Position records shall be integrated with the Employee Master and related modules to ensure consistency across payroll and human resource processes. The system shall support configurable position types, including but not limited to permanent, casual, temporary, acting assignments, and contractual posts, with the ability to extend classifications as required by government policy.		
2.3.2.	The system shall maintain comprehensive approved cadre information for each institution, including sanctioned positions, actual filled positions, vacancies, and excess staffing levels. Each organizational unit shall store and manage its approved cadre structure in alignment with authorized establishment records		
2.3.3.	The system shall automatically calculate cadre utilization and highlight variances between approved and actual		

S/N	Requirement	S/C	Remarks
	staffing. It shall generate alerts for critical vacancies and staffing shortages to support timely administrative action.		
2.3.4.	Cadre reporting capabilities shall support workforce planning, budget preparation, and recruitment forecasting, ensuring alignment with government staffing policies and financial controls.		
2.3.5.	The system shall support controlled cadre restructuring through a defined approval workflow to ensure governance and compliance with authorized staffing decisions. Approved cadre changes shall automatically update payroll eligibility rules and related workforce records without manual intervention.		
2.3.6.	The system shall permanently retain a complete history of all cadre modifications for audit and administrative reference. Cadre restructuring functions shall include the creation of new posts, abolition of existing posts, and grade upgrades or downgrades, with effective-date tracking and approval traceability.		
3. Employee Master File			
3.1	General		
3.1.1.	The system shall maintain a centralized repository integrating data for all government employees. • The system shall maintain one unique employee record per individual across the Government service. • Employee master data shall be shared and referenced across all payroll modules. • The system shall prevent duplicate employee identities across institutions • Employment details shall integrate with Organization Structure		
3.1.2.	The system shall maintain a comprehensive employee master record containing verified personal information necessary for payroll administration, statutory compliance, and government personnel management. Each employee record shall capture a standardized set of personal attributes to ensure accurate identification, eligibility determination, and administrative processing. At a minimum, the employee master profile shall include the following information: ○ Full legal name		

S/N	Requirement	S/C	Remarks
	○ National Identity Card (NIC) number ○ Personal file number ○ Appointment number ○ Service number ○ Date of birth ○ Gender ○ Marital status ○ Family composition details ○ Residential address and temporary address (if applicable) ○ Contact telephone numbers ○ Mobile number ○ Email address ○ Dependents information		
3.1.3.	The system shall enforce mandatory data entry for required identification and eligibility fields during employee registration to prevent incomplete or invalid records. Validation controls shall ensure compliance with government identity standards, including format checks and uniqueness verification for NIC and service-related identifiers.		
3.1.4.	Any modification to sensitive personal information shall require authorized approval and shall be recorded through audit logging. The audit trail shall capture the original value, updated value, timestamp, user identity, and reason for change to preserve data integrity and accountability.		
3.1.5.	Personal information shall be protected through access controls and security measures aligned with government data privacy policies, ensuring that only authorized personnel can view or modify employee records.		
3.1.6.	The system shall support the recording and management of employee family relationship information as part of the employee master records. For each employee, the system shall allow authorized users to capture and maintain details of immediate family members, including spouse and children, with secure identification linkage. Each family relationship record shall be mapped using the National Identity Card (NIC) number to ensure uniqueness, traceability, and validation against government identity		

S/N	Requirement	S/C	Remarks
	standards. The system shall enforce data validation rules to prevent duplicate or invalid identity entries.		
3.1.7.	The system shall maintain emergency contact information for each employee. • Employees shall have one or more emergency contacts recorded. • Emergency contact updates shall be logged for audit purposes. • Emergency contact fields shall include: ○ Name ○ Relationship ○ Contact Number ○ Address		
3.1.8.	The system shall maintain structured employment-related information for each employee to support payroll processing, cadre control, and administrative reporting. The employee employment profile shall include standardized attributes necessary to determine eligibility, salary computation, and institutional assignment. At a minimum, the system shall record: ○ Appointment date ○ Retirement date ○ Employment type (e.g., permanent, contractual, casual, temporary) ○ Service grade and class ○ Salary scale and step ○ Designation and official job title ○ Work location and organizational assignment The system shall enforce mandatory completion of critical employment fields during employee registration to ensure data completeness and payroll accuracy. Employment data shall be validated against predefined government standards, including approved grade structures, salary scales, and organizational codes, to prevent unauthorized or inconsistent entries. Any updates to employment records shall follow controlled authorization procedures and shall be captured in audit logs to maintain accountability and historical traceability.		

S/N	Requirement	S/C	Remarks
3.1.9.	The system shall maintain structured and auditable records relating to employee qualifications and professional development to support human resource planning, eligibility assessment, and career progression management. These records shall be stored separately from core personal and payroll data while remaining linked to the employee master profile. The system shall support the capture and management of the following categories of information: ○ Academic qualifications ○ Professional experience ○ Professional certifications and licenses ○ Training programs attended ○ Workshops and capacity development activities Each qualification and development record shall support the attachment of supporting documents, such as certificates or transcripts, in secure digital form. The system shall allow verification status tracking to indicate whether credentials have been validated by authorized personnel.		
3.1.10.	Training and professional development history shall be searchable and reportable to support workforce planning, succession management, and promotion eligibility assessment in accordance with government service regulations. Any addition, modification, or removal of qualification records shall require authorized updates and shall be recorded through audit logging to preserve accountability and historical traceability.		
3.1.11.	The system shall provide a secure document management facility to store and manage digital copies of essential employee records. These documents shall be linked to the employee master profile and retained as part of the official personnel file to support administrative verification, payroll processing, audits, and compliance requirements. The system shall support the storage of, but not be limited to, the following document categories: ○ Appointment letters ○ Employment contracts ○ Curriculum vitae ○ Educational certificates ○ Service confirmations ○ Promotion letters		

S/N	Requirement	S/C	Remarks
	The document repository shall support uploads in standardized formats, including PDF and approved image formats, to ensure long-term accessibility and compatibility with government archival standards.		
3.1.12.	All stored documents shall be encrypted and protected through role-based access controls to prevent unauthorized viewing, modification, or deletion. Access to sensitive employee documents shall be restricted to authorized officers in accordance with government data protection policies.		
3.1.13.	The system shall maintain version history for all uploaded documents. Any replacement or update of a document shall preserve prior versions with timestamps, user identification, and change justification to ensure audit traceability and historical reference. Document integrity controls shall prevent unauthorized alteration and ensure that archived records remain legally admissible for administrative and audit purposes.		
3.1.14.	The system shall include a compensation section under each employee profile consisting of, but not limited to, the following: ○ Basic Salary ○ Allowances ○ Deductions ○ Tax Identification Number (TIN) ○ Statutory Contributions (W&OP, PSPF, EPF, ETF) ○ Payment Frequency ○ Bank Payment Method ● Compensation data shall directly integrate with Payroll Processing. ● Statutory deductions shall be auto-linked based on employee eligibility. ● Changes to salary components shall require approval workflow.		
3.1.15.	The system shall maintain encrypted access credentials and secure employee record protection. Employee records shall be protected by role-based access control. The system shall comply with Government cybersecurity and privacy policies.		

S/N	Requirement	S/C	Remarks
3.1.16.	The system shall provide reporting and analytics on employee data, including but not limited to: ○ Personal Demographics ○ Cadre Distribution ○ Employment Category Breakdown ○ Compensation Profiles ○ Qualification Summaries Reports shall support filtering by ministry, province, grade, category, etc. Analytics dashboards shall support workforce planning and policy monitoring. Outputs shall be exportable in standard formats.		
3.1.17.	The system shall allow updating and modification of employee information with change tracking and audit logs. All modifications shall record: ○ Previous Value ○ New Value ○ User ID ○ Timestamp ○ Reason Code High-impact updates (critical field) shall require multi-level approval.		
3.1.18.	The system shall maintain complete historical employment records including but not limited to: ○ Past Positions ○ Pay Scale History ○ Promotions ○ Transfers ○ Acting Assignments History records shall be immutable once approved. Historical views shall support audit investigations.		
3.1.19.	The system shall link employee records to Government organizational structures, including: ○ Ministry ○ Special Spending Unit ○ Department ○ Provincial Council ○ Statutory Bodies ○ Provincial Office ○ District Office ○ Divisional Office ○ Etc.		

S/N	Requirement	S/C	Remarks
	Employee assignment changes shall automatically update organizational payroll system.		
3.1.20.	The system shall provide validation checks to prevent duplicate or incomplete employee records. Duplicate detection shall be enforced using: ○ NIC Number ○ Employee Number ○ Bank Reference Identifiers ○ Etc. Mandatory completeness checks shall be applied before payroll activation.		
3.1.21.	The system shall allow categorization of employees by: ○ Employment type ○ Grade ○ Pension type ○ Etc. Category assignments shall drive payroll rules and statutory deductions. Reports shall support category-based Government workforce statistics		
3.1.22.	The employee master repository shall integrate with, but not be limited to: ○ Payroll Processing ○ Leave Management ○ Loan Management ○ Remittances ○ Statutory Contributions Employee updates shall propagate automatically across modules. Payroll cannot process employees with incomplete mandatory master data.		
3.1.23.	The system shall support secure bulk import/export of employee records. • Bulk formats shall include Excel, CSV, XML or any other standard format • Bulk imports shall require administrative approval. • Import validation shall detect: ○ Missing mandatory fields ○ Invalid NIC ○ Duplicate records		

