Request for Proposal



SELECTION OF SERVICE PROVIDER FOR DEVELOPMENT / CUSTOMIZATION AND IMPLEMENTATION OF MUKTA SOFTWARE



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Volume II <u>Terms of Reference</u>

Table of Contents

1	Bac	kgro	und	8
	1.1	Abc	out MUKTA scheme	8
	1.2	Abc	out the Department	8
	1.3	Pro	cess of Work allotment	8
	1.4	Obj	ective	9
2	Sco	ре о	f work	9
	2.1	Pre	paration of SRS, Detailed Design and other Technical Artifacts	10
	2.2	App	lication Development	10
	2.2	.1	Development of MUKTA-Soft	10
	2.2	.2	Development of Mobile Apps	11
	2.2	.3	Integration	11
	2.2	.4	GIGW/ GuD Apps Compliance	11
	2.2	.5	Web Design Considerations	12
	2.2	.6	Notification Facility	12
	2.2	.7	Non-Repudiable Digital Transaction (Use of Esign solution):	12
	2.2	.8	Data Import and Export facility	13
	2.2	.9	Desired Coding Standard	13
	2.2	.10	Desired Database Standard	13
	2.2	.11	Desired Security Standard	13
	2.3	Soft	ware Testing	14
	2.4	Sup	port during User Acceptance Testing	14
	2.5	Sup	port during Security Audit and Quality Assurance	15
	2.6	Dat	a Porting	15
	2.7	Trai	ning to Master Trainer	15
	2.7	.1	Training Content	15
	2.7	.2	Training Calendar	16
	2.7	.3	Training Venue	16
	2.7	.4	Training Participants	16
	2.7	.5	Post-Training Assessment	16

2.	7.6	Language for Delivery of Training	16
2.8	0	nline Help/Reference with Search Option	17
2.9	D	eployment and Configuration	17
2.10		Pilot Implementation	17
2.11		Application Roll out	17
2.12		Support during Pilot, Roll-Out	17
2.13		Operation and Maintenance	18
2.:	13.1	Application Support	18
2.:	13.2	Software Maintenance	18
2.:	13.3	System/Infra Support	19
2.:	13.4	Change Request Management	20
2.	13.5	Project Management	21
2.14		IT Helpdesk	21
2.15		Project Closure	22
2.16		Project Documentation	22
2.17		Project Timeline:	23
Phas	se w	rise break up of modules of MUKTA-Soft Smart Payment System	23
2.18		Service Level & Penalty	25
2.19		Bill of Material & Quantity	26
2.20		Payment Terms	26
Fu	ncti	onal Requirements of the MUKTA Soft Solution:	28
3.1	U	ser Authorization and Authentication	28
3.2	Sc	heme Monitoring	28
3.3	In	nportant Registers and Databases	29
3.3	3.1	Database of Community Organizations	29
3.3	3.2	Database of Wage-Seekers	29
3.3	3.3	Register of Community Assets	30
3.4	V	endors' Empanelment and Rate Contract	31
3.4	4.1	Schedule of Rate (Basic)	31
3.4	4.2	Schedule of Rates with Lead Charges	31
3.4	4.3	Empanelment of Vendor through Invitation of EOI	31

3.	4.4	Rates of Non-Schedule Items	32
3.	4.5	Empanelment of Vendor through Invitation of Public Bidding	32
3.	4.6	Rate Analysis of Works Item	33
3.5	She	elf of Works: Finalization of Identified Public Works	33
3.	5.1	Wishlist Module	33
3.	5.2	Feasibility Study & Observation Recording	34
3.	5.3	Finalization of Public Work	35
3.6	Wo	orks Estimate, TS and AA	35
3.	6.1	Basic Estimating Tool	35
3.	6.2	Template Based Estimating Tool	36
3.	6.3	Technical Sanction (TS)	36
3.	6.4	Administrative Approval (AA)	37
3.7	Wo	ork Order	38
3.	7.1	Tagging Community Organizations to Finalize Works	38
3.	7.2	Issuing Work Order	38
3.	7.3	Acknowledgement of Work Order by IA/IP	39
3.	7.4	Engagement of Wage-Seeker by IA/IP	39
3.	7.5	Engaged Wage-Seekers Acknowledged by Field Engineer	39
3.8	Exe	ecution of Works	40
3.	8.1	Commencement of the Works	40
3.	8.2	E-Measurement Book	40
3.	8.3	Works Completion Report	41
3.9	Att	endance of Wage-Seeker	41
3.	9.1	E-Muster	42
3.	9.2	M-Muster	43
3.10) P	Purchase of Material and Hiring of Equipment	43
3.	10.1	Purchase Order	43
3.	10.2	Receipt of Material	44
3.	10.3	Penalty and Withheld	44
3.	10.4	Vendor's Invoice	44
3 11	P	Billing & Payment Dishursement	45

	3.11.1	Preparation of Bill	45
	3.11.2	Approval of Bill	46
	3.11.3	Smart Payment to Wage-Seeker, Material Supplier and IA/IP	46
	3.11.4	Book Keeping	47
	3.12 T	raining & Knowledge Sharing	47
	3.12.1	Training Repository	47
	3.12.2	Training Planner	47
	3.12.3	Training Report	48
	3.13	Grievance Redress & Chatbot	48
	3.13.1	Lodging Complaint/ Grievance	48
	3.13.2	Routing of Grievance	48
	3.13.3	Resolution of Grievance	49
	3.13.4	Queries & Response	49
	3.14 S	ocial Audit & Compliance	50
	3.14.1	Empanelment of Independent Agencies for Social Audit	50
	3.14.2	Social Audit Planning	50
	3.14.3	Input for Social Audit	51
	3.14.4	Observation and Recommendation by Social Auditors	51
	3.14.5	Follow up Action and Compliance to Audit Remark	51
4	Use of	Analytical Tool & Services:	52
5	Roles a	nd Responsibilities of Different Stockholders	52
	5.1 Res	sponsibility of the Department:	52
	The follow	wing are the roles and responsibilities	52
	5.2 `Re	sponsibilities of Department/OCAC:	52
	5.3 Pos	enoncibility of System Integrator:	52

Abbreviations

AA	Administrative Approval
AE	Assistant Engineer
ALF	Area Level Federation
ANSI	American National Standards Institute
BOQ	Bill of quantity
CA	Certified Authority
CERT-In	Indian Computer Emergency Response Team
CLF	Community Level Federation
СО	Community Organizer
DAP	Directory Access Protocol
DDD	Detailed Design Document
DNS	Domain name system
DUDA	DISTRICT URBAN DEVELOPMENT AGENCY
E&IT	Electronics and Information Technology
еМВ	E-Measurement Book
EO	Executive Officer
EOI	Expression of Interest
ESI	Employees' State Insurance Scheme
FAQ	Frequently Asked Question
F&ARD	Fisheries and animal resource department
FRS	Functional requirement specification
GIGW	Guidelines for Indian Government Websites
GuDApps	Guidelines for Development of eGovernance Applications
H&UDD	Housing and urban development department
IA	Implementing Agency
IEEE	Institute of Electrical and Electronics Engineers
iFIX	Financial Information Exchange Bus

iFMS	Integrated Finance Management System
IT	Information Technology
IP	Implementing Partner
JE	Joint Engineer
L1	Least cost
LGD	Local government directory
MC	Municipal Commissioner
ME	Municipal Executive
MIS	Management Information System
MPR	Monthly Progress Report
MSG	Mission Shakti Group
MUKTA	Mukhya Mantri Karma Tatpar Abhiyan
OCAC	Odisha Computer Application Centre
OPWD	Odisha Public Works Department
ORSAC	Odisha Space Applications Centre
OSDC	Odisha State data Centre
PD	Personal Deposits
PL	Personal Ledger
PMC	Project Management Contract
РО	Purchase Order
PRDW	Panchayati Raj & Drinking Water Department
QA	Quality Assurance
RDBMS	Relational Database Management System
RFP	Request For Proposal
RWD	Responsive Web Design
SDA	Slum Dwellers' Associations
SeMT	State e-Governance Mission Team
SFTP	Secure File Transfer Protocol
SMS	Short Message Services

