# Request for Proposal

## SELECTION OF SERVICE PROVIDER FOR STUDY, DESIGN, DEVELOPMENT, IMPLEMENTATION AND MAINTENANCE OF INTEGRATED PROJECT & FUND MANAGEMENT SYSTEM (IPFMS) FOR WESTERN ODISHA DEVELOPMENT COUNCIL

***RFP No: OCAC-SEGP-SPD-0090-2025-26007***

# Vol-II Terms of Reference

**ODISHA COMPUTER APPLICATION CENTRE**

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# 1. Background

The Western Odisha Development Council (WODC), established by the Government of Odisha, is mandated to promote balanced regional development and socio-economic growth across the western districts of the state. Over the years, WODC has successfully implemented numerous projects in diverse sectors such as agriculture, education, healthcare, rural infrastructure, industrial promotion, tourism, and social welfare, driving inclusive and sustainable development in the region.

Currently, most of the project-related activities—such as proposal submission, fund allocation, progress tracking, and reporting—are carried out manually or through isolated systems maintained by different stakeholders. This fragmented approach results in operational inefficiencies, delays, redundant data entry, and limited real-time visibility into fund utilization and project performance. Additionally, the absence of a unified grievance and feedback mechanism restricts citizen participation and weakens accountability in developmental governance.

The Integrated Project and Fund Management System (IPFMS) aim to address these challenges by providing a single source of truth for all stakeholders involved—ranging from the Council and District Administrations to Block Offices, Implementing Agencies, and Citizens. The platform will integrate modules for project management, fund flow, inspection, grievance handling, asset tracking, and MIS reporting, supported by geo-tagging and mobile accessibility features.

The Proposed system will enable WODC to:

- Digitize and automate the complete project and fund management lifecycle.
- Monitor real-time progress through milestone-based dashboards and reports.
- Enhance transparency in fund allocation, utilization, and reconciliation.
- Facilitate citizen engagement through a unified grievance redressal and feedback mechanism.
- Support data-driven decision-making through integrated analytics and performance monitoring tools.

This initiative reflects WODC's vision to create a technology-driven governance ecosystem, empowering administrative efficiency, public accountability, and evidence-based development planning.

The Odisha Computer Application Centre (OCAC), under the Department of Electronics & IT, Government of Odisha, leads the state's e-Governance initiatives. As the government's tech backbone, OCAC drives digital transformation, aiming to enhance public service delivery through ICT. It collaborates with various departments to implement innovative, citizen-centric digital solutions that promote transparency, efficiency, and accessibility across Odisha.

## 1.1 OBJECTIVE

The objective of the Integrated Project and Fund Management System (IPFMS) project is to design and implement a comprehensive, web-based, and mobile-enabled digital platform that will streamline and automate all processes related to project planning, approval, implementation, fund flow, inspection, and monitoring under the purview of the Western Odisha Development Council (WODC). It will also serve as the central digital repository and management interface for all WODC-funded and facilitated projects.

This system aims to:

- Digitize and automate end-to-end project workflows including proposal submission, administrative approval, fund allocation, progress monitoring, inspection, and closure.
- Establish a unified digital repository for all WODC-funded and facilitated projects to ensure centralized access, transparency, and consistency of information.
- Integrate fund management and payment workflows with real-time tracking of financial disbursements, utilization certificates, and expenditure reconciliation.
- Enable geo-tagged field inspections and mobile-based progress reporting for effective on-ground validation of works and outcomes.
- Enable seamless coordination between the Council, District Collectors, Block Offices, Implementing Agencies, and other stakeholders through a structured workflow, ensuring transparency and efficiency at every stage of project execution.
- Provide real-time dashboards and MIS reports to decision-makers for evidence-based planning, policy formulation, and performance evaluation.

- Enhance transparency, accountability, and citizen engagement through integrated grievance management and feedback mechanisms.
- Ensure data-driven governance by leveraging analytics, visualization tools, and automated alerts for monitoring timelines and financial health of projects.

# 2. Scope of Work

## 2.1 REQUIREMENT STUDY

The Selected Agency shall perform the detailed assessment of the solution requirements as mentioned in this section. Based on the understanding and its own individual assessment, the Selected Agency shall develop & finalize the System Requirement Specifications (SRS) in consultation with WODC/OCAC. While doing so, the Selected Agency is at least expected to do following:

a. The Selected Agency or shall liaise with Western Odisha Development Council officials, Govt. of Odisha.
b. The Selected Agency shall consult with the domain experts and translate all the requirements mentioned in the document into System Requirements
c. The Selected Agency shall follow standardized template for requirements capturing.
d. The Selected Agency must maintain traceability matrix from SRS stage for the entire implementation.

## 2.2 DESIGN

a. After completion of system study, Selected Agency shall design the solution architecture and specifications for meeting the requirements mentioned as part of this document. The Selected Agency shall be entirely responsible for the design and architecture of the system implemented to satisfy all requirements as described in this document including suggestion on sizing of the required hardware.
b. Selected Agency shall be responsible for the preparation of System Requirement Specification (SRS) document covering all modules & features planned to be covered as specified based on the outcome of detailed System Study and refined/ improvised FRS.
c. Selected Agency shall demonstrate the SRS including screen templates, reporting requirements, process flow, and new features suggested for review and shall incorporate all the suggestions / modifications for approval by OCAC/Department.

d. Selected Agency is required to update the SRS documents as and when any enhancement/ modifications is made into the module/ system till the duration of contract.

## 2.3 DEVELOPMENT

The Selected Agency shall design and develop the Web portal and mobile app (both android and ios app) with components / functionalities to address the requirements of Western Odisha Development Council, Govt. of Odisha including but not limited to the approved SRS, Solution Architecture & Standards as specified in this RFP document. The Selected Agency shall supply the following documents along with the developed components:

a. Business process guides
b. Data model descriptions
c. Sample reports
d. Frequently asked question (FAQ) guides
e. Any other documentation required for usage of implemented solution

## 2.4 INTEGRATION

The Selected Agency shall be responsible for integration with other Applications, databases, SMS, eMail as well as with WhatsApp services before go-live as specified in this document as well as other IT systems of the Department. Along with that, following integrations need to be done post go-live subject to the availability of necessary integration related API and go-ahead from the concerned department:

a. Integration with PPMS (Panchayati Raj Project Monitoring System) developed by Panchayati Raj & Drinking Water, UPMS (Urban Project Monitoring System) and WAMIS to avoid duplication of project data.

## 2.5 TESTING

b. The Selected Agency shall design the testing strategy including test cases and conduct testing of various components of the solution developed. The solution testing shall at least include Unit Testing, System Integration Testing, Performance Testing, and User Acceptance Testing (UAT).
c. The Selected Agency shall perform the testing of the solution based on the test plan, document the results, fix the bugs found during the testing and take remedial action based on outcome of the tests.

d. The Selected Agency shall ensure that each module & features developed under this RFP is tested as per the latest version of the IEEE 730 (Software Quality Assurance Processes) standards and shall comply with GIGW guideline.

e. Selected Agency must ensure deployment of necessary resources, tools and related logistics during the testing phases.

## 2.6 SECURITY AUDIT

a. The Selected Agency needs to ensure that the solution is in compliance with the CERT-In Security Policy and Guidelines.

b. The Selected Agency shall appoint CERT-In empanelled auditor who shall be responsible for performing the Security Audit of the solution.

c. The cost of audit & rectification of non-compliances shall be borne by the Selected Agency.

d. The agency shall carry out Security audit before Go-live of application to obtain the Safe-to-host certification.

e. Perform Periodic audit & certification as and when it is required as per Data Centre policy.

f. The audit shall be performed at least on the below mentioned aspects.

- Functional Testing
- Accessibility Testing
- Application Security Audit
- Vulnerability Testing

## 2.7 SSL CERTIFICATION

The Selected Agency shall carry out SSL certification, as per requirement.

a. Secure connection between Client and Server through Secure protocol HTTPS

b. Encryption of Data during transmission from server to browser and vice versa

c. Encryption key assigned to it by Certification Authority (CA) in form of a Certificate.

d. SSL Security in the application server

## 2.8 DEPLOYMENT & CONFIGURATION

a. The Web portal is proposed to be hosted on the infrastructure to be arranged by Western Odisha Development Council/OCAC after successful UAT.

b. The Selected Agency will be responsible for configuration, installation and hosting of the Web application in High Availability mode over the hardware infrastructure provided.

c. The Selected Agency shall be responsible for the end-to-end management of hosting and deployment of the application.

d. Post award of contract, the Selected Agency will be expected to furnish detailed hardware & software sizing including server, storage, security devices and related system software required for operationalization of the solution. Based on sizing submitted by the Selected Agency, the required hardware & software will be arranged.

e. Enterprise grade database shall be provisioned for the proposed application. The selected agency shall procure required database license for this project in name of the Department DAFE valid for the duration of the project.

f. The Selected Agency shall carry out necessary installation, configuration, maintenance & support for the Application production environment and the supplied software(s) to ensure that the services are made accessible to the users.

g. The Selected Agency will be required to develop the solution in their own test environment.