S/N	Requirement	S/C	Remarks
3.1.24.	The system shall maintain employee status flags, including but not limited to: ○ Active ○ Retired ○ Resigned ○ Transferred ○ On Leave ○ Dismissed ○ Etc. Status changes shall automatically update payroll eligibility. Retired employees shall be archived separately for pension reference.		
3.1.25.	The system shall provide self-service access for employees to view and update non-critical personal information. • Employees may update non-critical personal information. • Salary, grade, and statutory fields shall remain restricted. • Employee self-service actions shall be maintained a logged.		
3.1.26.	The system shall generate alerts for: ○ Missing mandatory employee fields ○ Incomplete documents ○ Invalid bank details ○ Payroll-ineligible employee status Alerts shall appear on administrator/ user dashboards. Notifications shall be configurable by DSA or relevant entity.		
3.1.27.	The system shall maintain full audit logs for all employee master data activities. • Audit logs shall be immutable and retained per Government policy. • Logs shall support internal audits and compliance investigations. • Audit exports shall be available for authorized oversight bodies		

S/N	Requirement	S/C	Remarks
4. Employee Movement			
4.1	General		
4.1.1.	The system shall support employee movement processing including but not limited to: ○ Promotion ○ Acting duty assignments ○ Temporary placements ○ Permanent transfers ○ Retirement ○ Death-in-service ○ Suspension or dismissal ○ Overseas leave ○ Study leave ○ No-pay leave ○ Long-term medical leave ○ Secondment / attachment ○ Movement types shall be configurable in alignment with government circulars and service minute rules ○ Movement categories shall be extensible without vendor customization		
4.1.2.	All employee movements shall be recorded in a separate employment history repository unique to each employee • Each movement shall create a permanent employment history transaction • Approved history records shall be immutable • Employment history shall include: ○ Previous position ○ New position ○ Effective date ○ Movement type ○ Authority reference ○ Payroll impact details ○ Supporting document reference		
4.1.3.	Approved movements shall automatically update payroll data Position changes shall trigger recalculation of: ○ Salary scale ○ Allowances ○ Loan deductions ○ Statutory contributions ○ Tax deductions		

S/N	Requirement	S/C	Remarks
	- Payroll updates shall apply from the approved effective date - Backdated movements shall generate arrears or recovery adjustments		
4.1.4.	Each movement shall require mandatory document attachments including: - Promotion letters - Transfer orders - Acting approvals - Retirement notifications - Circular references - Movement shall not be finalized without required documents - Documents shall be stored in encrypted repositories - Document version history shall be retained		
4.1.5.	Organizational charts shall update automatically - Vacancies and cadre occupancy shall update in real time - Dashboards shall reflect live staff distribution - Movement reports shall be available by institution and sub-unit		
4.1.6.	Every movement shall follow an approval workflow - Bulk movement processing shall be supported - Bulk uploads shall support Excel/CSV formats - Validation rules shall detect: - Invalid effective dates - Missing approvals - Duplicate entries - Bulk execution shall require authorization		
4.1.7.	Upon retirement the system shall: - Remove employee from active structure - Stop payroll processing - Stop remittances and loan deductions - Transfer record to retired employee database		
4.1.8.	Leave movements shall support start/end validity periods - Payroll shall be prorated accordingly - Includes: - Overseas leave - Study leave - No-pay leave - Medical leave		

S/N	Requirement	S/C	Remarks
4.1.9.	Upon employee death: ○ Payroll shall terminate immediately ○ Dependent compensation workflow shall initiate ○ All actions shall be logged and documented		
4.1.10.	Supports: ○ Secondment ○ Attachments ○ Acting duties Temporary movements shall have defined start/end dates Payroll impacts apply only within validity period		
4.1.11.	Movement shall be blocked if employee has: ○ Pending disciplinary action ○ Incomplete master record ○ Missing statutory data Exception flags shall block processing Overrides require treasury-level approval		
4.1.12.	Backdated entries shall require justification and approval • Arrears/recoveries shall generate automatically • Mandatory documentation and audit review required • Only authorized HR/payroll officers may initiate/approve movements • Role-based control at every workflow stage • Unauthorized attempts generate security alerts		
4.1.13.	Each movement shall log: ○ Initiated by ○ Approved by ○ Effective date ○ Timestamp ○ Supporting documents • Audit logs shall be immutable • Records shall be exportable for au		
4.1.14.	External Integration • System shall interface with national HR databases • System shall support scanned document uploads Examples:		

S/N	Requirement	S/C	Remarks
	○ Appointment letters ○ Transfer orders ○ Retirement approvals		
5. Leave and Attendance			
5.1	General		
5.1.1.	The system shall provide a fully integrated Time & Attendance module linked directly with payroll processing.		
5.1.2.	The system shall ensure compliance with Establishments Code, Public Administration Circulars, and Financial Regulations.		
5.1.3.	The system shall support daily attendance capture for all employee categories.		
5.1.4.	The system shall support to enter attendance manually or biometric/system integration.		
5.1.5.	The system shall support attendance status codes (Present, Absent, Duty, Leave, and Holiday Work).		
5.1.6.	The system shall link the attendance records uniquely to employee master file.		
5.1.7.	The system shall automatically calculate payable working days per payroll cycle.		
5.1.8.	The system shall compute no-pay periods automatically.		
5.1.9.	The system shall support calculate half-day and partial attendance according to government rules.		
5.1.10.	The system shall automatically generate payroll deduction transactions on leave without pay.		
5.1.11.	The system shall support overtime entry linked to attendance records.		
5.1.12.	The system shall support supervisory approval for attendance submissions before payroll processing.		
5.1.13.	The system shall support require multi-level authorization on attendance corrections after approval.		

S/N	Requirement	S/C	Remarks
5.1.14.	Payroll shall consume only attendance records marked as “Approved for Payroll”.		
5.1.15.	The system shall support bulk upload of attendance via standard Excel/CSV templates.		
5.1.16.	Uploaded files shall undergo validation for duplicates, invalid dates, and unknown employees.		
5.1.17.	The system shall support API integration with biometric attendance systems.		
5.1.18.	Attendance cut-off dates shall be enforced prior to payroll finalization.		
5.1.19.	The system shall generate arrears/overpay recoveries based on attendance corrections affecting prior cycles.		
5.1.20.	Retroactive attendance adjustments shall require justification and documentation.		
5.1.21.	The system shall maintain a version history for all attendance-based payroll recalculations.		
5.1.22.	The system shall generate attendance-to-payroll reconciliation reports before salary payment.		
5.1.23.	Reports shall be exportable in PDF/Excel formats.		
5.1.24.	The system shall maintain immutable audit logs for attendance entries, approvals, and payroll processes.		
5.1.25.	The system shall allow employees to access attendance summaries and OT approvals via ESS portal.		
5.1.26.	Attendance and payroll-linked records shall be archived according to government retention policies.		
6. Loan Module			
6.1.	General		
6.1.1.	The system shall provide a configurable loan application framework capable of supporting multiple government loan schemes, including but not limited to housing loans, Distress loans, Special Advances, Festival Advances, and other emergency loan programs. Each loan type may have distinct eligibility rules, application structures, approval workflows, and repayment conditions.		

S/N	Requirement	S/C	Remarks
6.1.2.	The system shall allow authorized administrators to design and configure loan application templates without modifying the core application source code. The loan engine shall support customizable forms, data fields, validation rules, eligibility criteria, and approval routing to accommodate variations in government loan policies.		
6.1.3.	Each loan scheme shall be configurable to apply either: ○ Across all government institutions, or ○ Only to selected institutions		
6.1.4.	The system shall support institution-level eligibility controls, ensuring that loan programs are available only to authorized employee categories and organizational units. Loan configurations shall include: ○ Loan type definitions ○ Eligibility rules ○ Maximum loan limits ○ Interest or repayment policies ○ Installment structures ○ Deduction scheduling through payroll ○ Approval hierarchy ○ Supporting documentation requirements The system shall maintain version control and effective dating of loan rules to preserve historical accuracy and audit compliance. Loan processing shall integrate directly with payroll to automate installment deductions and outstanding balance tracking. All loan configuration changes shall be logged and governed by role-based administrative control to ensure transparency and regulatory compliance.		
6.1.5.	The system shall allow the creation of new loan categories, including but not be limited to: ○ Distress loan ○ Festival advance ○ Special advance ○ Housing loan ○ Vehicle loan ○ etc.		

S/N	Requirement	S/C	Remarks
	- The system shall support defining specific configuration parameters such as eligibility criteria, maximum amount, interest rate, and repayment period. - The system shall allow setting maximum permissible loan amount per category. - The system shall allow defining repayment duration limits (minimum and maximum installments) - The system shall support activation, suspension, or retirement of loan categories with audit logging.		
6.1.6.	The system shall allow configuration of applicable interest calculation methods per loan category, in accordance with government policy. - The system shall support the following interest computation types: - Fixed flat interest rate - Interest on remaining balance - Reducing balance interest method - Zero-interest loan schemes - The system shall allow introduction of new interest types as per future government circulars. - The system shall maintain effective dates for interest rules. - The system shall store historical interest policy changes for audit and reporting.		
6.1.7.	The system shall allow authorized officers to define loan eligibility rules and limits. - Loan rules shall be configurable based on: - Basic salary - Remaining loan balances - Maximum deduction capacity - Other government rules and regulations - The system shall validate eligibility automatically before loan process. - The system shall prevent loan process if eligibility criteria are not satisfied. - The system shall generate exception alerts for non-compliant loan process.		

S/N	Requirement	S/C	Remarks
6.1.8.	The system shall support configurable approval workflows for loan actions. - Workflow events include: - Loan application approval - Top-up approvals - Settlement approvals - Loan transfer approvals - Hierarchy levels shall be configurable per institution.		
6.1.9.	The system shall support multiple active loans per employee. - Employees may hold concurrent loans under different categories. - The system shall enforce total deduction capacity limits. - Priority recovery rules shall be configurable.		
6.2.	New Loan		
6.2.1.	The system shall allow the creation of a new loan record for an employee-specific loan account upon approval. - The loan record shall capture mandatory details including but not limited to: - Loan category/type - Approved principal amount - Issue/disbursement date - Repayment commencement date - Interest rate and method - No. of Installments - Deduction frequency - The system shall generate a unique loan reference number. - Loan accounts shall be linked to employee NIC and payroll number in employee master. - Loan creation shall require workflow approval and audit trail capture.		