SP	Service Provider
SPDP	Social Protection Delivery Platform
SRS	Software requirement Specification Document
SSL	Secure Socket Layer
SSO	Single Sign-on
SUDA	State Urban Development Authority
ТСР	Transmission Control Protocol
TS	Technical Specification
UAT	User Acceptance Testing
UDID	Unique Disability ID
ULB	Urban Local Body
URS	User Requirement Specification
WCR	Work Completion Report
WLC	Ward Level Committee

1 Background

1.1 About MUKTA scheme

Mukhya Mantri Karma Tatpara Abhiyan (MUKTA) aims to achieve the objective of providing sustainable livelihood opportunities to the urban poor, informal and migrant labourers and create & maintain ecological sustainable and climate resilient community assets, critical to ensure inclusive, sustainable and equitable urban development.

The Mukta Scheme aims at building on the relative success of the Urban Wage Employment initiative that was launched in April last year during Covid-19 lockdown. According to the urban development department, more than 6,000 projects had been completed under urban wage employment initiative. In other words, almost rupees 70 crores have been spent and around 3.5 lakh workers participated to get this initiative.

1.2 About the Department

As the nodal department, the Housing & Urban Development Department (H&UDD), government of Odisha, implements the MUKTA scheme. The State Urban Development Authority (SUDA) acts as a State Level Nodal Agency for implementing MUKTA across all the ULBs in Odisha.

MUKTA is a scheme of the community, by the community and for the community. The community based organizations including Mission Shakti Group (MSGs), Slum Dwellers' Associations (SDAs), Area Level Federations (ALFs), City Level Federations (CLFs), under this scheme, will identify and prioritize the work to be taken up in the ward. The works taken up will be executed directly by the community-based organizations of the wards under the general control and supervision of the ULBs, as far as possible. Furthermore, unemployed persons including migrant laborer's, women, transgender and persons with disabilities from ULBs will also be identified by the community and engaged based on their skillsets, directly in various urban infrastructure development works taken up under the scheme.

1.3 Process of Work allotment

As per the Guidelines the work will be allotted based on the estimated values in flowing manner.

- a) If the total estimated cost of the work does not exceed Rs.10 Lakhs, it will be executed by the community-based organizations such as Mission Shakti Groups, SDAs, ALFs and CLFs to be selected as Implementing Agency (IA) by the Municipal Commissioner (MC)/Executive Officer (E0). The IA shall be responsible for execution of the entire work with the technical support of AE/JE concerned.
- b) If the total estimated cost of the work exceeds Rs.10 Lakhs, it will be executed by the ULB through the concerned AE/JE. The concerned AE/JE shall be responsible for execution of the entire work with the support of the community-based organizations such as Mission

- Shakti Groups, SDAs, ALFs and CLFs to be selected as Implementing Partner (IP) by the MC/EO.
- c) All materials required for the works shall be procured by the concerned implementing agents (Implementing agencies in case of estimated value is below 10 lakhs and AE/JE in case estimated value is more than 10 lakhs) in accordance with the procedures prescribed by the Government of Odisha

1.4 Objective

H&UD Department has decided to implement MUKTA-Soft, a comprehensive digital solution that imbibe smart payment principles for frictionless payment to the Implementing Agencies/ Implementing Partners and to the wage earners those who worked under the scheme in just-in-time manner. H&UD department is pleased to engage qualified and preferred software development vendors to execute this time bound project for delivery, implementation and maintenance of MUKTA-Soft project.

The major objective is to

- a) Create decent wage employment opportunities in urban areas and ensure sustainable livelihoods for urban poor people.
- b) Ensure creation as well as maintenance of inclusive, sustainable, climate resilient community assets, thereby improving quality of life for the urban citizens
- c) Build sustainable community resilience by enhancing capacities of community-based organizations, building trust-based relationships and promoting local leadership, thereby strengthening the fourth tier of governance and furthering synergies for long term development

2 Scope of work

Scope of work of this project includes software development, testing and QA, training of master trainers, managing database & application services for non-interrupted operation and providing change management & maintenance support service during pilot & rollout of MUKTA-Soft by H&UDD across all ULBs of Odisha. This term of reference contains an indicative top level requirement of envisaged MUKTA-Soft for reference. The software vendor is desired to deliver a comprehensive bespoke system as per the signed requirement specification for implementation in all ULBs across Odisha. The vendor is free to suggest any hardware, software tools preferably enterprise grade open source that shall be required for successful implementation of the project. Project Management Committee may consider the suggestions and approve suitably. Accordingly, the scope of services will encompass the following:

- a) Preparation of SRS, Detailed Design and other Technical Artifacts
- b) Application Development

- c) Third party tools and licenses
- d) Software Testing
- e) Support during User Acceptance Testing
- f) Support during Security Audit and Quality Assurance
- g) Data Porting
- h) Training of Master Trainers
- i) Operation & Maintenance Services
- j) Change Request Management
- k) Project Closure

2.1 Preparation of SRS, Detailed Design and other Technical Artifacts

The Service Provider shall perform a detailed assessment of the service and solution requirements as per the User Requirement Specification (URS) and Functional Requirement Specification (FRS) provided by the department. Based on the assessment, service provider shall develop & finalize the Detailed Design Document (DDD) and the System Requirement Specifications (SRS). While doing so, it is suggested that the SP should:

- a) Consult with H&UDD and OCAC officials
- b) Engage some domain experts during the study
- c) Follow standardized template for requirements capturing
- d) Maintain traceability matrix from SRS stage for the entire implementation

Besides SRS and DDD, the service provider shall prepare other necessary technical artifacts at each phase of software development life cycle. Version management with release note of all technical artifacts is mandatory. IEEE standard must be followed while preparing these technical documentations.

2.2 Application Development

The service provider shall identify, design and develop components / functionalities that are required to address the application requirements according to approved SRS and DDD. The service provider shall consider following activities:

2.2.1 Development of MUKTA-Soft

The service provider will be responsible for development of MUKTA-Soft as per top level requirement given in these terms of reference. Modules of MUKTA-Soft should be developed in 3 distinct phases. The software development team should operate from their office premises.

2.2.2 Development of Mobile Apps

MUKTA-Soft includes mobile application along with web application. The Service provider shall develop required mobile apps for related modules under each phase. All mobile application should be form factor responsive. The mobile application necessarily run on both iOS and Android platforms. The service provider shall comply with all mandatory guidelines recommended in 'Guidelines for Development of Mobile Applications in Government' for development of any mobile app of MUKTA-Soft.

2.2.3 Integration

The service provider is responsible to integrate MUKTA-Soft with external systems. Integration of MUKTA-Soft with IFMS is essential for frictionless payment to the wage-seekers, the implementing agencies/ partners and to the material suppliers. MUKTA-Soft must implement workflow engine, iFIX (Financial Information Exchange Bus) of the DIGIT platform for workflow automation. Integration with Mission Shakti database and Jaga Mission is required to gather information about mission Shakti groups and slum-dwellers association

Following applications will be integrated with the proposed MUKTA Soft: The below integration can be change as per the requirement of Department and number of integrations can be increased.