## 2.9 UAT

a. After completion of the development work for application, Western Odisha Development Council/OCAC will conduct the reviews of development work performed by the Selected Agency as UAT. OCAC / WODC may constitute a UAT committee for this purpose.

b. The Selected Agency shall be responsible for:

- Preparation and submission of test strategy, test cases and test results
- Demonstration of module-wise functionalities/ features before the Western Odisha Development Council/OCAC in staging environment
- Support Western Odisha Development Council/OCAC and its designated authority for conducting the testing and provide access of the systems as required by them.
- Rectification in the new application for any issues/ bugs/ and improvements/ Enhancements / upgradations suggested Departments (if any) during the UAT without any additional cost.

- It would be Selected Agency's responsibility to ensure that all issues raised during UAT are closed and signed-off from respective authority.

c. After incorporation of the suggestions made during the UAT phase, the Selected Agency shall host the application in the production environment and the system will be then made available for Go-live.

## 2.10 GO-LIVE

a. Once the UAT have been done, then the following conditions needs to be achieved in order to declare the application as Go-Live:

- The system must have obtained Cert-In Security Audit certificate.
- The system must have been deployed at OSDC with a domain name and requisite SSL certificates.
- At least 20 project details need to be entered on the system .

b. After the Go-live, the application will be rolled out for Operation and Maintenance.

## 2.11 TRAINING & HANDHOLDING SUPPORT

a. The Selected Agency` is required to undertake training for the end users to make them acquainted with the application.

b. The schedule / training calendar and the training material for imparting training shall be developed by the Selected Agency in consultation with Western Odisha Development Council. It is also proposed that the training contents / User Manuals be made available to Users in downloadable (PDF) format so that the Users may refer / download it for their own personal reference as and when needed.

c. The Selected Agency shall also provide hand-holding support to WODC users as required during the contract period and shall deploy three (3) resource for a duration of one year from the Go-Live of application and that can be extended further upon requirement and approval from department.

## 2.12 APPLICATION FRAMEWORK

The application shall be developed using any open-source technology. The application shall comply with relevant industry standards wherever applicable. The solution architecture must be scalable and flexible for modular expansion and should ensure ease of integration with other applications. The solution architecture should cater to the evolving requirements of the Directorate. the bidder shall use only the Enterprise version of the Database software and procure the same in the name of the Department as per its quoted price.

The bidder shall incorporate suitable Artificial Intelligence (AI)–based components within the proposed work plan to enhance efficiency, automation, and decision-support capabilities. The proposed AI interventions may include, image blurry & clear detection, anomaly detection, and user-experience enhancement tools if any. Bidders are required to clearly outline the AI technologies, methodologies, and implementation approach, along with expected outcomes and measurable benefits. The AI solutions should comply with applicable standards, ensure data security and privacy, and be scalable for future upgrades.

## 2.13 ANNUAL MAINTENANCE SUPPORT

Support and maintenance will be provided for a period of 1 year from the date of go live of the application including following:

a. Application, System Software Administration & Database cleansing
b. Fixing the bugs identified during the period
c. Issue handling and resolution of issues related to application software.
d. Maintaining the updated version of source code
e. Tuning of the system to improve performance
f. Enhancement of MIS report if required
g. Database & System Administration including patches and upgrades
h. User & access management
i. Ensure compliance to SLAs as indicated in this RFP and plan any upgrades / major changes to the software ensuring the SLA requirements are met at no additional cost.

# 3. Functional Requirement

The following are the functional elements to be provided in the proposed solution:

## 3.1. GIS BASED PROJECT MANAGEMENT SYSTEM

### 3.1.1. PROJECT CREATION & CONFIGURATION

- Facility to create and categorize projects under predefined sectors and sub-sectors such as Infrastructure, Health, Education, Livelihood, etc.
- Capture detailed project information including name, description, implementing agency, start and end dates, estimated cost, and objectives.
- Option to associate projects with corresponding administrative approval and sanction order references.

- Provision to link projects with unique project codes for traceability across modules.
- Configurable templates for recurring project types to streamline creation.
- Multi-level approval workflow for project creation and validation by designated authorities.
- Auto-generation of project summary sheets for administrative review.
- Facility to clone existing project data for similar new initiatives, reducing duplication of entry.
- Audit trail maintained for every project creation, modification, and approval action.

### 3.1.2. GPS-BASED PROJECT TAGGING & MAP INTEGRATION

- Facility to capture accurate latitude and longitude coordinates for each project location using GPS-enabled devices or manual entry.
- Mobile app integration for on-site GPS capture and automatic data sync with the main system.
- Option to verify and update GPS coordinates during inspections or project modification stages.
- Capture of metadata such as date, time, device ID, and user credentials during coordinate submission.
- Capability to handle projects with multiple GPS points.
- Restriction to authorized officials for adding or modifying GPS details to maintain integrity.
- Automatic linkage of GPS data with project details for verification and reporting.
- Storage of GPS tagging logs for future audit and reference.
- Integration with mobile inspection module to verify project location during field visits.
- Provide map layers and legends to visualise project categories—sector, status (planned / in-progress / completed), fund utilisation bands, and risk flags if needed.
- Implement role-based map visibility: different map layers and access for Admin, District/Block users, Inspectors, and public viewers.
- Provide map-based dashboards with drill-down — click a project on map to open full project record, inspection history, fund flow and beneficiary details.

### 3.1.3. PROJECT LIFECYCLE MANAGEMENT

- End-to-end tracking of project stages — from proposal to completion — within a single digital workflow.
- Configurable process flows for administrative approval, technical sanction, and financial sanction.
- Facility to record project initiation, fund release, progress updates, and final completion details.
- Automated routing of proposals to appropriate approving authorities based on role hierarchy.
- Ability to return, resubmit, or reject project proposals with remarks and digital approval signatures.
- Auto-notifications for each stage transition (submission, approval, or pending review).
- Digital repository for all documents and comments associated with the project's lifecycle.
- Real-time status indicators for tracking project stage and progress.
- Role-based workflow customization to suit departmental hierarchies.

### 3.1.4. MILESTONE & PROGRESS TRACKING

- Facility to define physical and financial milestones for each project.
- Regular progress updates by implementing agencies at milestone level.
- Ability to attach supporting documents, progress reports, and photographs for validation.
- Auto-computation of project completion percentage (physical and financial).
- Comparative view of planned vs. actual timelines and costs.
- Automatic alerts for delayed milestones or pending updates.

### 3.1.5. INSPECTION & FIELD MONITORING

- Creation and management of inspection plans and schedules for each project.
- There will option to create inspection plan against each milestone of a project if deemed necessary.
- Auto-generation of inspection calendars based on project timelines and milestones.
- Allocation of inspection duties to designated officers at district or block levels.
- Mobile-based inspection facility allowing officers to upload geo-tagged photographs and videos.

- Integration of GPS and timestamp for authenticating the location and time of inspection which is subject to the availability of the feature in the mobile device.
- Archive of all past inspection data for audit and analytical reviews.
- Multi-level approval workflow for inspection report validation if required. It should be configured.
- Real-time push notifications to inspectors regarding scheduled visits.
- Photo-based validation of site progress and beneficiary engagement.
- Auto-generated reports of inspections completed, pending, and upcoming.
- Ensures complete accountability and data authenticity in project supervision.

### 3.1.6. WORKFLOW AUTOMATION

- Role-based configurable workflow for project creation, approval, modification, and closure.
- Automatic routing of project proposals and updates to respective approving authorities.
- Configurable escalation mechanism for delayed approvals or missing information.
- In-built notification and reminder engine through email and SMS.
- Complete audit log of every workflow action for accountability.