S/N	Requirement	S/C	Remarks
6.2.2.	The system shall automatically calculate and generate a complete loan amortization schedule. • The amortization schedule shall include per installment: ○ Principal component ○ Interest component ○ Total installment amount ○ Outstanding loan balance • The schedule shall support government-approved loan rules.		
6.3.	Loan Top-Up and Reschedule		
6.3.1.	The system shall support loan top-up or rescheduling by merging additional amounts with existing balances. • The system shall support additional disbursement on an active loan subject to policy limits. • The system shall calculate merged outstanding balance automatically. • The system shall retain the original loan history separately for audit purposes. • Top-ups shall require approval workflow enforcement.		
6.3.2.	The system shall automatically regenerate amortization schedules upon modification events. • Modification triggers shall include: ○ Loan top-up ○ Interest rate revision ○ Installment restructuring • The system shall store both previous and revised schedules for traceability. • Recalculation shall comply with Treasury-approved interest formulas.		
6.3.3.	The system shall allow authorized restructuring of repayment terms under exceptional cases. • Restructuring may include: ○ Changing installment value ○ Extending repayment duration		

S/N	Requirement	S/C	Remarks
	- Automated recalculation shall occur immediately. - Approval hierarchy shall be enforced for restructuring events. - All restructuring actions shall maintain full audit trails.		
6.3.4.	The system shall allow modification of interest rates under authorized conditions. - Interest rate changes may occur due to: - Policy revision - Correction of errors - The system shall store: - Old rate - New rate - Effective date - Authorizing officer details - Full version history shall be retained permanently.		
6.4.	Loan Deduction		
6.4.1.	The system shall automatically deduct loan installments through payroll processing. - Loan deductions shall be applied as part of payroll deduction sequencing. - The system shall update outstanding balances after each payroll cycle. - Loan deductions shall appear clearly on employee pay slips. - Deduction failures due to insufficient salary shall generate arrears tracking.		
6.4.2.	The system shall calculate, and post interest accruals periodically as configured. - Accrued interest shall be posted automatically into outstanding loan balances. - The system shall generate accrual adjustment logs for audit.		

S/N	Requirement	S/C	Remarks
6.4.3.	The system shall allow authorized deferment of installments under special circumstances. - Deferment scenarios include but not be limited to: - No-pay or Special leave - Special government orders - Disciplinary suspensions - Deferred installments shall resume automatically after deferment end date. - Deferment approvals shall be recorded with justification.		
6.4.4.	The system shall integrate loan recovery with employee separation workflows. - Resignation or retirement processing shall trigger: - Outstanding loan balance checks - Final recovery deductions - Clearance certificate generation - Separation shall not be finalized until pending loans are resolved.		
6.5.	Loan Settlement		
6.5.1.	The system shall allow partial or full settlement of loans with automatic recalculation. - Settlement may occur via payroll deduction or manual payment. - The system shall adjust outstanding principal and interest accordingly. - Settlement transactions shall generate: - Closure certificate - Final settlement report - The system shall lock closed loans from further modification.		
6.5.2.	The system shall support repayment through payroll or manual payment mechanisms. - Manual repayments shall be recorded with: - Receipt reference		

S/N	Requirement	S/C	Remarks
	○ Bank deposit details ○ Payment date • Payroll deductions shall remain the default recovery mechanism. • Hybrid repayment scenarios shall be supported.		
6.6.	Loan Transfer		
6.6.1.	The system shall support transfer of loan accounts when employees are transferred. • Loan balances, repayment schedules, and deduction continuity shall remain intact. • Transfers shall occur between inter organizations: • The system shall ensure payroll deductions continue seamlessly post-transfer.		
6.7.	Loan Statements and Reports		
6.7.1.	The system shall generate employee-wise loan statements. Statements shall include but not be limited to: ○ Disbursement history ○ Repayment transactions ○ Interest charged ○ Outstanding balance as of date Statements shall be exportable.		
6.7.2.	The system shall support bulk upload of loan records for migration and setup. • Import formats shall include Excel, CSV, XML or any other suitable format. • The system shall validate uploaded data for: ○ Employee mapping accuracy ○ Loan balance consistency ○ Policy compliance • Bulk uploads shall require approval before activation.		
6.7.3.	The system shall produce loan aging reports for overdue recoveries. • Aging reports shall classify overdue loans by: ○ 30/60/90+ days ○ Outstanding principal ○ Pending interest • Reports shall support Treasury recovery monitoring.		

S/N	Requirement	S/C	Remarks
6.7.4.	Employees shall be able to view loan details through the Employee Self-Service (ESS) portal. Employees shall access: ○ Active loan balances ○ Repayment history ○ Amortization schedule ○ Future installment projections ESS access shall follow secure authentication controls.		
6.7.5.	The system shall maintain full audit trails for all loan-related activities. • Audit logs shall capture: ○ Creation ○ Modification ○ Approval ○ Settlement ○ Transfers • Logs shall include user ID, timestamp, and before/after values		
6.7.6.	The system shall generate loan policy reports including historical changes. • Reports shall capture: ○ Interest rate change history ○ Effective policy dates ○ Treasury circular references • Policy reports shall support compliance audits.		
7. Government Supported Loan Scheme with Banks			
7.1	General		
7.1.1.	The system shall support government-supported loan schemes offered to government employees by authorized government banks. • Allow administrators to activate or deactivate loan schemes based on government policy. • Integrate with employee payroll to ensure automatic deduction of loan instalments. • Support different government loan types, e.g., housing loans, vehicle loans, etc.		

S/N	Requirement	S/C	Remarks
7.1.2.	The system shall allow recording of comprehensive loan details, including type, loan amount, interest amount, and approval authority. • Capture loan type and scheme reference code. • Record approved loan amount and disbursement date. • Record approval authority and reference to authorization documents. • Validate loan data for completeness before saving.		
7.1.3.	The system shall support capturing the capital portion, employee interest portion, and government interest contribution for every instalment. • Support to enter capital and interest components per instalment. • Maintain separate fields for employee interest and government subsidy. • Allow adjustments to government contributions based on policy updates. • Generate a breakdown of instalments for employee and bank reporting.		
7.1.4.	The system shall support individual employee-wise loan detail entry or bulk upload using Excel, CSV, XML, or other compatible formats. • Validate imported file format, column mapping, and mandatory fields. • Detect duplicate loan entries and alert user. • Support bulk updates for migrated or initial data setup. • Maintain audit trail for all bulk uploads, including user ID and timestamp.		
7.1.5.	The system shall store annual instalment plans uploaded by government banks or departments. • Maintain yearly loan instalment plan for each employee. • Support storage of plan details including start/end dates, principal, and interest breakdown. • Allow retrieval of historical plans for reconciliation and audit purposes.		
7.1.6.	The system shall allow banks to uploaded annual loan instalment plans, into the payroll system.		

S/N	Requirement	S/C	Remarks
	- Validate bank-uploaded files against predefined format and employee identifiers. - Automatically map uploaded data to existing employee loan records. - Notify payroll administrators upon successful upload. - Flag errors in mapping or invalid data for correction.		
7.1.7.	The system shall ensure that the uploaded instalment plan automatically maps to the correct employee records using NIC, employee number, or bank reference number. - Maintain mapping rules for multiple identifiers. - Validate each mapping for consistency and uniqueness. - Provide error report for unmatched records. - Allow manual reconciliation for unmatched records.		
7.1.8.	The system shall generate the total remittance amount payable to each bank, including capital, employee interest, and government interest. - Aggregate loan instalments per bank and per scheme. - Generate employee-wise, scheme-wise, and bank-wise remittance totals. - Support adjustments for partial payments or arrears. - Produce verification report for bank and payroll reconciliation.		
7.1.9.	The system shall produce segregated remittance reports showing employee contribution, government subsidy contribution, and total payable. - Generate detailed breakdown for each employee and loan scheme. - Support monthly, quarterly, or annual reporting periods. - Allow export in PDF, Excel, CSV, or XML formats. - Include report summary totals for management review.		
7.1.10.	The system shall generate a consolidated monthly bank remittance schedule to be sent to each bank. Merge all individual employee instalments into a single bank submission file.		

S/N	Requirement	S/C	Remarks
	- Validate bank account details and total remittance values. - Include details for capital, employee interest, and government contribution. - Maintain electronic copy and audit trail for submission.		
7.1.11.	The system shall maintain audit trails for all changes including loan amount, interest rate, and instalment adjustments. - Record user ID, timestamp, and action type for each modification. - Track creation, update, and deletion of loan records. - Provide audit reports for internal and external review. - Protect historical data integrity while allowing authorized review.		
7.1.12.	The system shall integrate with payroll calculations to ensure loan instalments are deducted correctly and reflected on employee pay slips. - Automatically deduct monthly instalments (capital and employee 's interest) from employee net pay. - Update outstanding loan balance after payroll run. - Include loan deductions in employee pay slip detail. - Trigger alerts if employee salary is insufficient for loan deduction.		
7.1.13.	The system shall enforce role-based access control for loan data entry, approval, and reporting. - Define user roles: payroll administrator, loan officer, bank user, HR manager. - Restrict creation, modification, or approval of loans to authorized roles. - Log all access and actions for compliance and audit. - Support multi-level approval workflows for loan creation and adjustments.		
7.1.14.	The system shall allow exporting loan data and reports in multiple formats (PDF, Excel, CSV, XML). Support one-click export of individual and bulk loan data.		