SI#	Name of the application	Owner Department
a)	PAReSHRAM Portal	Department of Labour and ESI
b)	Odisha SPDP	Department of Electronics and Information technology
c)	LGD Database	Department of E&IT and PRDW
d)	F&ARD	F&ARD
e)	Unified Farmer Portal	Agriculture Department
f)	iFMS/PFMS	Finance Department
g)	iFIX (Financial Information Exchange Bus)	DIGIT platform (for workflow automation)
h)	Mission Shakti database	Department of Mission Shakti
i)	Jaga Mission	H&UDD

2.2.4 GIGW/ GuD Apps Compliance

The Service Provider shall comply with all mandatory guidelines recommended in GIGW/GUDApps for implementation of MUKTA-Soft. In case of audit compliance is not as per GIGW/GuDApps or cyber security audit of the software developed by Service Provider, Service Provider will extend all technical support to the said auditor during audit process.

2.2.5 Web Design Considerations

MUKTA-Soft should be able to support all common browsers (like Internet explorer, Mozilla, Chrome, Safari etc). The Service Provider shall strictly follow Responsive Web Design (RWD) approach for developing user interfaces. At least labels used in the forms, reports etc. in the MUKTA-Soft shall be bilingual and be available in English and Odia following UNICODE standard.

2.2.6 Notification Facility

Proposed MUKTA-Soft should issue SMS alerts to the respective users for time bound actions and escalation mechanisms for non-attended activities. The service provider will integrate the relevant modules under each phase of MUKTA-Soft with messaging gateway provided by H&UDD for inbound or outbound SMS for different functionalities. MUKTA-Soft should support e-mail and popular messaging app integration.

The solution shall have provision for WhatsApp integration for sending different notification. The service provider shall integrate the application with WhatsApp API which will be provided by department.

2.2.7 Non-Repudiable Digital Transaction (Use of Esign solution):

Implementation of e-Signature will provide legal sanctity to all digital transactions under IT Act. The service provider shall incorporate the feature of e-Signature solution in the MUKTA-Soft. . It will be the responsibility of service provider to implement the same in MUKTA-Soft.

E- SIGN Service:

e-Sign Service is one of the key elements for Paperless revolution, as part of Government's Digital India Program. Keeping in line with the Digital India Initiative by the Government of India, H&UD department envisages to implement e- Sign solution in MUKTA Soft application which shall enable users to electronically sign documents within seconds from anywhere and anytime. All the major stake holders like Departmental officials, ULB officials who has the authority to sign and approve any document related to MUKTA Soft application, shall get e- sign facilities so that it will help them to sign their document anywhere and anytime thus reducing the waiting time of applicants.

Specification for Esign:

- 1. Bidder/OEM (Certifying Authority-Esign Service Provider under CCA) must adhere to latest guidelines (currently 3.2, Non-aadhaar KYC) issued by CCA. Further, during contract period, if CCA updates its guidelines then it is bidder's responsibility to make the system compliance as per new guidelines without any additional cost to tenderer.
- 2. System should have the capability to e-sign multiple documents in bulk, as per latest guidelines issued by CCA.

3. The bidder/OEM (Certifying Authority-Esign Service Provider under CCA) shall provide unlimited e-Sign online electronic signature facility (per user based) for the application eSign is integrated with.

OEM authorization certificate is mandatory during Bid submission process for Esign solution.

2.2.8 Data Import and Export facility

This facility in MUKTA-Soft enables users to download any report in MS Office and Open Office, CSV, PDF, XML formats. Similarly, the system should also allow the user to upload data from a MS-Excel, CSV, and XML wherever required.

2.2.9 Desired Coding Standard

The Service provider shall follow object-oriented programming methodology to facilitate sharing and multiple-use of standard code

2.2.10 Desired Database Standard

Database should be Open Standard (Open Source) Database with 24x7 Global Premium Expertise Technical Support & SLA should be available upfront as multiyear bundled package Subscription which include all Database Features, Tools, Platform, Built-In Geo Spatial Extension, Upgrades for monitoring DBA activities for future enhancements.

Database should support Materialized Views for better performance. Databases should have built-in capabilities necessary to integrate and manage other data sources for structured, unstructured and NOSQL databases or distributed file systems and deploy rapidly across multiple environments. Databases should also support JSON, XML etc.

Databases should be platform independent and function in multiple operating systems like Linux/Unix/ Windows environment with 64-bit support. No Vendor Lock In. Should support major Cloud platforms.

OEM Authorization letter and OEM support letter is mandatory.

2.2.11 Desired Security Standard

a) Service Provider shall build a complete audit trail of all transactions (add, edit and delete) using transaction log reports, so that errors in data – intentional or otherwise can be traced and reversed.

b) SSL (Secure Sockets Layer) must be used to protect transport layer of the system. Industry standard Directory Structures may be used to protect session layers and industry standard Portal for protecting presentation layer.

The Service Provider shall carry out SSL certification.

- Secure connection between Client and Server through Secure protocol HTTPS
- Encryption of Data during transmission from server to browser and vice versa
- Encryption key assigned to it by Certification Authority (CA) in form of a Certificate.
- SSL Security in the application server
- c) Directory Access Protocol (DAP) must be used for managing user information. Single signon (SSO) facility may be provided to access various sub system within MUKTA-Soft as applicable.
- d) Application of protected web-services (REST API) through access tokenizer with expiration time to share information with other system and consume information from external system may be necessary. SFTP should be used for transferring files between the systems.

2.3 Software Testing

Testing activities for MUKTA-Soft will be carried out in iterative manner for each of the module as the service provider keep on developing. Testing activities must be carried out on the testing environment of the server provided by the service provider.

The service provider shall submit the test plan to Project Management Committee earlier for testing the developed application (module) along with traceability matrix. The test plan should be in line with the functional requirement specifications. The service provider shall prepare test cases based on duly approved test plan the testing procedures should be carried out for each unit, module and for the system as well. Test reports with defect list should be submitted to PMC for reference. The service provider shall deliver the tested and fault rectified MUKTA-Soft application to PMC and deploy the same on the staging server. Staging server shall be provided by the OCAC.

2.4 Support during User Acceptance Testing

User Acceptance Testing will be carried out on the staging server of H&UD department. The service provider shall be responsible to deploy the application on staging server and facilitate Project Management Committee in H&UDD to conduct User Acceptance Testing. Selected users from state level, ULB level will carry out the UAT of the developed modules of MUKTA-Soft. The service provider will provide necessary training to the selected users for carrying out the UAT. All feedback with respect to functionalities, performance, user experience and reported bugs must be addressed by the service provider concurrently. The PMC will issue user acceptance certificate to the service provider for further actions.

2.5 Support during Security Audit and Quality Assurance

The service provider shall carry out following activities relating to Security Audit of MUKTA-Soft application.

- a) The service provider needs to ensure that the solution is in compliance with the CERT-In Security Policy and Guidelines.
- b) The service provider shall appoint CERT-In empaneled auditor who shall be responsible for performing the Security Audit of the solution.
- c) The third-party agency shall conduct audit on minimum below mentioned parameters.
- d) The cost of audit & rectification of non-compliances shall be borne by the service provider. As per the quantity mentioned in the commercial bid
- e) Coordination with the CERT-In empaneled firm for security audit and obtain the compliance certificate.
- f) Carryout security audit before go-live of application and obtain the safe-to-host certification
- g) Carryout the periodic audit & certification as and when it is required as per the OSDC policy.