### 3.1.7. AI IMPLEMENTATION

- Provision to capture before-and-after images of each project site auto-detect any discrepancies in construction progress.
- AI-enabled structure detection to automatically identify, analyze, and classify the type of constructed infrastructure (e.g., building, road, boundary wall, water tank) based on captured images.
- Automated image quality assessment uses algorithms to instantly check if uploaded photos are blurry or hazy and rejects poor-quality images, ensuring only clear, valid photos are accepted for monitoring.
- Configuration of image capture parameters, including minimum and maximum permissible distance from which the photograph must be taken by leveraging AI.
- AI-based landmark identification to recognize and validate the presence of official signboards in front of the constructed building as per the WODC norms.
- Automated detection of duplicate or repetitive project proposal within a defined geographic radius using AI algorithms to prevent overlapping or redundant project proposals.

## 3.2. FUND MANAGEMENT SYSTEM

- Facility to allocate funds to projects during creation based on approved budget and sanction order.

- The fund can be placed against the phases of the project as well. Multi-tier fund flow system from Council → Collector → BDO → Implementing Agency → Beneficiary.
- Integration with IFMS payment solution for direct disbursement.
- Provision to define expenditure heads, financial milestones, and sub-allocation levels if required.
- Workflow-based fund approval and release mechanism with digital sign-off.
- Real-time tracking of fund status (Allocated, Released, Utilized, Pending).
- Auto-generation of financial reports and fund statements for transparency.
- System-generated alerts for fund utilization limits and pending UCs.
- Reconciliation of receipts and expenditures through integration with e-Cashbook.
- Provision to attach financial documents like vouchers, bills, and expenditure statements.
- Automated fund roll-over or reallocation facility based on project progress which may be optional.
- Dynamic linking of fund release with project milestone completion.
- Role-based approval levels for fund disbursement at each administrative tier.
- Option to handle both DBT and non-DBT payments based on project nature.
- Dashboard for monitoring fund distribution and expenditure trends.
- Ensures real-time visibility of fund flow to eliminate delays and leakages.
- Only when the geo-tagging has been done, then only the payment to be processed after after validation.

### 3.3. EMPLOYEEMENT GENERATION & BENEFICIARY TRACKING:

- Provision for registration of beneficiaries associated with each project, capturing key personal, identification, and contact details.
- Facility to record age, gender, income level, education, skill category, and livelihood background for detailed beneficiary segmentation.
- Maintenance of a structured repository for workers, laborer's, vendors, and service providers engaged under multiple projects or programs.
- Recording of workdays generated, duration of employment, and type of work executed under each project for monitoring and reporting purposes.
- Seamless synchronization with the Fund Management System for automatic update of wage disbursement, utilization, and beneficiary payment status.
- Development of an interactive dashboard displaying real-time employment trends, gender ratio, project-wise beneficiary count, and geographical spread.
- Auto-generation of periodic reports (daily, weekly, monthly) at project, district, and state levels with exportable formats (PDF, Excel).

- Facility to classify beneficiaries based on their skill sets and map them to suitable project requirements or employment opportunities if needed.
- System to calculate and display Key Performance Indicators such as employment generated per project, cost per employment, and percentage of women beneficiaries.
- Tracking of each beneficiary's journey from registration to project engagement, wage payment, and exit or re-engagement in new projects if required.
- Auto-notifications via SMS or email for payment status updates, new employment opportunities, or required document submissions.
- Facility for beneficiaries to raise issues related to payments, employment verification, or project allocation, with resolution tracking.
- Option to geo-tag worksites or beneficiary participation points for monitoring field-level employment creation and validation.
- Analytical layer to identify employment generation trends, underperforming districts, and opportunities for policy improvement.
- Option to monitor beneficiaries' income growth, skill enhancement, and transition from unskilled to semi-skilled or skilled categories over time.
- Provision of a mobile-friendly interface for on-site registration, attendance marking (if required), and digital verification of employment activities which will be optional.
- Workflow-enabled review, approval, and validation mechanism for beneficiary registration and wage disbursement by designated authorities.
- Mechanism to share beneficiary and employment data with other government departments and agencies in a secure, controlled manner.

## 3.4. GRIEVANCE REDRESSAL FEEDBACK MANAGEMENT SYSTEM

### 3.4.1. GRIEVANCE SUBMISSION & RESOLUTION

- Provide an easy-to-use grievance submission form where beneficiaries/stakeholders and internal users can lodge complaints or concerns. The form should allow users to select the nature of the grievance.
- Grievances can be accessed by beneficiaries and stakeholders from both the end.
- Allow grievances to be submitted through the platform's website, mobile app.
- Set up categories to streamline complaint handling and assign grievances to appropriate stakeholders within the department.
- Classify grievances by urgency (e.g., urgent, moderate, low priority) to ensure critical issues like delayed payments are resolved promptly.

- Provide each grievance with a unique tracking ID, allowing beneficiaries and administrators to follow the progress.
- Send automatic notifications at key stages—when a grievance is submitted, under review, resolved, or requires additional information.
- Assign grievances to designated staff based on type and complexity. Allow only authorized personnel to access and address grievances.
- Define and display expected resolution times based on grievance type, enhancing transparency.
- For unresolved grievances, there would be provision to create an automatic escalation feature where complaints are passed to higher authorities after a specified time frame.
- Send out periodic notifications through email or SMS to keep users informed throughout the grievance process.

### 3.4.2. VIRTUAL GRIEVANCE HEARING

- The system shall allow beneficiaries to register their grievances online through the application.
- During registration, the beneficiaries/stakeholders shall provide basic details including: ¬ Grievance category ¬ Mobile number ¬ Project Related Details ¬ Supporting documents (if any)
- Beneficiaries/Stakeholders shall be able to select a preferred time slot from the available virtual grievance hearing schedule.
- Automatically send an SMS to the Beneficiaries/Stakeholders registered mobile number confirming their grievance registration.
- Include a secure virtual meeting link which will be Google Meet link in the SMS for the scheduled Monday hearing.
- The system shall provide an interface for administrators to configure time slots for virtual hearings every Monday.
- Slot configuration shall include start and end time of hearings, number of grievances per slot, maximum daily limit of cases.
- Slots shall be dynamically assigned on a first-come, first-served basis with provision for rescheduling if slots are full. On the scheduled Monday, Beneficiaries/Stakeholders shall join the hearing through the link provided to present their grievance to the designated officer.
- Officers shall have access grievance details, uploaded documents, beneficiary profile & payment history.
- After the virtual hearing, the officer shall mark the grievance as: Resolved by giving ATR, Pending.

### 3.4.3. INTEGRATIONS

A total of 10 API based integration to be done for data sharing and that maybe increase further upon requirement after go-live:

- Integration with Janasunani Portal.
- Integration with SPDP
- Integration with state Dashboard
- Integration with State Asset database
- Integration with other departmental Project Monitoring System
- Integration with WAMIS
- Integration with AMASASANA Portal
- Integration with PPMS, UPMS etc.

### 3.4.4. FEEDBACK MANAGEMENT SYSTEM

- Provision to collect structured feedback from various stakeholders involved in project implementation and monitoring.
- Facility to capture feedback from citizens, beneficiaries, field officers, district administrators, and sector heads through dedicated role-based interfaces.
- Enables field-level staff to provide inputs on project progress, implementation challenges, and ground-level issues.
- Captures administrative feedback on resource utilization, inter-departmental coordination, and project timelines.
- Facilitates higher-level review and performance evaluation based on aggregated project feedback data.
- Option to configure custom feedback forms for different project types and sectors.
- Feedback captured can be linked to specific project IDs, sectors, or sub-sectors for traceability and analytical review.
- Facility for anonymous feedback submission to encourage transparency and open communication. Generation of project-wise, sector-wise, and district-wise feedback reports for performance evaluation.
- Feedback scoring and ranking system to identify high-performing and underperforming projects.
- Auto-notifications to project authorities when negative feedback trends are detected.

- Integration with grievance system for automatic escalation of critical feedback into formal complaints.

### 3.5. PERFORMANCE MONITORING SYSTEM

- It shall automatically generate Monthly Progress Reports (MPRs) consolidating data on fund utilization, project completion, and physical progress.
- Facility to customize reporting templates as per departmental needs, ensuring uniformity and comparability across districts.
- The MPR could be generated sector wise, project wise, block wise and district wise.
- Real-time synchronization of data between field applications, fund management, and project tracking modules for accuracy.
- Time-series visualization of project progress, budget trends, and milestone completion for analytical insights.
- Comparative performance analysis between districts, blocks, and implementing agencies.
- Facility to generate sector-wise, category-wise, and geography-based reports for performance evaluation.
- Integration with inspection data to link physical verification with financial progress metrics.
- Auto-scheduling of MPR generation and submission features.
- Notification alerts for overdue report submissions or missing data entries.
- Export options in PDF, Excel, and CSV formats for easy submission to higher authorities.
- Role-based access control for generating and reviewing reports at each administrative level.
- Provision to track year-on-year progress for better planning and budget forecasting.
- Analytical tools for detecting anomalies, underutilization, or project delays.
- Historical data archive for performance review and audit trail.
- Automated scorecards and ranking mechanisms for evaluating district/block performance.