S/N	Requirement	S/C	Remarks
	- Provide export templates aligned with bank and government reporting requirements. - Validate data integrity prior to export. - Maintain export log for audit purposes		
8. Over Time (OT) Payment			
8.1.	Over Time and Holiday Pay		
8.1.1.	The system shall support overtime and holiday payment processing as variable earnings within the payroll module.		
8.1.2.	The system shall allow authorized payroll users to enter overtime hours or holiday work data manually for each employee or bulk upload using Excel, CSV, or other approved structured formats.		
8.1.3.	The system shall provide standardized upload templates with required field definitions and formatting rules.		
8.1.4.	The system shall validate uploaded OT records before posting into payroll transactions.		
8.1.5.	The system shall automatically calculate OT payment amounts based on configured OT rates and hours/ days entered.		
8.1.6.	The system shall support configurable OT rate rules based on employee category, designation, salary scale, or government circulars.		
8.1.7.	The system shall calculate holiday payment amounts separately using holiday pay multipliers approved by government regulations.		
8.1.8.	The system shall support different multipliers for weekday OT, weekend OT, and public holiday work.		
8.1.9.	The system shall retrieve OT eligibility and rate parameters directly from the Employee Master File.		
8.1.10.	The system shall capture mandatory OT transaction fields including Date, Employee Number, Pay Item Code, OT Hours, and Holiday Works.		
8.1.11.	The system shall restrict OT pay item selection to approved OT/Holiday pay item codes only.		

S/N	Requirement	S/C	Remarks
8.1.12.	The system shall automatically compute OT Amount and Holiday Amount and prevent manual overrides unless authorized.		
8.1.13.	The system shall prevent deletion of OT transactions once processed in payroll history.		
8.1.14.	The system shall allow OT transactions to be marked Active/Inactive without deletion.		
8.1.15.	The system shall enforce validation rules including employee existence, mandatory fields, and permissible OT hour limits.		
8.1.16.	The system shall detect and flag duplicate OT entries for the same employee, pay item, and payroll period.		
8.1.17.	The system shall support multi-level approval workflows for OT and holiday payments prior to payroll execution.		
8.1.18.	The system shall maintain complete audit trails for OT entry, modification, approval, and payment processing.		
8.1.19.	The system shall generate employee-wise OT and holiday payment reports with hours, rates, and amounts.		
8.1.20.	The system shall generate department/entity-wise OT expenditure summaries for budget monitoring.		
8.1.21.	The system shall generate exception reports highlighting excessive OT, abnormal payment patterns, or rejected entries.		
8.1.22.	Abnormal OT patterns shall be flagged for HR and Treasury review.		
8.1.23.	OT and holiday earnings shall automatically integrate into gross-to-net payroll calculations, pay slips, and bank payment files.		
8.1.24.	The system shall support secure export of OT/Holiday payment outputs in PDF/Excel formats and integration with ITMIS/Treasury systems.		

S/N	Requirement	S/C	Remarks
9. W&OP/ PSPF/ EPF/ETF			
9.1	General		
9.1.1.	The system shall calculate statutory contributions in compliance with varying employee categories. - Employee categories shall include: - Permanent pensionable staff - Casual workers - Temporary Employees - Contract employees - The system shall apply category-specific rules for: - EPF/ETF - Widowers' and Orphans' Pension (W&OP) - Public Service Provident Fund (PSPF) - Contribution applicability shall be configurable per employment type.		
9.1.2.	The system shall automatically calculate Widowers' and Orphans' Pension (W&OP) contributions for all pensionable employees, strictly in accordance with prevailing Government of Sri Lanka regulations and Treasury-approved contribution rates. - The system shall determine W&OP eligibility based on pensionable service status. - The system shall calculate W&OP deductions as a percentage of pensionable salary components. - The system shall support configuration of contribution ceilings or exempt salary elements if mandated. - The system shall automatically apply W&OP deductions during each payroll cycle. - The system shall ensure W&OP deductions are reflected accurately in: - Employee pay slips and Pay Sheets - Payroll deduction registers - Remittance schedules		
9.1.3.	The system shall automatically calculate Public Servants' Provident Fund (PSPF) contributions for eligible employees, based on predefined statutory contribution percentages. - The system shall classify employees eligible for PSPF based on employee type. - The system shall calculate PSPF contributions using: - Employee contribution percentage - Employer/government contribution percentage		

S/N	Requirement	S/C	Remarks
	- The system shall allow institution-level PSPF rate variations where authorized. - The system shall generate PSPF contribution summaries by employee and employer/department.		
9.1.4.	The system shall automatically calculate Employee Provident Fund (EPF) contributions for applicable employees, including both employee and employer portions, in compliance with statutory requirements. - The system shall support EPF contribution computation based on: - EPF-covered earnings - Employee statutory deduction rate - Employer statutory contribution rate - The system shall allow institution-level PSPF rate variations where authorized. - The system shall maintain EPF member identifiers and authority reference numbers. - The system shall generate EPF contribution summaries by employee and employer.		
9.1.5.	The system shall automatically calculate Employee Trust Fund (ETF) contributions for relevant employees by applying the applicable government-mandated rates. - The system shall calculate ETF as an employer-funded statutory contribution where applicable. - The system shall ensure ETF computation is based on eligible gross salary components. - The system shall generate ETF schedules aligned with Department of Labour reporting formats.		
9.1.6.	The system shall allow retroactive adjustment of W&OP, PSPF, EPF, and ETF contributions in cases of backdated promotions, salary revisions, arrears processing, or missed deductions. - The system shall support recalculation for prior payroll periods when: - Salary scales are corrected - Promotions are entered retrospectively - Payroll omissions are detected - The system shall automatically compute: - Contribution arrears payable - Over-deductions refundable - Retroactive adjustments shall require: - Justification entry - Approval workflow enforcement		

S/N	Requirement	S/C	Remarks
	The system shall maintain historical correction logs for audit.		
9.1.7.	The system shall support statutory contribution calculations for employees joining mid-month, leaving service, or placed on unpaid leave. - The system shall prorate statutory deductions based on: - Actual service days in payroll month - Government-approved contribution rules - The system shall suspend contributions automatically during: - No-pay leave periods - Long-term unpaid absence - The system shall ensure final-month statutory deductions are settled correctly upon separation. - The system shall generate exception alerts for incomplete statutory periods.		
9.1.8.	The system shall validate all statutory contribution calculations against government-mandated minimum and maximum thresholds. - The system shall enforce: - Contribution ceilings - Minimum contribution rules - Salary element eligibility constraints - The system shall prevent payroll finalization if statutory contribution validation fails. - The system shall generate compliance exception reports for Treasury review. - The system shall support automated rule updates based on new gazette notifications.		
9.1.9.	The system shall generate monthly and annual contribution reports for W&OP, PSPF, EPF, and ETF, with breakdowns by employee, department, institution, and payroll grouping. - Reports shall include: - Employee-wise contribution listings - Department-level totals - Employer vs employee portions - The system shall generate statutory schedules in formats required by: - Department of Pensions - EPF/ETF authorities - Annual contribution certificates shall be supported.		

S/N	Requirement	S/C	Remarks
9.1.10.	The system shall generate cumulative year-to-date statutory contribution reports for employee and employer contributions. - The system shall provide YTD views for: - Individual employees - Institutions - Treasury consolidated reporting - The system shall support comparative analysis across fiscal years. - The system shall allow employee self-service access to statutory contribution history.		
9.1.11.	The system shall generate electronic remittance payment files for EPF/ETF/PSPF/W&OP remittances to respective statutory authorities. - File formats shall include: - CSV - Excel - XML - SLIP-compatible bank formats - The system shall validate bank and authority account details before file generation. - Remittance file generation shall require approval workflow completion.		
9.1.12.	The system shall maintain full audit trails of all statutory contribution calculations, adjustments, and remittance transactions. - Audit logs shall capture: - Calculation events - Rate changes - Manual adjustments - Approvals and authorizations - Logs shall record: - User ID - Timestamp - Before/after values - Statutory contribution records shall be retained for legally mandated archival periods.		
9.1.13.	The system shall produce comparative reports showing monthly and annual statutory contribution trends for management and Treasury review. - Trend reports shall include but not be limited to: - Contribution growth patterns - Variance analysis by institution - Etc. - Dashboards shall provide real-time Treasury oversight of statutory liabilities.		

S/N	Requirement	S/C	Remarks
9.1.14.	The system shall allow configuration of updated statutory rates, contribution formulas, and compliance rules without requiring system downtime. - Authorized administrators shall be able to update: - Contribution percentages - Effective start/end dates - New statutory schemes introduced by government - Rule changes shall require multi-level approval. - The system shall maintain version history of statutory policy configurations. - Updated rules shall take effect automatically from the configured payroll period.		
10. Advance Payment Income Tax (APIT)			
10.1.	APIT Employee Profile and Eligibility		
10.1.1.	The system shall maintain employee tax identification details including NIC, TIN, tax category, and employment type. - The system shall capture mandatory employee tax identifiers, including NIC number, Taxpayer Identification Number (TIN), and IRD registration status. - The system shall maintain employee tax classification attributes such as resident/non-resident, taxable/exempt status, and employment scheme type. - The system shall allow linkage of employee tax profiles across multiple employing institutions in cases of transfers. - The system shall retain historical tax profile changes with effective dates for audit compliance		
10.1.2.	The system shall automatically determine APIT liability based on taxable income thresholds issued by IRD. - The system shall identify whether an employee falls within taxable thresholds based on monthly and cumulative income - The system shall apply IRD-defined exemption thresholds automatically without manual intervention - The system shall generate system alerts when employees transition from non-taxable to taxable thresholds during the year		

S/N	Requirement	S/C	Remarks
	The system shall support automatic classification updates based on revised IRD rules.		
10.1.3.	The system shall allow authorized officers to assign employees into APIT applicability categories (taxable, exempt, special cases). - The system shall provide configurable APIT applicability categories as per IRD and Treasury policy. - The system shall support special case tagging for employees under concessions or special tax treatments. - The system shall require approval workflow for exemptions granted outside standard rules. - The system shall log all category changes with officer ID, justification, and effective date.		
10.1.4.	The system shall restrict APIT processing for employees without valid tax identifiers, unless explicitly approved. - The system shall prevent APIT file generation for employees missing NIC/TIN details. - The system shall flag incomplete tax registration records before payroll finalization. - The system shall allow exception approvals through a controlled workflow for temporary processing. - The system shall produce exceptional reports for unresolved missing identifiers. - The system shall enforce compliance with IRD reporting completeness requirements.		
10.2.	APIT Calculation Rules		
10.2.1.	The system shall automatically calculate monthly APIT deductions based on IRD-approved tax slabs and contribution rules. - The system shall compute APIT liability using progressive tax slabs issued by IRD. - The system shall support marginal rate application and tier-based tax computation logic. - The system shall calculate APIT separately for salary, supplementary payments, and lump-sum earnings. - The system shall generate detailed calculation breakdowns for audit review. - The system shall ensure deductions comply with statutory limits and rounding rules.		