2.6 Data Porting

The service provider shall be responsible to import legacy data (mostly master data and essential transaction data of ongoing fiscal year) related to different modules of MUKTA-Soft. Legacy data will be provided by H&UD department from a central location in csv format. Documents (pdf, jpeg, png, gif) to be attached, if any, will be provided. The vendor will work hand in hand with the designated officials of H&UD department to import legacy data.

2.7 Training to Master Trainer

Train the Trainer model is adopted for imparting training for the MUKTA-Soft solution. The Service provider shall be responsible for imparting training to the master trainers on developed modules. The resource person of the service provider responsible for training, shall work under the supervision of H&UD department officials.

2.7.1 Training Content

- a) The Service provider shall ensure that the training content is relevant to the target trainees depending upon the role played by them in the system. There should be separate training materials for different level of users. The training material should be illustrative enough for easy understanding of the user and smooth adaptability of the MUKTA-Soft software.
- b) The Service provider shall submit the training content to H&UD department for approval. It shall be submitted at least 20 days in advance before the conduction of the training. The H&UD department will review and provide comments to the service provider on the training content within 7 days of the submission of draft training content. The Service

- provider shall incorporate and implement changes suggested by H&UD department in training delivery and content.
- c) The service provider should prepare pre-training content separately. These pre-training content should be circulated among the trainees 7 days prior to the training program. The purpose of such pre-training content is to make the trainees prepared for receiving the training.
- d) Providing hard copies of training material to participants shall not be responsibility of the software vendor.

2.7.2 Training Calendar

Objective of the training is to ensure proper adaptation and use of the MUKTA-Soft software by the end users. To meet this objective, the service provider shall prepare training calendar for each phase of software development in consultation with the H&UD department. The software vendor shall set up training environment for hands on practice on the modules of MUKTA-Soft.

2.7.3 Training Venue

Training of the master trainers shall take place virtually through MS Teams/ Zoom/Google Meet. In case of physical training requirement, the training shall be conducted centrally at Bhubaneswar and Cost of travelling of trainees for attending the training will be borne by the H&UD department. The H&UD department shall provide the venue including furniture, Internet, projector, work station essential for the training.

2.7.4 Training Participants

- a) Indicative number of master trainers to be trained is 150 (One hundred and fifty).
- b) H&UD department shall identify the participants (master trainers) for the training.
- c) Each batch should not have more than 15 (fifteen) participants.

2.7.5 Post-Training Assessment

- a) The service provider shall conduct conceptual and practical proficiency tests for the trainees and outline a pass/ fail criteria. Trainees those are successful in each module of MUKTA-Soft shall be awarded a master trainer certificate.
- b) The service provider needs to submit training completion report at end of training of each phase separately.

2.7.6 Language for Delivery of Training

The language of training delivery shall be in English and Odia.

2.8 Online Help/Reference with Search Option

- a) 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.
- b) It is envisaged that any user will be able to search and read the directions / information for the right content. On entering the key words for search criteria, the system should pull out and display the links to the content as mapped.
- c) The system should support dynamic search facility i.e. as soon as the key words are changed; a new set of content links with page shall be displayed to the user.

2.9 Deployment and Configuration

It is also the responsibility of the service provider to deploy the developed modules on the staging server for testing by the state level and ULB level users. The service provider should comply with all the feedback reported by the selected users of H&UDD. Once the module gets cleared and accepted by selected user groups it should be deployed on training and production environment.

- a) The Service Provider's team should submit deployment plan in advance and get it approved by the PMC.
- b) Each deployment should carry a release note for the users.

2.10 Pilot Implementation

The MUKTA-Soft will be piloted in 2 ULBs namely Dhenkanal and Baripada Municipality. The functionality of the software, integration of the system, user experience and response time will be evaluated during pilot implementation.

2.11 Application Roll out

On successful implementation in pilot ULBs, MUKTA-Soft will be rolled out to rest 112 ULBs across the state.

2.12 Support during Pilot, Roll-Out

MUKTA-Soft shall be implemented at selected 2 pilot ULBs. H&UD department will take up the responsibility of conducting pilot. On successful pilot the software will be rolled out across all ULBs by the department. There may be series of feedbacks/ complaints on issues from the users during pilot implementation and roll-out. Service request ticket would be raised by the helpdesk of the department on receipt of such feedbacks and complaints. Resolution of tickets raised by the helpdesk as per SLA shall be considered as acceptance of operation & maintenance support service for the period.

It is mandatory on the part of the service provider to resolve all reported issues such as fixing of bugs, enhancing user experiences, improving response time of the MUKTA-Soft and revising software to meet the requirements according to the feedback of the users. The revised software shall be deployed appropriately.

On successful completion of rollout of MUKTA-Soft across all ULBs of Odisha, completion certificate will be issued to the service provider. Only then the project shall enter into O&M phase.

The service provider shall depute 2 MIS Executives at client premises for a period of one year from the date of commencement of Pilot implementation for monitoring and super visioning of implementation.

2.13 Operation and Maintenance

2.13.1 Application Support

Application support includes, but not limited to, production monitoring, troubleshooting and addressing the functionality, availability and performance issues, implementing the system change requests etc. The Service provider shall keep the application software in good working order; perform changes and upgrades to applications as requested by H&UDD. Key activities to be performed by the service provider in the application support phase are as follows:

- a) Enhancement of Analytical MIS report as per the requirement
- b) Database query report management on emergency
- c) Optimization of the already developed reports
- d) Tuning of transactions
- e) User & access management
- f) The service provider shall ensure compliance to SLAs as indicated in this RFP and any upgrades / major changes to the software shall be accordingly planned by the service provider ensuring the SLA requirements are met at no additional cost to the department.

2.13.2 Software Maintenance

- a) The service provider shall provide support through Telephone / Email as required as per the service window defined in the RFP
- b) The service provider shall address all the errors / bugs / gaps in the functionality in the solution implemented by the service provider (vis-à-vis the FRS and SRS signed off) at no additional cost during the support phase.
- c) Any changes/upgrades to the software performed during the support phase shall subject to the comprehensive and integrated testing by the service provider to ensure that the

- changes implemented in the system meets the specified requirements and doesn't impact any other function of the system.
- d) Tuning of products / applications, databases, third party software's and any other components provided as part of the solution software including reconfiguration of the system in the event of any hardware/ network failures/ if any hardware/ network components have to be replaced, shall be the responsibility of the service provider.
- e) Issue log for the errors and bugs identified in the solution and any change done in the solution shall be maintained by the service provider and periodically submitted to the department.

2.13.3 System/Infra Support

2.13.3.1 Database Administration

- a) Regular monitoring & management of all the applications installed / re-installed and databases hosted as and when it required for the project
- b) Installation & configurations the RDBMS software
- c) Database administration, optimization and trouble Shooting
- d) Database & file back-up as per the policy of OSDC
- e) Application Load balancing and Database Clustering
- f) Perform Database, event & system log analysis

2.13.3.2 <u>Security Administration</u>

- a) Regular analysis of events and logs generated
- b) User ID and group management services

2.13.3.3 Backup and Restore Management

- a) Preparation of backup plan
- b) Backup of operating system, database and application as per OSDC policy
- c) Monitoring and enhancement of the performance of scheduled backups

2.13.3.4 System/Network Administration

- a) Network configuration
- b) Patch update
- c) System Administration and Trouble Shooting
- d) Application & System Software Administration (including performance tuning)
- e) Application and database level performance tuning

2.13.4 Change Request Management

MUKTA is an innovative urban wage employment initiative of government of Odisha and it is evolving continuously. It may be so required to customize the MUKTA-Soft to accommodate revise guidelines evolving time and again. Any such customization will be considered as change request.