### 3.6. ASSET REGISTER

- Central repository to store and manage information on assets such as buildings and projects data.
- The asset details can be uploaded via an excel sheet also which would allow the officials to import bulk asset details.
- Facility to capture asset details including location, implementing agency, project completion, cost, and depreciation.
- Integration with project management module to map assets created under each project.
- GPS-based tagging and map visualization for location-specific asset identification.

- Asset categorization by type, department, and lifecycle stage (active, under maintenance, disposed).
- Workflow for asset creation, modification, verification, and approval.
- Provision to upload supporting documents such as invoices, project completion data, and photos.
- Automatic computation of asset depreciation and valuation for accounting purposes if required.
- Real-time dashboards displaying asset distribution, condition, and utilization metrics.
- Audit log for all asset-related transactions ensuring traceability.
- Role-based access for viewing, editing, or approving asset records.
- Data export for audit and inventory verification.
- Geo-enabled reporting of asset location and status.

## 3.7. WEBSITE & CONTENT MANAGEMENT SYSTEM AND DMS

### 3.7.1. WEBSITE

- The public forum platform would be made for sharing critical information, achievements, highlights and multi-media to the common citizens for WODC activities.
- The forum will have a visually appealing design that aligns with organization branding standards.
- Clear and intuitive navigation menus will allow users to access content with minimal clicks.
- The forum will optimize load times by compressing images and using efficient coding practices.
- Colors will be chosen to ensure readability and meet accessibility standards.
- The forum will be compatible with all major browsers, ensuring uniform functionality across platforms.
- Content delivery networks (CDNs) and caching mechanisms will be implemented to reduce load times.
- SEO techniques such as meta tags, alt text for images, and keyword optimization will be applied to improve search engine rankings.
- Custom error pages will guide users in case of broken links or server issues, ensuring a seamless experience.
- The forum will include links to relevant government portals and resources for easy access by users.
- The forum will adapt seamlessly to mobile devices and tablets without compromising functionality.
- The forum will include features such as text resizing and high contrast mode for users with disabilities.
- The forum will undergo regular updates based on feedback from audits to maintain compliance and improve functionality.

- The forum will implement security measures such as HTTPS encryption to protect user data.
- Users can provide feedback on the website's performance and suggest improvements.
- The forum will integrate with analytics tools to track user behaviour and improve content.
- The forum will adhere to the Guidelines for Indian Government Websites for accessibility and security such as GIGW compliant site.
- The forum will archive older content for reference or restoration purposes when needed.
- Administrators can customize the website layout based on specific needs or events.
- There will be clear definition of the login page for each of the role on the website itself.
- There shall be section to highlight important notifications/date/communication by the department officials by the public who visits the website.
- Provision to highlight the achievements of the department across schemes through the public forum.

### 3.7.2. CONTENT MANAGEMENT SYSTEM

- Administrators can create, edit, or delete menus dynamically based on organizational needs.
- Citizens can view the photo gallery directly from the website, with options for downloading images.
- Administrators can define specific content types (e.g., scheme guidelines, announcements) for better organization.
- Provision to have creator, approver & publisher roles before publishing the information in public forum.
- The CMS supports role-based access control, for creation and publication of content in the website.
- All events within the CMS will be logged for tracking changes and ensuring accountability.
- Content editors can resize text and images dynamically for better presentation without affecting page layout.
- The CMS ensures that the website adapts seamlessly to mobile devices and tablets without compromising functionality.
- Users can navigate through content easily using drop-down menus integrated into the CMS interface.
- The system should have search feature allows users to find content quickly by entering keywords or phrases.
- Content published through the CMS is compatible with all major browsers, ensuring universal accessibility.

- The CMS ensures automatic scaling of content to fit smaller browser windows or mobile screens without distortion.
- The CMS optimizes content specifically for mobile devices, ensuring fast load times and responsive layouts on smartphones.
- Administrators can archive older versions of pages for reference or restoration purposes when needed.
- The CMS allows administrators to customize templates for different types of content or events.
- The CMS integrates with other modules for comprehensive issue resolution.
- The CMS will receive regular security updates to protect against vulnerabilities and ensure data integrity.
- There will be provision to add/modify home page sections through the CMS.
- There will be provision for multi-media accessibility and addition in the application.

### 3.7.3. DOCUMENT MANAGEMENT SYSTEM

- Centralized repository for storing project files, government orders, letters, and reports.
- Hierarchical folder structures for department-wise and project-wise document organization.
- Metadata tagging for quick search and retrieval.
- Integration with project, fund, and grievance modules for linked document access.
- Role-based access ensuring confidentiality of sensitive files.
- Version control mechanism for tracking edits and maintaining document history.
- Full-text search engine for locating documents by keywords or tags.
- Auto-archival policy for old or inactive documents.
- Facility to upload documents in multiple formats (PDF, Word, Excel, Images, ZIP).
- Real-time synchronization with cloud or departmental servers.
- Audit trail for document upload, download, and modification.
- Role-based workflow for document approval or sharing.
- Dashboard to monitor document volume and user activity.
- Access control matrix defining privileges per role.
- Alerts for document expiry or required renewal.
- Provision to share files and folders between the WODC hierarchy.
- If a file is deleted, then there shall be option to recover the file within 30 days before permanently deleting it.

## 3.8. E-CASHBOOK

### 3.8.1. FUND ALLOCATION

- The system shall enable configuration, allocation, and tracking of funds across Sectors, Sub-Sectors and Projects.
- Each allocation entry shall record administrative and financial approvals, including sanction order number, amount, and approval date.
- Facility to define funding sources such as Interest Money, Main, Special or supplementary contributions, where applicable.
- Hierarchical allocation mechanism — from Department to Collector, BDO, and Implementing agency — ensuring traceability of fund movement.
- Auto-generation of Sanction Orders/Allocation Letters as per the WODC format.
- Provision to define budget heads, sub-heads, and expenditure categories in accordance with WODC structures.
- Tracking of sector-wise and sub-sector-wise budget availability, pending allocations, and balance funds.
- Integration with IFMS/PFMS and bank systems for automatic synchronization of allocation and release data.
- Facility to configure multi-stage fund release schedules linked to project milestones or physical progress indicators.
- Analytical visualization of fund distribution across sectors and sub-sectors for budget optimization.
- System-generated allocation ratio analysis between sectors to assess equitable distribution of resources.
- Alerts and notifications for delayed sanctions, fund re-appropriation requests, or pending approvals.
- Facility to export sector-wise allocation data in PDF/Excel formats for reporting and compliance purposes.

### 3.8.2. EXPENDITURE MANAGEMENT

- The system shall record and manage expenditure transactions at each level — Sector, Sub-Sector and Project.
- Each expenditure entry shall be linked to a specific financial head and project milestone, allowing physical-financial correlation.

- Facility to upload invoices, vouchers, bills, and supporting documents for each financial transaction if required.
- Real-time calculation of expenditure against fund allocation, highlighting underutilization or overspending.
- Multi-level verification and approval workflow for expenditure submission, review, and authorization which is configurable.
- Facility to track pending liabilities, advance settlements, and carry-forward balances at sector and project levels.
- Analytical visualization of expenditure trends by sector, sub-sector, and project categories over different time periods.
- Auto-generation of Expenditure Registers and Statement of Accounts for financial reporting and audits.
- Option to filter and compare expenditure data between sectors or sub-sectors for performance analysis.
- Alerts for exceeding expenditure ceilings, delayed reporting, or unverified payments.
- System-generated expenditure summary reports categorized by sector, sub-sector, and funding source.

### 3.8.3. UC MANAGEMENT

- The system shall support auto-generation of Utilization Certificates (UCs) at Sector, Sub Sector, and Project levels based on verified expenditure data.
- Implementing agencies shall be able to digitally submit UCs with necessary attachments, including bills, vouchers, and progress reports.
- Workflow-enabled approval process for UC verification and authorization by designated financial officers.
- Auto-population of allocation, release, and expenditure details into UC templates as per the WODC norms.
- UC formats shall comply with government financial guidelines and audit requirements.
- Real-time status tracking of UC submission, review, and approval across administrative levels.
- Alerts and reminders for UC submission deadlines and pending approvals.
- Facility to attach geotagged images, completion certificates, or inspection reports as supporting documents.