S/N	Requirement	S/C	Remarks
10.2.2.	The system shall include all taxable earnings such as salary, allowances, overtime, arrears, bonuses, and benefits-in-kind in APIT calculations. - The system shall maintain a configurable list of taxable pay components. - The system shall automatically include arrears and retrospective earnings into taxable income. - The system shall support taxation of non-cash benefits as prescribed by IRD. - The system shall exclude exempt allowances based on IRD circulars. - The system shall provide audit visibility into taxable vs non-taxable earnings classification.		
10.2.3.	The system shall support configurable tax slabs, thresholds, and effective dates without requiring system downtime. - The system shall allow Treasury administrators to update tax slabs via configuration screens. - The system shall support effective dating for policy changes across financial years. - The system shall preserve historical slab structures for past payroll recalculations. - The system shall validate updated slabs before activation. - The system shall ensure configuration updates do not disrupt payroll processing.		
10.2.4.	The system shall support calculation of APIT for different employee categories (permanent, contract, casual, part-time). - The system shall apply category-specific tax computation rules where applicable. - The system shall support part-month tax proration for casual and contract staff. - The system shall apply statutory exemptions or concessions for specific service types. - The system shall ensure tax treatment consistency across institutions. - The system shall generate category-wise APIT reporting outputs.		
10.2.5.	The system shall automatically recalculate APIT for retroactive payroll adjustments such as backdated promotions or salary corrections.		

S/N	Requirement	S/C	Remarks
	- The system shall detect payroll revisions affecting taxable earnings. - The system shall recompute APIT liability for impacted months automatically. - The system shall adjust cumulative taxable income totals accordingly. - The system shall generate recalculation audit reports. - The system shall apply corrections through arrears or refunds mechanisms.		
10.2.6.	The system shall generate APIT arrears or refunds automatically when recalculations result in under/over deductions. - The system shall compute tax under-deductions and recover them over configurable periods. - The system shall generate refund adjustments for excess tax deductions. - The system shall ensure refunds comply with IRD correction guidelines. - The system shall maintain adjustment history per employee. - The system shall include arrears/refunds in monthly APIT reporting.		
10.3.	Payroll Deduction and Posting		
10.3.1.	The system shall automatically deduct APIT amounts from monthly payroll based on calculated liability. - The system shall apply APIT deductions during payroll finalization. - The system shall prioritize APIT over voluntary remittances in deduction hierarchy. - The system shall support multi-payroll cycles with correct APIT computation. - The system shall ensure deductions reflect in pay slips and ledgers. - The system shall prevent manual alteration after approval.		
10.3.2.	The system shall validate salary sufficiency before applying APIT deductions and flag negative net salary cases. - The system shall verify available salary balance before deduction application. - The system shall generate alerts for insufficient net pay cases.		

S/N	Requirement	S/C	Remarks
	- The system shall allow configurable handling (carry-forward, partial deduction, exception approval). - The system shall produce exception listings for payroll supervisors. - The system shall ensure statutory compliance even in constrained salary scenarios.		
10.3.3.	The system shall reflect APIT deductions clearly in employee pay slips and payroll summaries. - The system shall show monthly APIT deduction values separately on pay slips. - The system shall provide year-to-date APIT totals for employee transparency. - The system shall include APIT in payroll summary and deduction schedules		
10.4.	APIT Reporting Requirement		
10.4.1.	The system shall generate monthly APIT deduction schedules with employee-wise and institution-wise breakdowns. - The system shall generate monthly employee-level APIT schedules. - The system shall consolidate APIT totals per department and institution. - The system shall support selected-period APIT reporting. - The system shall allow export in Excel/PDF/CSV formats. - The system shall include arrears and adjustment breakdowns.		
10.4.2.	The system shall generate consolidated APIT reports for ministries, departments, provincial councils, and statutory bodies. - The system shall produce hierarchical APIT summaries aligned with government organization structures. - The system shall support separate reporting per central/provincial/statutory payroll databases. - The system shall consolidate totals for Treasury-level oversight. - The system shall provide dashboards for APIT trends.		
10.4.3.	The system shall generate year-to-date APIT contribution summaries for employee and institutional reporting.		

S/N	Requirement	S/C	Remarks
	- The system shall calculate cumulative APIT totals per employee. - The system shall provide institution-level year-to-date APIT liabilities. - The system shall support mid-year employee transfers with correct YTD continuation.		
10.4.4.	The system shall produce annual APIT summary reports including total taxable income, total tax deducted, and adjustments. - The system shall generate annual taxable income statements. - The system shall include arrears, refunds, and adjustment details. - The system shall support IRD year-end submission compliance. - The system shall allow reporting across fiscal years. - The system shall provide archival for statutory audits.		
10.4.5.	The system shall support generation of employee tax deduction certificates for annual tax filing purposes. - The system shall generate employee APIT certificates in IRD-approved format. - The system shall maintain certificate issuance history. - The system shall support multilingual certificate templates if required.		
10.4.6.	IRD Electronic Submission & Interface (File generation, validation, secure submission, acknowledgements) - Generate IRD-compliant electronic returns in required formats. - Validate completeness of NIC/TIN, deduction totals, codes, and institution identifiers. - Support secure transmission through IRD portal/API integration. - Store submission receipts, acknowledgements, and reference numbers. - Enable resubmission and correction workflows with version control.		
10.4.7.	Audit, Compliance & Security - Maintain complete audit trails of calculations, adjustments, and submissions. - Enforce RBAC for tax configuration and reporting access.		

S/N	Requirement	S/C	Remarks
	Generate compliance exception reports automatically.		
11. Payroll Process			
11.1.	General		
11.1.1.	The system shall support the definition and management of payroll transactions with flexible classification and rule-based processing capabilities. Payroll transactions shall be configurable as fixed or variable and further categorized as earnings or deductions , in accordance with government payroll policies and institutional requirements.		
11.1.2.	The system shall provide administrative functions to define transaction attributes such as transaction type, calculation basis, applicability, frequency, and eligibility criteria. Transactions may include, but are not limited to, basic salary components, allowances, overtime, statutory deductions, loan repayments, and ad-hoc adjustments.		
11.1.3.	All payroll transactions shall be linked to a configurable formula-based or rule-driven calculation engine . The rule engine shall support mathematical formulas, conditional logic, thresholds, and parameter-based rules to compute payroll values accurately. The engine shall allow rules to reference employee attributes, cadre details, service grades, attendance data, and organizational assignments.		
11.1.4.	The system shall support institution-specific calculation logic to accommodate variations in payroll computation across different government ministries, departments, or statutory bodies. Such variations shall be configurable through the rule engine without requiring any change to the application source code.		
11.1.5.	The rule engine shall be configurable at different organizational scopes, including system-wide, ministry-level, department-level, or other designated organizational units. Configuration access shall be restricted to authorized users, and rule applicability shall be enforced only within the defined organizational boundaries.		
11.1.6.	All rule definitions and modifications shall be version-controlled, auditable, and effective-date driven to ensure payroll accuracy, traceability, and compliance with government audit standards.		

S/N	Requirement	S/C	Remarks
11.1.7.	The system shall allow authorized payroll administrators to add newly recruited employees into the payroll process, capturing all mandatory employment, bank, and tax details. • Capture personal details: full name, NIC, date of birth, contact information, dependents. • Capture employment details: grade, job title, employment type, department, appointment date. • Capture bank details: bank name, branch, account number, SWIFT code (if applicable). • Capture tax details: TIN, APIT status, applicable deductions. • Validate mandatory fields to prevent incomplete employee setup. • Assign employee to correct organizational unit and pay grade.		
11.1.8.	The system shall allow payroll administrators to remove employees from active payroll for resignation, retirement, or transfer, ensuring all pending payments, deductions, and statutory obligations are settled. • Identify pending salary, arrears, and unpaid leave adjustments. • Ensure deduction of outstanding loans, advances, and remittances. • Automatically update employee status flags: resigned, retired, transferred. • Archive employee payroll records in a secure, read-only format. • Generate exit payroll summary including final pay, deductions, and statutory contributions. • Trigger workflow for intra-departmental or inter-departmental transfer if applicable		
11.1.9.	The system shall allow secure updating and modification of employee payroll data, including recurring and fixed elements, with full change tracking and audit logging. • Modify pay components: basic salary, allowances, overtime, bonuses. • Update deduction parameters: statutory contributions, loans, advances.		