- a) Major enhancement to the existing modules which may affect the application process & database (To be agreed by technical committee)
- b) Development of new Module/Form/Report
- c) Any changes in the Workflow/data flow or Core application framework
- d) Any new integration with other system
- e) System Administration

Change requests from the stakeholders of MUKTA-Soft shall be collected on regular basis. Change requests collected shall be discussed in the PMC, considered for implementation on priority basis and assigned to the service provider to work upon. The service provider should adapt following procedure to implement assigned change requests into MUKTA-Soft.

- a) To understand change requests and to analyze impact of desired change on existing modules.
- b) To prepare effort estimate on the basis of overall-person-days to bring desired changes in MUKTA-SOFT. The estimate of effort to implement the change requests must be approved by PMC before the vendor takes it up for implementation.
- c) To revise requirement specifications, design document prepared earlier including traceability matrices, test plan, test cases and other related technical artifacts to incorporate desired change.
- d) To revise the existing source code in related modules according to the revised design document, conduct test with test cases and recording of test results.
- e) To revise all related manuals and preparing release notes.
- f) To redeploy upgraded version of MUKTA-Soft application onto the staging, training and production environment.
- g) To close change-request-ticket after receiving note of satisfaction from the PMC

2.13.5 Project Management

The envisioned project is a multi-disciplinary initiative. An effective Project Management Plan and commitment to adhere to it is a mandatory requirement. The project plan should also include the resource, task and time plan for the entire duration of the project.

The service provider shall employ best practices in project management methodology to ensure that the envisioned project components are developed and implemented within the defined time period. A copy of the project management Plan (both soft and hard copy) shall be handed over to H&UD department to keep track of the progress of the project.

2.14 IT Helpdesk

- a) The Service provider shall set up a helpdesk for resolution of queries internal to H&UDD officials only
- b) IT Helpdesk shall be the first point of contact for H&UDD officials for resolving all IT related incidents or service requests.
- c) It aims to restore normal service operation as quickly as possible and minimize the adverse effect on business operations, thus ensuring that the best possible levels of service-quality and availability are maintained.
- d) Address the application related functional queries raised by officials of H&UDD
- e) Co-ordinate with software team for all types of issue management / redressal in relation to the application software, selection list, MIS reports, etc
- f) The team shall furnish periodic report on number of issues received vis-a-vis resolved related to software.
- g) 5 Nos. of resources to be deployed at Client premises by the service provider for IT helpdesk will comply with following qualification & experience.

Designation	Qualification	Experience
Helpdesk Executive	Any Graduate	Minimum 2 Year experience with proficiency in Odia and English Language and having basic computer skills.

- h) The service provider shall provide IT infrastructure like Laptop, Telephone for IT helpdesk personnel
- i) Department will bear the non-IT infrastructure like, Workstation, Electricity, Internet connectivity, Printer etc.
- j) Department will bear the recurring expenditure related to helpdesk service for the entire contract period

2.15 Project Closure

The last month of the project is considered as Project Closure period. H&UDD will not assign any new tasks or change request during the project closure period. During the project closure, the service provider shall clear all pending work as follows.

- a) To ensure that all the feedback, issues, complaints, change requests received from the users are resolved to the satisfaction of H&UDD.
- b) To ensure that all technical artifacts delivered meets the quality standard and comply with the feedback of the third-party quality auditor.
- c) To ensure that the final version of all the artifacts including source code of the MUKTA-SOFT solution is handed over to H&UDD technical team.
- d) To ensure proper transfer of knowledge to the H&UDD technical team.

2.16 Project Documentation

The service provider shall share below list of documents to OCAC during the project contract period.

Milestone	Documentation
Preparation of SRS, Detailed Design	 System Requirement Specifications (SRS)
and other technical artifacts	 Detailed Design Document (DDD)
Testing	Test Plan,
	Test Cases,
	 Test Results,
	 Defect List,
	 Traceability Matrices
Training	 Training calendar
	 Training Manual
	 Operation Manual,
	User Manual
Exit Management	 Programme Source Code,
	 Programmers Manual,
	 Installation Manual,

2.17 Project Timeline:

Phase wise break up of modules of MUKTA-Soft Smart Payment System

Phase-I Modules	Phase-II Modules	Phase-III Modules
User Authentication and	Work Order & Wage-Seeker	Scheme Planning and
Authorization (UAA)	Engagement (ORD)	Monitoring (MON)
Registers and Databases	Execution of Works and E-	Training and Knowledge
(RAD)	Muster book (EMB)	Sharing (TRA)
Vendor's Empanelment and	Attendance of Wage Seekers	Grievance Redress and
Rate Contract (VEN)	with E-Muster (EMR)	Chatbot (GRV)
Shelf of Works, Finalization of	Purchase of Materials and	Social Audit and Compliance
Identified Public Works	Hiring of Equipment (PUR)	(SOC)
(WOR)		
Work Estimate, Technical	Billing and Payment	
Sanction and Administrative	Disbursement (PAY)	
Approval (WES)		

SI#	Milestone	Deliverables	Duration in Months
a)	System Study	 System Requirement Specification (SRS) Detailed Design Document (DDD) 	T0 + 1.0
b)	Walkthrough of SRS and DDD by H&UDD, revision by SI and approval by H&UDD	- SRS and DDD Sign off from H&UDD	T0 + 1.5
c)	Delivery of Phase-I modules	 Source code for Phase-I modules Technical, Operational and User Manual for Phase-I modules Test Cases and Test Plan of Phase-I modules Staging certificate from SDC/OCAC for Phase-I modules 	T0 + 3.0
d)	Training to UAT group on delivered Phase-I modules by SI, User Acceptance Testing by H&UDD, revision of modules by SI, approval by H&UDD	- UAT sign off for Phase-I modules from H&UDD	T0 + 3.5
d)	Delivery of Phase-II modules	 Source code for Phase-II modules Technical, Operational and User Manual for Phase-II modules Test Cases and Test Plan of Phase-II modules Staging certificate from SDC/OCAC for Phase-II modules 	T0 + 5.0
e)	Training to UAT group on delivered Phase-II modules by SI, User Acceptance Testing by H&UDD, revision of modules by SI, approval by H&UDD	- UAT sign off for Phase-II modules from H&UDD	T0 + 5.5

f)	Delivery of Phase-III modules	 Source code for Phase-III modules Technical, Operational and User Manual for Phase-III modules Test Cases and Test Plan of Phase-III modules Staging certificate from SDC/OCAC for Phase-III modules 	T0 + 7.0
g)	Training to UAT group on delivered Phase-III modules by SI, User Acceptance Testing by H&UDD, revision of modules by SI, approval by H&UDD	- UAT sign off for Phase-III modules from H&UDD	T0 + 7.5
h)	UAT of complete and integrated system of all phases	 Final UAT certificate from H&UDD 	T0+8
i)	Cyber security audit and compliance	 Safe to host certificate submission 	T0+8.5
h)	Pilot Implementation in 2 ULB	Successful pilot completion report	T0+9
i)	Roll out in 112 ULB	Go- Live certificate	T1=T0+12
j)	Operation and Maintenance	Issue Logs Monthly / Quarterly Activities Sheet	T1+48
k)	IT Helpdesk	Monthly / Quarterly Activities Sheet	T1+48

2.18 Service Level & Penalty

SI#	Major Area	Parameter	Requirements	Penalty
a)	Customization & Implementation	Major milestone during development and implementation as per project timeline.	As per project timeline	Rs. 500/- per day delay
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 service provider to fix the problem	Problems with severity within 48 hours from the time of reporting.	Rs. 500/- per hour delay
e)	IT Helpdesk	Start of service	As per project timeline	Rs. 2,000/- per day delay