- Provision to auto-restrict further fund release if previous UC submissions remain unverified or incomplete.

### 3.8.4. FUND RECONCILIATION

- The system shall enable real-time reconciliation of fund allocation, release, and expenditure across Sectors, Sub-Sectors, and Projects.
- Facility to reconcile fund allocation, expenditure statements, and UC data for end-toend financial accuracy.
- Analytical dashboard showing fund reconciliation progress, pending cases, and verification trends.
- Facility to conduct monthly, quarterly, and annual reconciliation cycles with digital approval workflows.
- Alerts and notifications for unmatched transactions, pending acknowledgments, or unverified payments.
- Integration with UC and Expenditure modules to ensure synchronized and validated financial data.
- Role-based access for financial controllers, auditors, and administrators to maintain data confidentiality.
- Facility to generate consolidated reconciliation reports by Sector, Sub-Sector, or time period.

### 3.8.5. HOST TO HOST INTEGRATION

- Provide secure host-to-host API integration framework to exchange payment, sanction and reconciliation data between IFMS and the system.
- Support bidirectional data flows: (a) push fund release requests & beneficiary payment instructions from IFMS (b) pull payment status, bank confirmation, and docket references from IFMS.
- Implement standardized message formats (JSON / XML) with a documented contract (API spec) including request/response schemas, status codes and error codes.
- Ensure authenticated and encrypted communication using industry standards (mutual TLS / OAuth2 / signed JWT or API keys) and certificate management for host identification.
- Support batch processing and scheduled transmission for high-volume transactions with configurable batching window and atomicity controls.
- Implement real-time webhook/call back handling for asynchronous status updates (payment success/fail/reverse) and reconciliation events.
- Provide retry, dead-letter queue and alerting mechanisms for failed transmissions to ensure reliable message delivery and operational continuity.

### 3.9. WHATSAPP BASED CHATBOT

- Capability to provide project information, scheme details, and progress updates on user request.
- Integration with the Grievance Redressal System for lodging and tracking complaints directly via WhatsApp.
- Real-time status updates of grievance cases, fund disbursements, or project milestones through automated messages.
- Two-way interaction allowing users to query FAQs related to projects, funds, or employment schemes.
- OTP-based authentication for secure access to personalized data such as beneficiary payment status.
- Option for field officers to receive task alerts, inspection schedules, and notifications via WhatsApp.
- Integration with alert system to push time-sensitive information like payment approvals or inspection reminders. Interactive menu-based responses enabling easy navigation for users unfamiliar with text commands.
- Central dashboard for administrators to view chatbot usage analytics, engagement statistics, and common queries.
- Capability to broadcast verified government notifications, circulars, and public messages.
- Smart escalation of grievances requiring manual intervention to human operators.
- Facility to auto-log every user interaction into the grievance and MIS system for data analysis.
- Ensures continuous citizen engagement even in low-connectivity regions using WhatsApp's lightweight infrastructure.
- Option for periodic survey or feedback collection through chatbot interactions.

### 3.10. MANAGEMENT INFORMATION SYSTEM (MIS)

- Comprehensive data aggregation from all modules — Project, Fund, Inspection, Beneficiary, and Grievance.
- Predefined and customizable report templates aligned with departmental reporting formats.
- Auto-generation of monthly, quarterly, and annual reports with minimal manual intervention.
- Sector-wise, geography-wise, and time-based performance reporting for granular insights.
- Integration with GIS and dashboards to visualize spatial and temporal data patterns.
- Comparison between sanctioned, utilized, and unspent funds for each project.
- Employment and beneficiary progress tracking integrated into performance reports.
- Inspection compliance and quality assessment analytics based on field reports.

- Data-driven identification of underperforming projects or agencies through KPI tracking.
- Auto-scheduled email delivery of standard reports to stakeholders. • Facility to export reports in PDF, Excel, and CSV formats.
- Drill-down capabilities from summary reports to project-specific details.
- Option to generate ad-hoc or on-demand analytical reports through filter-based queries.
- Real-time data synchronization with field applications ensuring report accuracy.
- Graphical and tabular report representation for easier interpretation. Facility to compare progress trends year-on-year or quarter-on-quarter.
- Role-based report visibility ensuring access control.
- Auto-generated exception and compliance reports for administrative follow-up.
- Archival of all reports for audit and historical reference.
- Empowers management with a 360° view of project, fund, and beneficiary performance.

## 3.11. MULTI LEVEL ANALYTICAL EXECUTIVE DASHBOARDS

### 3.11.1. PROJECT SPECIFIC DASHBOARD

- Real-time visualization of project-wise physical and financial progress.
- Display of project start date, expected completion date, and current status (e.g., ongoing, completed, delayed).
- Representation of total beneficiaries and employment generated under each project.
- Monitoring of fund allocation, utilization, and pending disbursement across all projects.
- Integration with GIS to display project locations on interactive maps.
- Auto-calculation of key performance indicators such as cost per beneficiary, average duration, and fund efficiency.
- Highlighting of high-performing and underperforming projects through visual alerts.
- Facility to drill down into project components, sub-projects, and implementing agencies.
- Graphical trends of progress over time, including work completion percentage and expenditure milestones.
- Linkage to beneficiary data for impact analysis and demographic segmentation.
- Display of project-specific grievances and redressal status.
- Automated generation of project completion and evaluation reports.
- Download and export facility for project-level summaries in PDF and Excel formats.
- Role-based access for project officers, administrators, and auditors to view customized insights.

### 3.11.2. SECTOR SPECIFIC DASHBOARD

- Consolidated view of all projects categorized under key sectors (e.g., Infrastructure, Health, Education, Agriculture, Skill Development).
- Sector-wise visualization of fund allocation, utilization, and pending releases. Comparative performance analytics across multiple sectors based on defined KPIs.
- Display of cumulative employment generation and beneficiary reach per sector.
- Trend analysis showing sectoral growth and performance over quarters or financial years.
- Identification of top-performing and underperforming sectors through heatmaps or visual scoring.
- Automated computation of sectoral contribution to total employment generation.
- Sector-wise fund absorption ratio and project execution efficiency metrics.
- Visualization of project count, total expenditure, and beneficiary count per sector.
- Drill-down facility to explore projects under each sector and their current progress.
- Option to filter data by geography, financial year, or implementing agency.
- Sector-level dashboard integration with monitoring and evaluation reports.
- Alerts and notifications for deviation from planned targets or fund utilization thresholds.
- Exportable visual and tabular reports for policy analysis and decision-making.

### 3.11.3. DISTRICT SPECIFIC DASHBOARD

- Overview of all projects implemented within a specific district, categorized by scheme or department.
- Real-time tracking of fund allocation, release, and expenditure at the district level.
- Display of total beneficiaries, households covered, and employment days generated in the district.
- Visual representation of project distribution across blocks, panchayats, and urban areas.
- District performance ranking based on KPIs like fund utilization, project completion rate, and beneficiary satisfaction.
- Monitoring of gender and category-wise beneficiary representation.
- Integration with GIS maps for monitoring of ongoing and completed projects.
- District-level trend analysis over multiple financial years for performance evaluation.
- Drill-down facility to view block-wise and project-specific progress within the district.
- Facility to generate automated district reports for administrative reviews and audits.
- Display of grievance redressal statistics and citizen feedback at district level.
- Inclusion of employment, training, and capacity-building indicators for each district.
- Exportable reports and dashboards for submission to State or Central authorities.

### 3.11.4. BLOCK SPECIFIC DASHBOARD

- Micro-level monitoring of project activities and fund utilization within each block.
- Visualization of block-wise progress in terms of physical achievements and financial disbursement.
- Display of block-level beneficiary count, employment generated, and scheme coverage.
- Integration with project and district dashboards for upward data synchronization.
- Performance comparison among blocks within a district for benchmarking and review.
- Facility to track work progress across Gram Panchayats and local implementation units.
- Alerts and notifications for delays, unspent balances, or deviations from plan.
- Visualization of infrastructure creation and asset distribution at block level.
- Facility for block officers to upload field verification data and inspection images.
- Auto-generation of block-level summary reports and data sheets.
- Graphical indicators for fund utilization percentage, completion rate, and pending approvals.
- Localized insights for targeted planning, corrective actions, and field monitoring visits.