S/N	Requirement	S/C	Remarks
	- Track change history with before/after values. - Log user ID, timestamp, and reason for modification. - Enforce role-based access to ensure only authorized personnel can perform updates.		
11.1.10.	The system shall support multiple pay periods to accommodate different employee types: permanent, casual, and contract. - Monthly payroll for permanent employees. - Weekly, bi-weekly or monthly payroll for casual or temporary staff. - Configurable payroll calendar per office/department. - Automatic alignment with statutory cut-off periods.		
11.1.11.	The system shall calculate and include variable earnings such as overtime, holiday pay, bonuses, and incentives. - Capture overtime hours and apply predefined rates. - Calculate holiday pay based on official gazette holidays and employee eligibility. - Apply bonuses and incentives as per HR policy formulas. - Generate detailed variable pay breakdown in payroll summary.		
11.1.12.	The system shall allow addition of various allowances such as travel, food, medical, housing, and other discretionary benefits. - Define allowance types and eligibility rules. - Apply allowances automatically based on employee grade, department, or location. - Maintain allowance history for auditing purposes. - Enable one-time or recurring allowance assignment.		
11.1.13.	The system shall automatically deduct and settle salary advances previously taken by an employee. - Identify outstanding advance balances. - Apply repayment schedules as per HR policy. - Deduct advance installments automatically from payroll. - Update employee salary advance ledger post-payroll run		

S/N	Requirement	S/C	Remarks
11.1.14.	The system shall calculate employee salaries based on total earnings and total deductions. - Aggregate components: (e.g.: basic salary, allowances, variable pay). - Deduct statutory contributions (e.g.: W&OP, PSPF, EPF, ETF, Tax). - Deduct loans, advances, and approved remittances. - Compute net pays automatically. - Validate net salary is non-negative; trigger alerts if validation fails.		
11.1.15.	The system shall allow retroactive payroll adjustments, arrears, or corrections for salary, allowances, and deductions. - Apply corrections for backdated promotions or salary revisions. - Recalculate affected statutory contributions. - Update historical payroll and generate adjustment reports. - Maintain audit trail for each retroactive transaction.		
11.1.16.	The system shall provide alerts for incomplete employee payroll records, negative net salary, or missing statutory deductions. - Generate pre-processing validation alerts. - Highlight missing bank or tax details. - Notify payroll administrators of exceptions before payroll finalization. - Maintain exception logs for audit and compliance reporting.		
11.1.17.	The system shall calculate deductions for W&OP, PSPF, EPF, ETF, and APIT automatically based on employee eligibility. - Integrate statutory deductions with payroll engine. - Apply contribution rates per employee category. - Validate against statutory limits. - Generate employee-wise and institution-wise contribution summaries.		

S/N	Requirement	S/C	Remarks
11.1.18.	The system shall generate pre-payment payroll summaries and reconciliation reports for review before final salary disbursement. • Produce detailed departmental payroll preview. • Summarize gross pay, deductions, and net pay. • Allow payroll manager approval before bank transfer. • Generate reconciliation reports to ensure accuracy.		
11.1.19.	The system shall maintain comprehensive employee identification details including but not be limited to: NIC, salary scale, job title, employment type, and TIN number. • Maintain current and historical employment information. • Link employee data with organizational unit and payroll records. • Validate key identifiers to prevent duplicates.		
11.1.20.	The system shall produce SLIP (Standard Local Interbank Payment) files for secure bank integration and automated salary transfers. • Generate bank-compliant electronic salary transfer files. • Validate employee bank accounts before file creation. • Log file generation and approvals for audit.		
11.1.21.	The system shall store and retain historical payroll records in a secure archive for legally mandated retention periods. • Archive payroll records by legally mandated retention periods. • Maintain read-only access for compliance and audits. • Enable retrieval for retroactive adjustments or reporting.		
11.1.22.	The system shall generate detailed monthly salary reports including but not be limited to breakdowns by department, pay element, and employee. • Department-wise salary summary. • Employee-specific detailed pay breakdown. • Integration with budget and finance reporting.		
11.1.23.	The system shall allow payroll processing for multiple offices or departments simultaneously.		

S/N	Requirement	S/C	Remarks
	- Centralized processing with multi-office visibility. - Ensure correct office-specific statutory and payroll rules. - Enable cross-office payroll reporting and reconciliation.		
11.1.24.	The system shall allow authorized users to configure payroll rules, pay components, and deduction parameters without system downtime. - Update salary structures, allowances, and deduction rules. - Configure pay schedules and cycles. - Maintain version history of payroll rules		
11.1.25.	The system shall generate annual payroll summaries and reports for auditing and government submissions. - Consolidated payroll by institution and department. - Year-to-date summary of gross, net, and deductions. - Support statutory submission formats.		
11.1.26.	The system shall support to generate employee-specific reports, including pay history, deductions, allowances, loans, and contributions. - Provide ESS portal access for employees. - Generate ad-hoc and scheduled reports. - Enable printable or exportable formats.		
11.1.27.	The system shall generate department-wise, category-wise, and pay-grade-wise payroll reports. - Aggregate payroll by employee category (permanent, contract, casual). - Support comparative analysis by grade, department, or office. - Provide real-time dashboards for management.		
11.1.28.	The system shall maintain audit logs of all payroll transactions, adjustments, and approvals. - Record user ID, timestamp, and action type. - Track manual edits and automated calculations. - Generate audit-ready payroll logs for external review.		

S/N	Requirement	S/C	Remarks
11.1.29.	The system shall support secure export of payroll data to accounting systems, treasury, or government portals. - Export in multiple formats: CSV, Excel, XML, PDF. - Validate exported data integrity. - Support secure transmission protocols for sensitive payroll information		
12. Salary Revision			
12.1.	General		
12.1.1.	The system shall allow authorized users to create new salary revision records.		
12.1.2.	The system shall support multiple salary revisions without affecting historical payroll records.		
12.1.3.	The system shall allow salary revisions to be created based on Government Circular		
12.1.4.	The system shall record Circular Number, Circular Date, Effective Date and Implementation Date.		
12.1.5.	The system shall support retrospective (backdated) salary revisions		
12.1.6.	The system shall support multiple effective dates under one salary revision where required.		
12.1.7.	The system shall allow to implement salary revision stage wise when required		
12.1.8.	The system shall maintain version control for every salary revision.		
12.1.9.	The system shall revise salary scales according to approved Government salary structures.		
12.1.10.	The system shall create new salary scales without deleting previous salary scales.		
12.1.11.	The system shall map old salary scales to revised salary scales.		
12.1.12.	The system shall support revised initial salary.		
12.1.13.	The system shall support revised increment values.		
12.1.14.	The system shall support revised salary slabs.		
12.1.15.	The system shall support revised maximum salary.		
12.1.16.	The system shall validate duplicate salary scale codes.		
12.1.17.	The system shall maintain historical salary scales.		
12.1.18.	The system shall automatically convert existing salaries into revised salary scales.		
12.1.19.	The system shall automatically calculate salary arrears arising from salary revisions.		

S/N	Requirement	S/C	Remarks
12.1.20.	The Salary Revision Module shall integrate with other payroll modules.		
12.1.21.	The system shall provide comprehensive salary revision reports. Old vs New Salary Report • Salary Arrears Report • Vote-wise Salary Revision Report • Treasury Financial Impact Report • Organization-wise Revision Report • Employee Category Report		
12.1.22.	The ESS Portal shall provide salary revision information to employees. • View revised salary details. • View arrears calculation. • Receive notifications of salary revisions.		
12.1.23.	All salary revision activities shall be fully auditable. • Record user, date, time, and action. • Maintain revision history permanently. • Prevent unauthorized modification after approval. • Maintain immutable audit logs.		
13. Employee Self-Service (ESS) Module			
13.1.	General		
13.1.1.	The system shall provide an Employee Self-Service (ESS) portal for all government employees under the centralized payroll framework.		
13.1.2.	ESS access shall be role-restricted and applicable only to employee-authorized self-service functions.		
13.1.3.	The ESS module shall comply with government cybersecurity policies and access control regulations.		
13.1.4.	ESS services shall be available through web and mobile-responsive interfaces.		
13.1.5.	The system shall enforce secure login using NIC/Employee ID with multi-factor authentication where required.		
13.1.6.	The system shall lock accounts after repeated failed login attempts and notify administrators.		

S/N	Requirement	S/C	Remarks
13.1.7.	Employees shall only view their own payroll data and no other staff information.		
13.1.8.	The system shall allow employees to view monthly pay slips through ESS after payroll approval.		
13.1.9.	Employees shall download pay slips in PDF format with secure watermarking.		
13.1.10.	ESS shall provide year-to-date salary summaries for employee reference.		
13.1.11.	Employees shall view APIT deductions and cumulative tax totals via ESS.		
13.1.12.	The system shall generate employee tax certificates (annual) for filing purposes.		
13.1.13.	Employees shall view statutory deductions such as EPF/ETF/W&OP/PSPF contributions.		
13.1.14.	Employees shall view approved overtime hours and holiday work payments through ESS.		
13.1.15.	ESS shall show OT rates applied and calculation breakdown.		
13.1.16.	Employees shall view active loan balances, monthly installments, and remaining recovery period.		
13.1.17.	ESS shall provide schedules for salary advances and overpayment recovery deductions.		
13.1.18.	Loan and recovery statements shall be downloadable for official purposes.		
13.1.19.	Employees shall view remittance deductions such as insurance premiums, union fees, or bank remittances.		
13.1.20.	ESS shall display agent/institution details and remittance reference numbers.		
13.1.21.	Employees shall receive alerts when remittance deductions start, change, or stop.		
13.1.22.	Employees shall view their master data profile (designation, grade, bank account, duty station).		