2.19 Bill of Material & Quantity

SI#	Category	Items	Qty
a)	Study, Design, Development / Customization, Testing, Deployment / Implementation	Application development as per requirement mentioned under clause no. 3 of this document.	12 months
b)	Operation & Maintenance of the application	Application Support, Software Maintenance, System Support, etc mentioned under clause 2.12 of this document.	4 Years
c)	MIS executive Deployment	Deployment of Manpower as specified in 1 Ye clause 2.12	
d)	IT Helpdesk	Deployment of Manpower as specified in clause 2.14 4 Years	
e)	Email	License and recurring expenses required as per the technical proposal of the Service provider. 4 Years	
f)	SSI certificate	As per the scope mentioned in clause 5 years 2.2.11	
g)	Standard Database license	As per the scope mentioned in clause 5 years 2.2.10	
h)	E sign solution	As per the scope mentioned in clause 2.2.7 150 Nos.	
i)	Cyber Security Audit	As per the scope mentioned in clause 3.5	10 Nos
Con	tract duration would be five years a	and may be extended for another two years ba	sed on

Contract duration would be five years and may be extended for another two years based on the requirement & performance of the Service Provider at the same cost/rate & terms.

2.20 Payment Terms

SI#	Category	Payment Terms
a)	Design, Development and Implementation	 20% payment of application development on SRS Approval
		 15% payment of Application development on completion of UAT of Phase-I
		 15% payment of Application development on completion of UAT of Phase-II
		 15% payment of Application development on completion of UAT of Phase-III
		 25% payment of Application development on
		receipt of security audit certificate and Go-Live
		Certificate.

SI#	Category	Payment Terms		
		 Balance 10% 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 16 quarters	
		Software Maintenance		
		System/Infra Support		
c)	Security Audit cost	100% payment on submission of Safe-To-Host Certificate		
d)	SSI certificate	100% payment on submission of configuration report		
e)	Database cost	100% after go live and submission of license		
f)	E sign solution	100% payment after E- sign integration and go live.		
g)	Analytical Tool License cost	100% after submission of license		
h)	Integration with Other application	100 % payment after successfully integration and go live of each Integration, the payment will be made as per actual number of integrations.		
i)	Help desk resource cost	Monthly after receiving MPR		
j)	Helpdesk Setup cost	100 % payment after fully set up and operational on go live		
k)	MIS Executive resource cost	Monthly after receiving MPR		
l)	Additional Modules /	100% payment on Go-Live of the additional modules /		
	Change Request	change request upon approval		

Functional Requirements of the MUKTA Soft Solution:

The objective of MUKTA is to provide sustainable livelihood opportunities to the urban poor, informal and migrant wage-seekers and creation and maintenance of climate resilient community assets through partnership with community-based organizations. The MUKTA-Soft is envisaged to cover all functionalities as prescribed in the scheme guideline.

It is envisaged that all the modules are developed in phase manner in 3 phases. Below table depicts the phase wise module lists.

Phase-1	Phase-2	Phase-3
User Authorization &	Work Order & Engagement	Scheme Monitoring
Authentication	of Wage-Seeker	
Important Registers &	Execution of Work (eMB)	Training and Knowledge
Database		Sharing
Vendors' Empanelment and	E-Muster	Grievance Redress &
Rate Contract		Chatbot
Shelf of Work	Purchase of Material	Social Audit & Compliance
Work Estimate, TS & AA	Billing & Payment	
	Disbursement	

The detailed Functionalities are mentioned in the below sections

3.1 User Authorization and Authentication

There is state level, district level, ULB level, community organization level as well as wage-seeker level stakeholders/ users of MUKTA-Soft exist in the system. MUKTA-Soft enables the system administrator to create users with their login credential. Role based access authorization of the users can also be defined in MUKTA-Soft. E-sign particulars of the users are also recorded through this module. Directory access protocols must be implemented for recording users' credentials.

This module shall have below functionalities

- a) Provision to register various key stakeholders such as state level, district level, ULB level officials, community organization as well as wage-seekers.
- b) Creation of users with their login credential as per Role based access authorization by System Administrator
- c) Provision to capture the E-sign particulars of the users.

3.2 Scheme Monitoring

The Scheme Monitoring module is a web component of the MUKTA-Soft. This module enables state level authorities to prepare fiscal year plan for the scheme, to assign annual target and to allocate (and reallocate) funds to ULBs. The funds allocated to the ULB become the authority-to-spend for the authorities of respective ULB. In other words, that sets the limit up to which the ULB level committee can finalize works, or up to which payment to IA/IP, wage-seekers and

material suppliers can be made. This module gathers physical, financial and wage employment progress data from the ULB and present them on dashboards comparing target vis-à-vis actuals. It enables the user to navigate performance data through drill down facility across State, ULBs and Ward up to Project level.

This module shall have below functionalities:

- a) Provision to create fiscal year in the system
- b) Provision to create plan under the fiscal year
- c) Facility to assign annual Target
- d) Capture fund allocation to ULB
- e) Provision to create Dashboard to view physical, financial and wage employment progress data of various ULBs

3.3 Important Registers and Databases

3.3.1 Database of Community Organizations

MUKTA-Soft maintains a database of project Implementing Agencies (IAs) or Implementing Partners (IPs) with their unique Id. This module enables the ULBs to register community organizations with their details. Such organizations include Mission Shakti Groups (MSG), Slum Dwellers Associations (SDA), Area Level Federations (ALF) and City Level Federations (CLF). Facility should also be available to import records of MSGs from Mission Shakti database and records of SDAs from Jaga Mission database. The data import facility must include one-time import of existing records as well as time-and-again import of new records added incrementally into the database. This module also keep on building the history of projects assigned to the community organization as IA or IP with financial detail and employment opportunity created through MUKTA scheme in course of time.

This will have below functionalities:

- a) System shall maintain a database of project Implementing Agencies (IAs) or Implementing Partners (IPs) with their unique Id.
- b) Facility should also be available to import records of MSGs from Mission Shakti database and records of SDAs from Jaga Mission database.
- c) Provision to show history of projects assigned to the IA or IP with financial detail and employment opportunity created through MUKTA scheme in course of time.

3.3.2 Database of Wage-Seekers

MUKTA scheme is available to all adult wage seekers, resident of the State and desirous of working in the urban areas. However, while engaging the wage seekers, preference shall be given

to local wage seekers and vulnerable groups like women, transgender, persons with disabilities etc. residing in the ULB area.

MUKTA-Soft maintains a centralized database of wage-seekers with their unique Id. The wage-seekers' enrolment module must be available on mobile app as well as on the web application. The demographic details including caste category, disability information, AADHAAR information, banking details and skill profile of the wage-seekers should be recorded during registration. AADHAAR seeding and UDID seeding facility should be available with the registration module. Wage-seeker registration is a dynamic process. It means a wage-seeker can be registered on the spot when assigning her/him job in a works. This module enables any citizen to submit request for enrolment as a wage-seeker through SMS. This module also keeps on building the history of employment offered to the wage-seeker and wage disbursed through MUKTA scheme in course of time.