### 3.11.5. CONSOLIDATED DASHBOARD

- Interactive dashboards with drill-down capabilities from state to village level.
- Consolidated visualization of key metrics — projects, funds, inspections, employment, and grievances.
- Map-based dashboard displaying GPS-tagged projects and assets.
- Dynamic comparison of districts and blocks based on fund utilization and project progress.
- Time-series graphs and heatmaps showing performance trends.
- Configurable widgets allowing users to personalize dashboard views.
- Integration with mobile app for responsive, on-the-go access.
- Role-based dashboards — Collector, BDO, Implementing Agency, and Council-level views.
- Real-time alerts and highlights for delayed projects or pending grievances.
- Analytical layer enabling correlation between fund utilization and outcome delivery.
- Auto-refreshing data feeds ensuring live performance visibility
- Drill-through analytics connecting dashboards to detailed MIS reports.
- Export capability for sharing dashboard snapshots in PDF or Excel.
- Color-coded visual indicators (e.g., red for delays, green for on-track).
- Graphical summaries of physical and financial progress by sector
- Key insights on employment generation and asset creation
- Comparative ranking system for administrative evaluation.

### 3.11.6. DETECT MY LOCATION VIA MAP

- The “Detect My Location” functionality enables the system to automatically identify the user’s current geographical position using GPS or browser-based geolocation services.
- Upon detection, the system dynamically displays all ongoing, completed, and proposed projects within a defined radius on an interactive GIS-based map interface.
- Users can filter projects by category, department, GIA Type, funding source, or implementation stage for localized insights.
- The map view highlights project locations with distinct color-coded markers representing different project statuses.
- Clicking on a project marker displays a detailed information window, including project name, implementing agency, budget, start and end dates, and beneficiary count.
- The feature supports real-time map refresh as the user changes location, ensuring upto-date visibility of nearby development activities.
- Users can toggle between Map, Satellite, and Terrain views for enhanced visualization if required.
- Integration with the Project Management System allows retrieval of live project progress and expenditure details linked to each location.
- The map includes a “Distance Filter” option, enabling users to view projects within customizable ranges (e.g., 1 km, 5 km, 10 km, or entire district).
- Provides search and navigation support, allowing users to find specific projects or directions from their current location to the project site.
- The system ensures data accuracy by fetching GPS coordinates directly from field entries or project registration modules.
- Supports offline caching of nearby project data in low-connectivity areas, ensuring smooth field operations.
- Administrators can generate location-based analytical reports to assess regional development concentration, project density, and fund distribution.
- Includes a security layer ensuring user consent before capturing geolocation, in compliance with data privacy norms.

## 3.12. MOBILE APPLICATION (IOS & ANDROID)

- Native mobile apps for Android and iOS, optimized for low bandwidth usage.
- Geo-tagged field data entry for inspections, beneficiary verification, and project tracking.
- Offline functionality for data capture in remote areas, with automatic synchronization once connected.

- Facility for inspectors to upload images, videos, and field reports directly from the site.
- Beneficiary registration and document upload through mobile interface.
- Integration with GPS and camera for location-based verification.
- Push notifications for assigned tasks, payment updates, and grievance resolutions.
- Role-based access ensuring relevant functions for Admin, Inspector, BDO, and Beneficiary.
- Alert system for overdue inspections and fund releases.
- Interactive dashboards and KPIs accessible on mobile.
- Biometric or OTP-based authentication for secure login.
- Grievance submission directly from field locations with photo proof.
- Integration with map view for displaying project locations via “Detect my Location” feature.
- Auto-sync with central MIS to maintain data uniformity.
- Facility to download project summaries and reports on demand.
- Notification panel displaying recent activities and pending tasks.
- Ensures real-time, on-the-ground data flow enhancing operational agility.

### 3.13. LEGACY DATA MANAGEMENT

- Standardization of data formats for compatibility with the new system before data migration.
- The legacy data will be uploaded to the system via excel sheets in the pre-defined formats.
- Verification of migrated records through approval before making it live in the system which may be optional.
- The application should validate uploaded files to ensure they match the expected format before processing.
- Provision to provide error messages and highlight incorrect data entries before submission. Provision to support bulk data uploads for multiple projects simultaneously.
- The system should implement a standardized format with mandatory and optional fields for different schemes.
- The system shall allow users to download pre-defined Excel/CSV templates for each scheme.
- Provision to provide role-based access control for uploading data to prevent unauthorized modifications.
- Functionality to allow version control to track changes made through Excel uploads.
- Feature to automatically map uploaded Excel/CSV data to the relevant database fields.
- Following data needs to be entered while entering the legacy data:
    - Upload Legacy Data through Excel

- Enter legacy data.

- If the user selects excel sheet, then the sample excel shall be downloaded and accordingly the data would be filled up and reuploaded.
- If the user select “Enter Legacy Data” then a project addition page shall be opened in which the legacy data would be entered.
- If needed, the project can be geo-tagged as well.

### 3.14. ALERTS & NOTIFICATION MANAGEMENT

- Multi-channel alerts via WhatsApp, SMS, Email, and Push Notifications.
- Configurable triggers for fund releases, project delays, grievances, and inspection due dates.
- Real-time notifications to officers and beneficiaries upon key events.
- Personalized message templates for each type of alert.
- Option to configure frequency, timing, and delivery method for each notification.
- Automated alerts for pending approvals, document uploads, and UC submissions.
- Integration with mobile app and chatbot for unified message delivery.
- Event-based alerts such as project completion or fund utilization thresholds.
- Escalation alerts for overdue grievances or inspection reports.
- Facility to resend failed notifications automatically.
- Secure integration with government-approved messaging gateways.
- Option to broadcast public messages or advisories to all users.
- Facility for citizens to opt-in/out of specific alert categories.
- Real-time synchronization ensuring no delay in alert transmission.
- Archival of alert history for audit and compliance.
- Improves efficiency and transparency through proactive communication.

### 3.15. REPOSITORY & ROLE BASED ACCESS CONTROL (RBAC)

- Centralized repository of all users, including officials, agencies, vendors, and beneficiaries.
- Implementation of Role-Based Access Control (RBAC) to define granular permissions. Configurable roles such as Admin, Approver, Implementing Agency, Field Officer, and Viewer.
- Facility to create and manage user groups with predefined access levels.
- Audit log for all user activities including login, edits, and approvals.
- Facility to assign, modify, or revoke user roles dynamically.
- Role hierarchy mapping for authority delegation.
- Access summary dashboard displaying users per role and permissions.
- Automatic role deactivation upon inactivity or transfer.

- Security alerts for unauthorized or failed login attempts.
- Role-based workflow participation for approvals and reviews.
- Simplifies administrative management of multi-level users.
- Strengthens data integrity and access security across the ecosystem.
- There shall be option to notify the users in every 90 Days for password change.

## 4. Technical support unit:

A dedicated Technical support unit to be deployed onsite (WODC/OCAC) to monitor and ensure successful implementation of the project. The Team will consist of 3 members and initially to be deployed for a period of 1 year. The TSU will function as the bridge between the Department, utilities, contractors, and the development team, ensuring that project milestones are delivered on time, SLA compliance is tracked, and stakeholder coordination is seamless. The term and numbers of resources can be increased further upon requirement and approval.

### 4.1. ROLES & RESPONSIBILITIES OF TSU:

The TSU shall provide technical, operational, and coordination support to the Department and all stakeholders. Key functions include:

- **Technical & Operational Support**
  - Assist the Department in day-to-day operations of the portal, ensuring smooth functioning of all modules.
  - Provide continuous feedback to the development team for bug fixes, enhancements, and SLA monitoring.
- **Stakeholder Coordination**
  - Act as a nodal point for interaction between departments, Disticts, contractors etc.
  - Track pending actions from each stakeholder and follow up through the portal's communication and escalation features.
  - Facilitate monthly coordination meetings by preparing project dashboards, issue lists, and escalation reports.
- **Progress Tracking & SLA Monitoring**
  - Monitor SLA compliance (7-day estimate submission, 1-month vetting, 7-day shutdown notice) through the portal's dashboards.
  - Prepare weekly and monthly reports for Department review, highlighting delays, escalations, and project risks.
- **Data Extraction & Reporting**
  - Extract project-wise, utility-wise, and contractor-wise data for departmental decision-making.
  - Generate customized reports required for review meetings, audits, and escalation management.

- **Issue Resolution & Documentation**
    - Log and track all issues reported by stakeholders until resolution.
    - Maintain documentation of enhancements, bug fixes, user queries, and escalations.
    - Ensure compliance with government IT standards (GIGW, CERT-In, Data Security policies).