S/N	Requirement	S/C	Remarks
13.1.23.	Employees shall not directly edit sensitive payroll fields but may submit update requests via workflow.		
13.1.24.	ESS shall send automated notifications for salary processing completion and pay slip release.		
13.1.25.	Employees shall receive alerts for no-pay deductions, arrears payments, or overpayment recoveries.		
13.1.26.	Notifications shall be available via portal inbox, email, or SMS as permitted.		
13.1.27.	The system shall maintain complete audit logs of ESS access, downloads, requests, and approvals.		
14. Dashboards, Portals, and Reporting (Module T & U)			
14.1.	General		
14.1.1.	Enterprise Data Warehouse Architecture - The system shall design, implement, and maintain a centralized Enterprise Data Warehouse (EDW) to consolidate payroll data from all eGPS functional modules. - The EDW shall support both structured and semi-structured data and be scalable to accommodate future data growth. - The architecture shall support historical data storage to enable long-term trend analysis and audit requirements.		
14.1.2.	Data Integration and ETL / ELT - The system shall provide automated ETL/ELT pipelines to extract data from core eGPS modules, external systems, and legacy databases. - ETL processes shall support scheduling, monitoring, failure recovery, and audit logging. - The solution shall allow incremental, full, and near-real-time data loads, configurable per data source.		
14.1.3.	Data Quality Assurance The system should implement processes and tools to monitor, cleanse, and validate data for accuracy, consistency, and reliability.		
14.1.4.	Deploy automated data quality checks for flight data to ensure that arrival and departure times are accurate and		

S/N	Requirement	S/C	Remarks
	consistent across all systems, reducing confusion and delays for passengers.		
14.1.5.	Data Integration and ETL Processes The solution should automate ETL/ELT pipelines to extract, transform, and load data from multiple sources into a unified repository.		
14.1.6.	Data Governance Framework - The solution should establish policies, roles, and responsibilities for effective data management, ensuring data quality, integrity, and compliance. - The system shall enforce a formal data governance framework, including defined roles such as Data Owner, Data Steward, and Data Custodian. - The solution shall support data ownership mapping per dataset and per ministry/PE.		
14.1.7.	All governance rules shall be configurable and enforceable through system controls. The solution should define data ownership and maintenance responsibilities across airport departments, ensuring that flight schedules and critical data remain accurate and reliable.		
14.1.8.	Data Lifecycle Management - Manage the entire data lifecycle—from creation and ingestion to archival or deletion—to ensure relevance and efficiency. - The MoF will Implement lifecycle policies for flight records to archive or purge outdated data, reducing storage costs and maintaining data relevance.		
14.1.9.	Data Privacy and Compliance Objective: Enforce strict measures for protecting sensitive information and complying with relevant data privacy laws and regulations.		
14.1.10.	Data Privacy and Compliance - Enforce strict measures for protecting sensitive information and complying with relevant data privacy laws and regulations. - Apply Sri Lanka data protection and data classification Law/ Guideline practices for ensuring consent-based		

S/N	Requirement	S/C	Remarks
	data use and providing data deletion options upon request.		
14.1.11.	The solution should make sensitive data shall be masked, anonymized, or restricted based on user roles. The system shall support consent-based data usage and right-to-erasure where applicable.		
14.1.12.	Data Documentation and Metadata Management The solution must maintain comprehensive metadata and documentation for all datasets to improve data discovery, context, and usability.		
14.1.13.	The system shall maintain a centralized metadata repository covering: - Dataset descriptions - Data lineage - Field definitions - Source systems - Refresh frequency - The metadata shall be searchable and accessible to authorized users to improve data discoverability.		
14.1.14.	Data Modelling and Access Layers The solution must design efficient data models and access layers that balance performance, usage frequency, and business value.		
14.1.15.	Data Analytics, Reporting, and Data Science Capabilities The solution should provide platforms and tools for analytics, reporting, data modeling, and visualization to support evidence-based decision-making.		
14.1.16.	Data Serving, Sharing, and Collaboration Foster collaborative, data-driven decision-making by enabling secure data sharing and user interaction within the platform.		
14.1.17.	Implement online collaboration tools, embedded analytics in productivity suites, and shared dashboards for inter-departmental engagement.		

S/N	Requirement	S/C	Remarks
14.1.18.	Visualization Standards The solution should establish consistent visualization guidelines to ensure clarity, accuracy, and uniformity in presenting analytical insights.		
14.1.19.	The platform shall support ad-hoc queries, dashboards, and predefined analytical views.		
14.1.20.	Authorized users shall be able to create and customize dashboards without vendor intervention.		
14.1.21.	The system shall ensure consistent labeling, filtering, and interpretation across all reports and dashboards.		
14.2.	Reports		
14.2.1.	Detailed Requirements Capture: The SIP shall gather and document detailed reporting requirements for each functional module of the eGPS. These requirements must be defined and validated through SRS and subsequently approved by the Ministry of Finance (MoF) prior to implementation.		
14.2.2.	The SIP shall develop and deliver up to 50 comprehensive reports covering key aspects of the payroll application		
14.2.3.	Every report shall be generated and made available in three official languages Sinhala, Tamil, and English ensuring inclusivity and compliance with national communication standards.		
14.2.4.	Reports shall be dynamically generated based on multiple user-defined parameters and filters such as date range, payroll method, payroll category, funding source, organization type, supplier, region, and contract value range. The filtering mechanism must support both predefined and ad-hoc queries for advanced analytics.		
14.2.5.	Visualization and Export Options: The system shall provide intuitive data visualization tools (charts, dashboards, infographics) and offer options to export reports in standard formats such as PDF, Excel, and CSV for decision-making, audit, and publication purposes.		

S/N	Requirement	S/C	Remarks
15. Artificial Intelligence (AI) Integration			
15.1.	General		
15.1.1.	Payroll Data Intelligence & Pattern Analysis The AI solution shall provide advanced payroll data intelligence including: ○ Analysis of historical payroll transactions ○ Identification of payroll trends and spending patterns ○ Detection of unusual salary variations ○ Identification of duplicate or suspicious payments ○ Workforce cost analysis by institution, cadre, or category ○ Predictive payroll expenditure modeling The system shall identify anomalies such as: ○ Unexpected salary spikes ○ Repeated irregular allowances ○ Duplicate employee payments ○ Abnormal deduction behavior		
15.1.2.	Fraud, Anomaly & Irregular Payroll Detection The AI solution shall provide continuous monitoring of payroll transactions including: ○ Detection of fraud indicators ○ Identification of ghost employees ○ Detection of duplicate identities ○ Detection of collusion or irregular financial behavior ○ Identification of abnormal overtime or allowance patterns The system shall support: ○ Configurable thresholds ○ Automated alerts ○ Risk scoring of payroll transactions ○ Continuous anomaly scanning		

S/N	Requirement	S/C	Remarks
15.1.3.	Payroll Forecasting & Budget Intelligence The AI solution shall forecast payroll requirements using: ○ Historical payroll trends ○ Cadre changes ○ Retirement projections ○ Seasonal staffing variations The system shall support: ○ Budget planning ○ Treasury forecasting ○ Salary growth modeling ○ Institutional payroll planning ○ Category-based payroll projections		
15.1.4.	Smart Payroll Document Processing (OCR + NLP) The AI solution shall support intelligent document processing including: ○ OCR extraction from payroll forms and letters ○ Processing of appointment letters ○ Processing of promotional approvals ○ Processing of transfer orders ○ Processing of retirement documents ○ Automatic classification and validation		
15.1.5.	Intelligent Search & Payroll Chatbot The AI solution shall provide: ○ Natural language payroll search ○ Conversational payroll assistant ○ Employee self-service chatbot ○ Policy explanation assistant ○ Payroll query resolution The chatbot shall support: ○ Salary explanation ○ Deduction breakdown ○ Leave impact on payroll ○ Loan balance queries ○ Retirement projections		
15.1.6.	Automated Payroll Report Summarization The AI solution shall summarize: ○ Payroll reports ○ Audit findings ○ Payroll exception logs ○ Department payroll summaries		

S/N	Requirement	S/C	Remarks
15.1.7.	Payroll Rule Intelligence & Validation The AI solution shall: ○ Validate payroll calculations ○ Detect rule inconsistencies ○ Identify policy violations ○ Flag non-compliant payroll transactions ○ Suggest correction recommendations		
15.1.8.	Workforce & Cadre Analytics The AI system shall provide: ○ Cadre utilization analytics ○ Vacancy prediction ○ Retirement impact modeling ○ Staffing imbalance detection ○ Cost optimization insights		
15.1.9.	AI Lifecycle & Model Management Bidders shall propose tools supporting: ○ Machine learning frameworks ○ NLP frameworks ○ Anomaly detection libraries ○ Conversational AI frameworks ○ Model lifecycle management tools		

16. Reports

The Payroll Reports Management module shall provide a comprehensive reporting framework to support statutory compliance, payroll analysis, financial accounting, and management decision-making. The system shall generate accurate, timely, and auditable reports for all levels of government payroll administration, including central government, provincial councils, and statutory bodies. Reports shall be available in multiple formats (PDF, Excel, CSV, XML) and support secure role-based access.

All reports shall include **sub-functions** such as filtering by employee, category, grade, department, payroll period, or specific statutory or financial criteria. Historical data and audit trails shall be maintained for reconciliation, policy compliance, and external audit purposes.