The above module shall have below functionalities:

- a) Provision to create database of the Wage –Seekers with below information
 - Name
 - Age
 - Gender
 - Residing district/ block/ ULB/
- b) Provision to capture the disability status of the Wage workers.
- c) Option to generate the Unique ID of wage workers.
- d) Provision to capture the Enrolment status through Mobile app.
- e) System shall have the provision to capture the demographic details including caste category, disability information, AADHAAR information, banking details and skill profile of the wage-seekers.
- f) Option for the AADHAAR seeding and UDID seeding facility shall be available with the registration module.
- g) Provision for the spot registration of the Wage-seeker
- h) Option to enable sms based enrolment request
- i) Facility to capture the history of the employment of Wage-seeker

3.3.3 Register of Community Assets

MUKTA-Soft maintains a centralized register of assets with their unique Id built through MUKTA scheme. This module enables the authorities to browse the asset database drilling down from state level through ULB level to Ward level. A log book of projects/ works executed for creation or for maintenance of the asset is also part of this database

This module will have below functionalities:

- a) Provision to create Asset register with Unique ID for each Assets
- b) Option to capture Geo Location of each Asset
- c) Provision for Higher authority to drilldown while searching of Assets
- d) Facilities for Asset Log book preparation

3.4 Vendors' Empanelment and Rate Contract

This module enables the Engineering Department of ULB to maintain registers of empaneled vendors or suppliers. It also enable the ULBs to maintain registers on rate of schedule items, non-schedule items, work items

3.4.1 Schedule of Rate (Basic)

The Works Department publish schedule of rates of material, equipment (plants & machinery) and labour items time to time. The MUKTA-Soft maintains the register of such schedule item with its code, its unit of measure and its unit rate. The register does not record the historic data of unit rate of the scheduled items. The schedule of rates is valid for the entire state.

This module will have below functionalities:

- a) Creation of Registers for scheduled items
- b) Option to capture the units and rates of the scheduled items

3.4.2 Schedule of Rates with Lead Charges

District specific rate of scheduled items vary from one district to the other, because of the lead charges for lead, lift, loading and unloading the item from the source to destination. Hence, The MUKTA-Soft provides a district specific register of rates with lead charges.

This module shall have following functionalities:

- a) Provision to capture district wise lead charges which includes following
 - District wise Loading unloading charge
 - lifting charge
- b) Provision to capture source and destination
- c) Provision to generate district wise registers

3.4.3 Empanelment of Vendor through Invitation of EOI

The ULB may invite expression of interest from interested supplier/ vendor to supply scheduled items in the specified rates. Invitation of expression of interest by ULB, submission of EoI by

supplier/ vendor, selection of eligible supplier/ vendor according to their technical competencies is done manually. The MUKTA-Soft enables the engineering department to maintain a register of empanel vendors approved by the ULB level authority. Purchase orders may be issued to any such empaneled vendors for supplying scheduled materials or equipment. Technical competency of the vendors is considered and equal supply opportunity to the vendors should be ensured while placing the order.

This module shall have below functionalities:

- a) Provision to capture information of empanel vendors
- b) Facility to upload the empanelment copy by the vendors
- c) Option to capture the rate contract
- d) Provision to upload the Purchase order against each empaneled vendor.

3.4.4 Rates of Non-Schedule Items

There may be many non-scheduled items (e.g. open gym equipment) required for execution of works under MUKTA scheme. To discover competitive market price of such non-scheduled items, ULBs invite price bid through public tender. The competitive market price of each non-scheduled item is discovered from L1 (least cost method) bid of technically qualified bidders. The process to discover the price is done manually. The MUKTA-Soft enables the engineering department to record the rate of non-scheduled items into a register.

This module shall have below functionalities

- a) Provision to capture information of Tender
- b) System shall have the option to capture the information of participants
- c) Provision to capture the price bid of the participants against the non-scheduled Items
- d) Facility to generate registers of non-scheduled items.

3.4.5 Empanelment of Vendor through Invitation of Public Bidding

To discover competitive market price of such non-scheduled items, ULBs invite price bid through public tender. The competitive market price of each non-scheduled item is discovered from L1 (least cost method) bid of technically qualified bidders. Any technically qualified bidder, who agrees to supply the items at L1 price is empaneled by the ULB level authorities. The entire process is carried out manually. MUKTA-Soft enables engineering department to record such empaneled vendors into the register. This module shall have below functionalities

- a) Provision to capture information of the empaneled vendor
- b) Provision to capture the agreed rate of the empaneled against the non-scheduled Items
- c) Facility to compare the final price with the price quoted by bidders

d) Creation of Register for the empaneled vendor

3.4.6 Rate Analysis of Works Item

The OPWD Code provides rate analysis of Works Items. The rate of a works item is derived by the sum of value of all material items, labour items and equipment items required to complete a unit works. The MUKTA-Soft enables the engineering department to record the rate analysis of all works item.

This module will have below functionalities:

- a) System shall have provision to select following items rate to calculate the final rate
 - Material Items rate
 - Equipment Items rate
 - Labour rate
- b) Provision for auto calculation of the above rates to generate the finalized rate
- a) Facility to save the finalized rates

3.5 Shelf of Works: Finalization of Identified Public Works

3.5.1 Wishlist Module

Keeping in view the overall objectives of the scheme, potential of local area and its needs, technical feasibility and financial limit, public works shall be identified and prioritized by the Ward Level Committee after a systematic and participatory planning exercise. The upper financial limit of public works to be taken up under MUKTA shall be Rs.15 Lakhs, which may be revised by the H&UDD from time to time.

A mobile app in MUKTA-Soft enables the ward level committee (WLC) to record the identified work into the Wishlist. Details of the works including (a) geo-location, (b) ward no in the ULB, (c) address, (d) type of works and (e) description of proposed work by the ward level committee should be recorded. The identified works must be assigned with (f) Wishlist-Id, The (g) Asset-Id of the public asset, which may be created or may be maintained through the proposed works should also be tagged with. The mobile app prepare PDF document of the Wishlist. Ward Officer prints the PDF and get it signed by the members of WLC and submit it to Municipal Engineer for feasibility study.

This module shall have following functionalities

a) Provision to record the identified work into the Wishlist.

- b) Option to capture details of the works including
 - Geo-location,
 - Ward no in the ULB
 - Address of the ward
 - Type of works
 - Description of proposed work by the ward level committee
- c) Provision to assign the identified work with following
 - Wishlist-Id
 - Asset-Id of the public asset

3.5.2 Feasibility Study & Observation Recording

This component is a mobile app that enables the concerned field engineer (i.e. JE/AE) of the ULB to record her/ his observations during feasibility study of each work in the Wishlist submitted by the respective ward level committee. By geo tagging the report, the mobile app ensures that the observations are recorded being at the proposed works site. To record the observation during the feasibility, study the App provides a standardized list that contains (i) mandatory checklist and (ii) optional checklist. The optional checklist on the basis of the type of works can be defined or configured by the respective ULB. The field engineer (JE/AE) marks each identified works as feasible or not. Feasibility report from all field engineers is consolidated by ME.

This module shall have below functionalities:

- a) Provision to record feasibility study observations by the field engineer through mobile app
- b) Option to capture the geo tag information while recording the observation
- c) Provision to refer the standardized list that contains (i) mandatory checklist and (ii) optional checklist while capturing the observations
- d) The details of Mandatory checklist shall be as follows:
 - Is public land or property available for the works: (Yes/ No)
 - What is the dimensions of the land or property available for the works?
 - Length (in meter): (Enter number with 3 decimal places)
 - Width (in meter): (Enter number with 3 decimal places)
 - Height (in meter): (Enter number with 3 decimal places)
 - Is the land or property suitable for the works: (Yes/ No)
 - Is the available land/ property free from encroachment or litigation: (Yes/ No)
 - Is necessary approval already obtained from competent authority to carry out the works on the property: (Yes/ No)
 - If answer is 'No' to the above question, can it be obtained quickly?: (Yes/ No)
 - What is the approximate budget to carry out the works?: (Enter amount in Rs.)
 - How many families can be benefitted from the asset built or maintained through this works: (Enter number)

- How many people can be benefitted from the asset built or maintained through this works: (Enter number)
- Is the asset built or maintained through this works climate resilient and ecologically sustainable? (Yes/ No)
- e) Provision for the field engineer to mark the work as feasible or non-feasible
- f) Option for the Municipal engineer to confirm on the 60:40 ratio on labour and material in aggregate

3.5.3 Finalization of Public Work

The ULB level committee (ULC) finalize the identified public works considering following factors.