### 4.2. DELIVERY APPROACH & RESOURCE DEPLOYMENT

TSU team with the following skill sets to be deployed.

| Role | No. of Resources | Years of deployment | Qualification & Experience |
|---|---|---|---|
| Program Manager | 1 | 2 | B.E./B.Tech/MCA with minimum 10 years of experience in leading IT/e-Governance projects. Responsible for overall project oversight, SLA compliance monitoring, stakeholder coordination, and quality assurance. |
| MIS Executives | 2 | 2 | B.E./B.Tech/MCA with minimum 5 years' experience in IT/e-Governance projects. Responsible for data extraction, dashboard preparation, SLA monitoring, and report generation for coordination/review meetings. |

## 5. Role & Responsibilities of Different Stakeholders

### 5.1. RESPONSIBILITY OF THE WODC

The WODC shall play an important role in the fruition of the envisioned system. The following are the roles and responsibilities:

- Provide information on Business Process / Domain related issues to the SI.
- Provide data /documents that need to be digitized and brought to the system.
- Provide and validate all users' requirement documents.
- Review the deliverable (interim and final) submitted by the SI.
- Identify Officers for different training needs.
- Approve the SRS, FRS submitted by SI.
- Monitoring and validation of functional requirements.
- UAT signoff

### 5.2. RESPONSIBILITIES OF OCAC:

- Conduct bid process management.
- OCAC will supervise and monitor project implementation, and coordinate with to facilitate smooth implementation of the project, and, for meeting the administrative requirements about the project.
- Coordinate with WODC officials, other departments, and SI for all the activities needed for the successful rollout of the project

### 5.3. SYSTEM INTEGRATOR

- Prepare and submit the Integrated Project Management Plan (IPMP) for implementation of the project. The IPMP shall comprise of all the components of deliverables prepared for Inception
- Prepare the project reporting formats to report the progress of the project to OCAC for approval
- Participate in Weekly / Monthly project review in regards to the progress of the project
- Identify and escalate issues/risks to OCAC/WODC and provide the mitigation plan
- Adhere to the directions of OCAC as and when provided.
- Prepare and deliver for approval all the deliverables such as SRS, SDD, Design Documents, etc. within a defined timeline, as agreed in the IPMP and to the satisfaction of OCAC / Department, throughout the implementation phase.
- Install/configure/deploy all the components of the system and get approval from OCAC.
- Provide detailed training plan to OCAC and Department and train the personnel identified by the WODC and report the results.
- Ensure UAT readiness & conduct the UAT and report the results thereof to OCAC and obtain acceptance thereof. The UAT report should also include the feedback of the UAT participants.
- Ensure completeness of the solution concerning requirements and performance, acceptance expectations from the solution, and get signoff from appropriate authority through OCAC.
- Coordinate with System Integrators of other relevant systems for ensuring that the system seamlessly exchanges data with them.
- Deploy and manage handholding support for addressing the issues and incidents raised by users; resolve such issues and report the status OCAC periodically.

- Prepare an SLA report based on the SLA parameters given in this RFP continuously and deliver it to OCAC for review and necessary action.

# 6. Technical Requirement

## 6.1. ADHERENCE TO STANDARDS

a. The development of application should be done preferably using open-source platform. The Selected Agency is free to use the software available like application server, any third-party software etc. as per requirement of their proposed solution. For proprietary software, adequate license must be procured in the name of Western Odisha Development Council, Govt of Odisha and cost towards the same will be borne by the Agency.

b. The system shall ensure compliance with relevant defined industry standards (their latest versions as on date) wherever applicable. This will apply to all the aspects of solution including but not limited to its design, development, security, implementation, and testing. The proposed architecture shall be scalable & flexible for modular expansion and shall ensure ease of integration with other applications.

**c.** The solution architecture should thus have provision to cater to the evolving requirements of Western Odisha Development Council, Government of Odisha.

A reference list of the minimum industry standards which the system components should adhere to is mentioned below:

| Component | Standards |
|---|---|
| Information Access / Transfer Protocols | SOAP, HTTP/HTTPS |
| Interoperability | Web Services, Open Standards |
| Portal Development | W3C Specifications |
| Document encryption | PKCS specification |
| Information Security | ISO 27001 certified System |
| Operation | ISO 9001 Certified |
| Service Management | ISO 20000 specifications or latest |
| Project Documentation | IEEE/ISO Specifications for documentation |
| Data Standards | All-important data entities should be in line with standards published by MeiTY. |

### 6.2. TECHNICAL ARCHITECTURE

The Technical Architecture of the System would be multi layered. The architecture should be scalable both vertically and horizontally with security features. The overall technology solution shall be based upon the most relevant and suitable architecture standards including standards for Service Oriented Architecture (SOA), XML services & necessary protocols for internet applications. The Selected Agency shall use only the Enterprise version of the Database software and procure the same in the name of Western Odisha Development Council, Government of Odisha as per its quoted price.

### 6.3. HOSTING INFRASTRUCTURE

The application will be hosted at state data Centre and the infrastructure to be facilitated by OCAC after successful completion of security audit.

## 7. Security, Integrity & Confidentiality

a. ***Web Services Security:*** System shall comply with all the Web services including routing, management, publication, and discovery should be carried out in a secure manner. Those who are using the Web services should be able to utilize security services such as authentication, authorization, encryption and auditing. Encryption of data shall take place at client level itself. Application server shall provide SSL security.
b. ***Data Integrity and Confidentiality:*** Data integrity techniques need to be deployed to ensure that information has not been altered, or modified during transmission without detection. Similarly, Data confidentiality features are also to be applied to ensure that the data is only accessible by the intended parties.
c. ***Transactions and Communications:*** With respect to the Data Transactions and Communications, system needs to ensure that the business process are done properly, and the flow of operations are executed in correct manner.
d. ***Non-Repudiation Security*:** The application shall have the non-repudiation security services to protect a party to a transaction against false denial of the occurrence of that transaction by another party. End-to-End Integrity and Confidentiality of Messages The integrity and confidentiality of messages must be ensured even in the presence of intermediaries.
e. ***Database Controls*:** The database controls for online transaction processing systems like access to database directly, access to database through application, access to log

files, access by the remote terminals, DBA controls, backup policy and backup procedures.

## 8. Change Management Procedure

Any requirement beyond the scope of work mentioned above shall be treated as Change Request. Change request management shall be conducted based on request received from the Department subject to the approval of the Change Request proposal. The activities that shall be treated as changes request are mentioned below:

- Functional changes in the application
- Development of new modules/Form/Report in the developed system
- Changes in the workflow or core application framework
- Addition of new modules

The procedure for executing the change request is as follows:

**Analysis**: The changes suggested shall be analysed and an effort estimation including timeline shall be submitted to the WODC.

**Approval**: WODC shall provide approval on the effort and timeline suggested.

**Incorporation**: After receiving the approval, the changes will be incorporated in the application.

**Payment**: The additional cost of change requests will be borne by the WODC. Payments to such assignment will be as per the man month rate provided in financial bid format and will be made as per actual man month consumed after completion of work of respective enhancement.

## 9. Intellectual Property Rights

The Intellectual Property Rights (IPR) of all software code, data, algorithms, documentation, manuals, digitized documents etc. generated as a part of implementation and O&M of this project shall solely vest with the WODC. The Selected Agency will not have any right to share, use or disclose above mentioned components/artifacts. The source code of entire applications along with necessary documentations developed under this RFP/ Contract should be shared with WODC/OCAC after Go-live of the application.

## 10. Exit Plan

a. The selected firm will provide systematic exit plan and conduct proper knowledge transfer process to handover operations to OCAC/ WODC team at least three months before project closure.

b. IT resource persons of OCAC/WODC will work closely with resource persons of the Service Provider at test, staging and production environment during knowledge transfer phase.

c. All knowledge transfer should be documented and possibly recorded.

d. The Service Provider will ensure capacity building of the IT resource persons of OCAC/WODC on maintenance of Application.

## 11. Project Documentation

The Service Provider will share below list of documents to OCAC/WODC during the project contract period.

a) Latest version of Source Code & Database
b) System Requirement Study Documents
c) High Level Design (HLD) / Low Level Design (LLD) documents including
   - Application architecture documents
   - ER diagrams and other data modelling documents
   - Database design
   - Application component design including component deployment views, control flows, etc.
   - Application flows and logic
d) User Manual
e) Application Installation & Configuration Manual
f) Report of Security Audit & Safe-to-Host Certificate
g) Any other documents defined under Timeline & Tentative Deliverables
h) All the above documentation should be done as per IEEE/ISO/CMM Standard

## 12. Project Timeline

The project shall initially be for a period of 1 year from the date of go-live and Operation & Maintenance may be taken up for another two (2) years upon satisfactory performance and Departmental approval.