No.	Report	Monthly	Annual	Selected Period
16.1. Core Statutory & Financial Reports				
16.1.1.	Account Report/ Account Summary Report The system shall generate account-wise salary expenditure reports summarizing gross pay, deductions, allowances, and net salary posted to financial accounts.	√		
16.1.2.	Category-wise Salary Report The system shall produce category-wise salary reports grouped by service category, job type, grade, or designation.	√		
16.1.3.	W&OP Report The system shall generate reports on W&OP contributions for eligible public officers.	√	√	√
16.1.4.	Contributory Pension/ PSPF Report The system shall generate pension contribution reports as per government statutory regulations.	√	√	√
16.1.5.	EPF/ ETF Report The system shall generate EPF/ETF reports, including employee numbers, contributions, arrears, and adjustments.	√	√	√
16.1.6.	APIT Report The system shall produce APIT reports summarizing income and APIT details of all employees.	√	√	√
16.2. Employee & Payroll Detail Reports				
16.2.1.	Employee Pay Particulars Report The system shall produce detailed monthly pay particulars for each employee.	√	√	√
16.2.2.	Overtime Report The system shall generate a detailed overtime calculation report.	√	√	√

16.2.3.	Employee With Negative Net Salaries Report The system shall automatically generate a report listing employees with negative net salary.	√		
16.2.4.	Staff Summary by Service, Class, and Grade The system shall generate staff strength reports categorized by service type, class, and grade.	√		
16.2.5.	Balance of Remit up to a Total The system shall generate an outstanding remittances summary report.	√		
16.2.6.	Employee Loan Particulars Report The system shall generate a detailed report of employee loan balances, installments, interest, and arrears.	√		
16.3. Remittance & Deduction Reports				
16.3.1.	Remittance List The system shall generate a report of all statutory, voluntary, and third-party remittances.	√		
16.3.2.	Monthly Loan Report The system shall generate monthly summaries of all loan recoveries.	√		
16.3.3.	Salary Advance Report The system shall produce a detailed report of salary advances issued and recovered.	√		
16.3.4.	Deduction Summary Report The system shall generate a complete summary of all payroll deductions.	√		
16.4. Payroll Summary & Control Reports				
16.4.1.	Salary Summary Report The system shall generate monthly gross, net, allowance, and deduction summaries.	√		
16.4.2.	Salary Reconciliation Report The system shall generate reconciliation reports comparing payroll totals against bank files and GL postings.	√		

16.4.3.	Category/Gross Pay Report The system shall produce gross pay reports by category, grade, and department.	√		
16.4.4.	Abatements Report The system shall generate a report on salary abatements and excess payments.	√		
16.5. Bank & Payment Reports				
16.5.1.	Net Salary to Bank List The system shall generate a bank transfer list for processing net salary payments.	√		
16.5.2.	Net Salary Section-wise Summary The system shall provide salary summaries grouped by sections/divisions.	√		
16.5.3.	Pay Slip The system shall generate all employee pay slips.	√		
16.5.4.	Pay Sheet The system shall generate a all employee pay sheet			
16.6. Special Reports				
16.6.1.	Employee History Report The system shall generate full employee payroll history including loans, allowances, remittances, and salary changes.		√	√
16.6.2.	Payroll Audit Report The system shall produce comprehensive audit logs of payroll runs.	√	√	√
16.7. Analysis Report				
16.7.1.	Budget Allocation vs. Expenditure Report The system shall generate salary expenditure vs. budget allocation reports.	√	√	√
16.7.2.	Increment Eligibility Report The system shall generate annual salary increment eligibility reports.	√	√	√

16.7.3.	Retirement Benefit Estimate Report The system shall generate a retirement benefit estimation report based on service period and contributions.	√	√	√
16.7.4.	Gratuity Eligibility Report The system shall generate reports identifying employees eligible for gratuity.	√	√	√
16.7.5.	Overtime Approval Summary Report The system shall generate summary reports of approved overtime hours and payments.	√		
16.8. Error Reports				
16.8.1.	Account Summary Error Report The system shall generate an Account Summary Error Report identifying inconsistencies in ledger postings, missing accounts, or imbalanced debit/credit records.	√		
16.8.2.	Remittance Error Report The system shall automatically generate a remittance error report showing mismatches, missing accounts, or incorrect calculations.	√		
16.8.3.	Error Report (General Payroll Error Report) The system shall generate a comprehensive error report highlighting missing data, incorrect configurations, and failed calculations.	√		

17. Business Continuity Offline Payroll Tool

17.1. Background

The Government of Sri Lanka operates a centralized payroll system that serves approximately one million (1,000,000) government employees across multiple ministries, departments, and public sector institutions. The centralized system is the primary platform used for payroll processing, salary calculations, and bank file generation.

However, due to the critical nature of government payroll operations, the Ministry of Finance has requested the development of a Business Continuity (BC) Offline Payroll Tool. This tool will ensure that payroll preparation can continue even during situations where the centralized system or network connectivity becomes unavailable.

The proposed solution will function as a temporary offline operational tool, enabling payroll units to continue essential salary payment activities until connectivity to the centralized system is restored.

17.2. Objective

The objective of this requirement is to develop an Offline Payroll Support Tool that allows authorized payroll officers to:

- Access previously backed-up payroll data through excel file upload only.
- Update employee salary information where necessary.
- Generate a bank payment diskette/file for salary disbursement.
- Maintain a record of modifications made to payroll data.
- Re-enter the payroll information (Manual) into the centralized payroll system once connectivity is restored.

17.3. System Overview

The overall payroll system architecture is designed as a centralized platform managed by the Government of Sri Lanka. However, under Business Continuity scenarios, individual payroll units must have the capability to operate independently using an offline tool.

Each payroll unit will maintain a backup Excel file containing the previous month's payroll information, which will be used as the baseline dataset for the offline payroll tool.

The offline tool will allow users to:

- Upload the backup Excel file.
- View and update specific payroll data.
- Generate bank payment files required for salary transfers.

It is important to note that this tool will not perform full payroll calculations, as the complete payroll processing logic will remain within the centralized system.

17.4. Functional Requirements

17.4.1 User Authentication and Access Control

The system shall provide a secure login mechanism to ensure that only authorized payroll officers can access the offline payroll tool.

Functional Requirements

- The system shall require users to log in using a User ID and Password.
- Each payroll officer shall be assigned unique login credentials.
- Access to the tool shall be restricted to authorized users within each ministry or department.
- The system shall maintain basic authentication security mechanisms to prevent unauthorized access.

17.4.2 Excel File Upload and Data Initialization

The system shall allow users to initialize payroll data using a backup Excel file from the previous month.

Functional Requirements

- The system shall provide a facility to upload a payroll backup Excel file.
- The Excel file shall contain the following minimum fields:
 - Employee Number
 - Employee Name
 - Bank Account Details
 - Previous Month Gross Salary
 - Previous Month Net Salary
 - Etc. (Base on the requirement gathering the information can be changed)
- After upload, the system shall display the employee payroll records within the tool interface.
- The uploaded data shall be stored locally within the tool environment.

17.4.3 Payroll Data Editing

The system shall allow authorized users to modify specific payroll data fields where necessary.

Functional Requirements

- Users shall be able to update:
 - Employee salary details
 - Bank account details
 - Employee status information (if required)
- The system shall allow editing only of permitted fields, while maintaining the original dataset structure.
- The system shall validate mandatory fields before allowing updates to be saved.

17.4.4 Bank Diskette Generation

The system shall generate a bank diskette/payment file required for salary disbursement.

Functional Requirements

- The system shall allow users to generate a bank payment file based on the updated payroll data.
- The generated file shall comply with the bank's required format for salary transfers.
- The system shall provide an option to download or export the bank file.
- The generated bank file shall be used by payroll units to submit salary payments to the banking system.

17.4.5 Audit Logging

The system shall maintain a basic audit log to track all modifications made to payroll data.

Functional Requirements

The audit log shall record the following information:

- User ID who performed the change
- Date and time of the modification
- Employee record affected
- Previous value
- Updated value

The audit logs shall allow administrators or authorized users to review any changes made during the offline operation.

17.4.6 Data Reconciliation with Centralized System

Once connectivity to the centralized payroll system is restored, payroll officers shall re-enter the updated payroll information into the central system.

Functional Requirements

- Users shall manually input or upload the updated payroll data into the centralized payroll system.
- The centralized payroll system will then perform the complete payroll processing workflow.
- The offline tool shall serve only as a temporary continuity mechanism, and not as a replacement for the main payroll system.

17.5. Business Continuity Workflow

- Centralized payroll system becomes unavailable due to network or system failure.
- Payroll unit activates the Offline Payroll Tool.
- User logs into the tool using authorized credentials.
- User uploads the previous month payroll backup Excel file.
- User reviews and updates necessary payroll data.
- System records all changes in the audit log.
- User generates the bank diskette/payment file.
- Salary payments are processed via the bank.
- Once the centralized system becomes available:
 - Payroll officers re-enter the updated payroll information.
 - Centralized payroll processing is executed.

17.6. Key Constraints

- The offline tool will not perform full payroll calculations.
- The tool will only support data update and bank file generation.
- The centralized payroll system remains the primary payroll processing platform.

18. Government Payroll Compliance

18.1. Background

The proposed Payroll System shall be specifically designed for the Government of Sri Lanka and shall fully support all payroll administration policies, financial regulations, establishment rules, Treasury instructions, and administrative procedures applicable to Government organizations. The solution shall not be based solely on standard commercial payroll practices but shall incorporate Government-specific business rules, approval processes, salary structures, payroll calculations, accounting requirements, and statutory obligations.

The system shall comply with, but not be limited to, the following:

- Establishments Code of Sri Lanka.
- Financial Regulations (FRs) of the Government of Sri Lanka.
- Treasury Circulars and Treasury Operations Circulars.
- Public Administration Circulars.
- Budget Circulars.
- Management Services Circulars.
- Salary and Allowance Circulars.
- Inland Revenue Act and APIT regulations.
- W&OP, PSPF, EPF, ETF, Pension, and other statutory requirements.
- Government Chart of Accounts, Vote structure, Economic Objects, and accounting classifications.
- Other Acts, Regulations, Circulars, Cabinet Decisions, and administrative instructions issued by the Government from time to time.

The solution shall provide configurable business rules to enable authorized administrators to implement future policy changes, salary revisions, new allowances, deductions, taxes, statutory contributions, and administrative procedures without requiring changes to the application's source code. All such configuration changes shall be version-controlled, effective-date driven, fully auditable, and supported through appropriate approval workflows.

Further, the successful bidder shall study the Government payroll policies, procedures, applicable laws, circulars, financial regulations, and establishment rules during the requirements validation phase and ensure that the final solution fully complies with such requirements before User Acceptance Testing (UAT).