T- Issuance of Work Order/Purchase Order

| Sl. No. | Activity | Tentative Deliverables | Timeline |
|---|---|---|---|
| a) | System Study & Prototype Design | • Single Point of Contact (SPOC) details<br>• Functional Specification Report (FSR) / Software Requirement Specification (SRS)<br>• Screen Prototypes / Wireframes | T + 8 Weeks |
| b) | Design, Development & Implementation | • Test Plans & Test Cases<br>• Operations Manual - FAQs<br>• Deployment of application in staging environment | T + 22 Weeks |
| c) | UAT, Training & Go-Live | • UAT Test Cases<br>• UAT Completion Certificate<br>• Training to users and Training Completion Report<br>• Migration of application from Staging to Production environment<br>• Safe-to-Host Certificate issued by CERT-In empaneled agency | T + 24 Weeks |
| d) | Annual Maintenance & Support (AMC) | • Minor system enhancements<br>• Bug fixing and issue resolution<br>• Technical assistance and performance monitoring reports | One (01) year from Go-Live |
| e) | Handholding Support | • Monthly Attendance Sheet<br>• Quarterly Performance report | One (01) year from Go-Live |
| f) | TSU | • Monthly Attendance Sheet<br>Quarterly Performance report | 1 year from the date of go live. |

## 13. Service Level & Penalty

The Selected agency shall agree to the following Service Level Agreement (SLA), if it fails to deliver as per scope of work within the corresponding Delivery Period and any extension thereof. These SLAs shall be tracked on the basis of timeline and are envisaged to have penalty and/or liquidation damage clauses on non-adherence to any of them.

a. Maximum penalty capping is 10% of respective milestone.

b. In case, the delay is more than 24 weeks and the cause of delay is attributable to Selected Agency, authority reserves right to increase the penalty value and/ or take appropriate action against the bidder such as cancellation of contract, increase of penalty percentage etc.

c. Penalty will not be applicable if the delay is not attributable to the agency/ due to force majeure situation or due to OCAC's default. However, in such cases, the Selected agency has to communicate in writing the reason of delay. The decision of the Purchaser in this regard shall be final.

d. If at any time during the Contract, the Selected agency encounters conditions impending timely performance of service, then the agency shall promptly notify to OCAC in writing of the fact of the delay and its likely duration along its cause(s). As soon as practicable, after receipt of the agency's notice, OCAC shall evaluate the situation and may at its discretion waive the penalty on the request of the selected bidder.

The SLA parameters are divided into 2 (two) types: -

### 13.1. IMPLEMENTATION PHASE

| Sl.# | Major Area | Parameter | Requirements | Penalty |
|---|---|---|---|---|
| a) | Development & Implementation | Major milestone during development and implementation as per project timeline. | As per project timeline | Rs. 500/- per daydelay |
| b) | Response time for bug fixing | Time taken (after the request has been informed) to acknowledge problem | Within 24 hours from the time the bug is reported. | Rs. 100/- per hour delay |
| c) | Resolution Time (Only for Bug fixing) | Time taken by the Selected Agency to fix the problem | Problems with severity within 48 hours from the time of reporting. | Rs. 500/- per hour delay |
| e) | Deployment of Support Resource | Start of service | As per project timeline | Rs. 1,000/- per day delay |

### 13.2. APPLICATION AVAILABILITY

The Application covering all the features shall remain operational during the scheduled operation time for at least 98% of time measured on monthly basis for a 24x7x365 time period excluding the OSDC network downtimes, if any. The non-availability for application service, website measured on monthly basis and excluding the scheduled maintenance shutdown.

| Measurement | Reporting Period | Target | Penalty |
|---|---|---|---|
| Daily | Monthly | >= 98% | Nil |
| | | >= 95% but <98% | 0.5% of Quarterly billed value of Application Development / Operation & Maintenance Support (As applicable) |
| | | >= 90% but <95% | 1.0% of Quarterly billed value of Application Development / Operation &Maintenance Support (As applicable) |
| | | <90% | 2.0% of Quarterly billed value of Application Development / Operation & Maintenance Support (As applicable) |

a. Performance of system refers to the proper and timely functioning of the system's functionalities. The application should be available and performing as per functionalities

b. The non-availability for application service is measured on monthly basis and excluding the scheduled maintenance shutdown and incidents.

i. Maximum penalty capping is 10% of respective milestone.

ii. In case, the delay is more than 24 weeks and the cause of delay is attributable to Selected Agency, authority reserves right to increase the penalty value and/ or take appropriate action against the bidder such as cancellation of contract, increase of penalty percentage etc.

iii. Penalty will not be applicable if the delay is not attributable to the agency/ due to force majeure situation or due to OCAC's default. However, in such cases, the Selected agency has to communicate in writing the reason of delay. The decision of the Purchaser in this regard shall be final.

iv. If at any time during the Contract, the Selected agency encounters conditions impending timely performance of service, then the agency shall promptly notify to OCAC in writing of the fact of the delay and its likely duration along its cause(s). As soon as practicable, after receipt of the agency's notice, OCAC shall evaluate the situation and may at its discretion waive the penalty on the request of the selected bidder.

### 13.3. REPORTING PROCEDURES OF SLA

The SI's representative will prepare and distribute Service level performance report in a mutually agreed format by the 10th working day of the completion of each month. The reports will include "actual versus target" Service Level Performance, variance analysis and discussion of appropriate issues or significant events.

Definitions

a. "Scheduled Maintenance Time" shall mean the time that the System is not in service due to a scheduled activity. The scheduled maintenance time would not be during Working Hour timeframe. Further, scheduled maintenance time is planned downtime with the prior permission.

b. "Scheduled operation time" means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the applications within the Primary DC, DR and critical client site infrastructure will be 12 hrs. X 7 days X 12 months.

c. "System downtime" means accumulated time during which the System is totally inoperable within the Scheduled Operation Time.

d. "Availability" means the time for which the services and facilities are available for conducting operations including application and associated infrastructure. Availability is defined as: {(Scheduled Operation Time – System Downtime) / (Scheduled Operation Time)} x 100%

Interpretations

a. The SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements.

b. The SI is expected to provide the required service levels. In case the service levels cannot be achieved at service levels defined in the tables below, it shall result in a breach of contract and invoke the penalty clause. Payments to the SI are linked to compliance with the SLA metrics.

c. During the contract period, it is envisaged that there could be changes to the SLA, in terms of addition, alteration or deletion of certain parameters, which is based on mutual consent of both the parties i.e. the OCAC and SI.

## 14. Payment Terms

| Sl No | Category | Payment Terms | |
|---|---|---|---|
| a) | Design, Development and Implementation | ▪ 20% payment of Application development on SRS Approval<br>▪ 30% payment of Application development on completion of UAT.<br>▪ 30% payment of Application development on receipt of security audit certificate and Go-Live Certificate.<br>▪ Balance 20% of application development will be paid after 6 months of successful Go-Live of the application. | |
| b) | Operation & Maintenance | Application Support | 100% cost of this item equally divided into 4 quarters after receiving QPR verified by user department |
| | | Software Maintenance | |
| | | System/Infra Support | |
| c) | Security Audit cost | 100% payment on submission of Safe-To-Host Certificate | |
| d) | SSL certificate | 100% payment on submission of configuration report | |
| e) | Hand holding support cost | Quarterly after receiving QPR along with Attendance sheet verified by user department. | |
| f) | TSU | Quarterly after receiving QPR along with Attendance sheet verified by user department. | |
| g) | Additional Modules / Change Request | 100% payment on Go-Live of the additional modules / change request upon approval | |

**N.B.**

i. Payments to the bidder/authorized partner, after successful completion of the target milestones (including specified project deliverables), after submission of an invoice along with supporting documents subject to penalties, if any.

ii. The currency or currencies in which payments shall be made to the selected bidder under this Contract shall be Indian Rupees (INR) only.

iii. In case of disputed items, the disputed amount shall be withheld and will be paid only after settlement of the dispute.

iv. Any penalties/ liquidated damages, as applicable, for delay and non-performance, as mentioned in this bidding document, will be deducted from the payments for the respective milestones.

v. Taxes, as applicable, will be deducted/ paid, as per the prevalent rules and regulations at the time of billing.