- a) Each finalized public works must be certified as feasible by field engineers.
- b) All finalized public works, in aggregate, must satisfy 60:40 ratio as to labour and material.
- c) Each ward should be getting proper representation in terms of number of works, value of works, number of provisioned employment days.

Each finalized work will have a unique identification number electronically generated by the MUKTA-Soft and updated with all necessary details. This module enables the Municipal Commissioner/ Executive Officer to record the decision of the ULC, generates PDF copy of the document and get it signed by the Chairperson/ Administrator

This module shall have below functionalities:

- a) Option to generate Unique Identification number
- b) Provision to Capture the decision given by Municipal Commissioner/ Executive Officer
- c) System shall have provision to generate PDF copy of the decision
- d) Option to upload the signed copy of the decision after approval

3.6 Works Estimate, TS and AA

This web component in MUKTA-Soft enables the field engineers to estimate the works finalized by the ULB level committee. There are two different tools are available to prepare the estimate, one by using estimating tool and the other by selecting a works template. Each estimated works must get Technical Sanction and subsequent Administrative Approval before issuing work order.

3.6.1 Basic Estimating Tool

The field engineer can prepare the estimate of the works by listing the works items required to complete the public works. In case the public works is complex, it may be splitted into simpler component works and then list the works item for each component works. The field engineer

needs to select works item with its unit one by one and providing dimensions in numbers, length, width and height. The tool calculates the bill of quantity (BOQ) for the works item, get its rate from rate analysis chart and computes the value of each works item. Sum of value of all works items become the total value of the public works.

This module shall have below functionalities:

- a) System shall have the provision to create the components
- b) Option to tag list of works against each component
- c) Provision to capture the unit of work
- d) Option to calculate the Bill of Quantity automatically for the listed works
- e) Provision to tag the rate of listed tag by selecting rates captured in rate analysis module
- f) Provision to auto sum of the value of listed works and save the total work value.

3.6.2 Template Based Estimating Tool

The MUKTA-Soft maintains a library of works template. The template is associated with the schematic drawing of the works and a data input form to specify the dimensions of the works.

This module enables the field engineer to select a suitable template from the library. The field engineer then fill in the actual dimension value in the data input form. The tool fetches related template estimate from the library and prepare the estimate on the basis of input dimension. Complex works needs to be splitted to simpler component works. The works can be estimated through selecting appropriate template for each component.

This module shall have below functionalities:

- a) Provision for the field engineer to select a suitable template from the library.
- b) System shall have the provision to create the components
- c) Option to tag list of works against each component
- d) Provision for the field engineer to fill in the actual dimension value in the data input form.
- e) Option to fetch related template estimate from the library
- f) Provision to prepare the estimate on the basis of input dimension.

3.6.3 Technical Sanction (TS)

Once the estimate of the finalized works are prepared by the field engineers, it is put up to the Municipal Engineer for Technical Sanction (TS). Municipal Engineer may return the estimate to the field engineer who prepared the estimate, if not found appropriate. ME may issue technical sanction to all works with appropriate estimate. The criteria for TS may consider the following criteria.

- a) The bill of quantities must be detailed for easy understanding of all stakeholders and the estimate must base on the schedule of rates with lead charges.
- b) The estimate includes supervision charges.
- c) All estimated public works, in aggregate placed for TS together, must satisfy labour to material cost as ratio of 60:40.
- d) For all works involving construction, cost-effective, labor-intensive technologies and usage of local materials shall be employed as far as possible
- e) Each work must have a note that indicate the expected outcomes from implementing the work.
- f) MUKTA-Soft allows the following TS activities for the works in phases and implements workflow for the activities involved in technical sanction.

MUKTA-Soft allows TS activities for the works in phases and implements workflow for the activities involved in technical sanction.

This module will have below functionalities:

- a) Provision to check & verify the estimate by Municipal Engineer
- b) Option to mark as not appropriate after due verification
- c) Option to mark as technical sanctioned if the estimated work is appropriate

3.6.4 Administrative Approval (AA)

After issuing technical sanction, the Municipal Engineer collate estimate of all works with Technical Sanction to Municipal Commissioner/ Executive Officer for acknowledgement. Municipal Commissioner/ Executive Officer, if found suitable, forward the works estimate to the Chairman/ Administrator for Administrative Approval (AA) of the works. The Chairman/ Administrator issue Administrative Approval, if found suitable, or return it with comments for necessary revision.

MUKTA-Soft allows AA activities for the works in phases and implements workflow for the activities involved in administrative approval

- a) Provision for the Municipal Engineer to forward the Technical sanction to Municipal Commissioner/ Executive Officer for acknowledgement
- b) Provision for the Municipal Commissioner/ Executive Officer, to forward the same to Chairman/ Administrator for Administrative Approval (AA) of the works.

c) Provision for the Chairman/ Administrator to issue administrative approval or return in case it requires revision

3.7 Work Order

If the total estimated cost of the work does not exceed Rs.10 Lakhs, it will be executed by the community-based organizations as Implementing Agency (IA), engaged by the Municipal Commissioner (MC)/ Executive Officer (EO). If the total estimated cost of the work exceeds Rs.10 Lakhs, it will be executed by the ULB through the concerned AE/JE. The concerned AE/JE shall be responsible for execution of the works with the support of the community-based organizations as Implementing Partner (IP) engaged by the MC/ EO. The processes involved in issuing the work order is presented below.

3.7.1 Tagging Community Organizations to Finalize Works

Community Organizer (CO) of the ULB invites Expression of Interest from the community organizations of the ULB to participate as implementation partner or implementing agency in executing works under MUKTA scheme. The EoI submitted by the community organizations are evaluated by the CO and awarded score on the basis of following factors.

The Community Organizer creates a priority list of the community organizations. In case multiple community organizations obtain same score, the Area Level Federation may be referred for priority order of the community organizations.

However, all above activities should be carried out manually. The MUKTA-Soft enables the Community Organizer to tag each finalized works to a specific community organization. The list of works and the tagged community organizations is approved by the Municipal Commissioner/ Executive Officer through a workflow.

This module will have following functionalities:

- a) Provision for the Community Organizer to tag finalized works to specific community organization
- b) Option to forward the list to the Municipal Commissioner/ Executive Officer through a workflow
- c) Option for the Municipal Commissioner/ Executive Officer to take decision (Approve or reject) the task

3.7.2 Issuing Work Order

The MUKTA-Soft enables Municipal Engineer to generate the work order just by selecting the Works and to issue necessary intimation to the tagged community organization over SMS and push notification on the mobile app of the community organization.

- a) Provision to select the works by Municipal Engineer
- b) Provision to generate the work order to the tagged community by Municipal Engineer
- c) Option for SMS/ email Intimation to the Community organization

3.7.3 Acknowledgement of Work Order by IA/IP

On issue of work order, the community organization receives the push notification with 'New' flag on the App and receive SMS alert on the registered mobile number to execute the works as Implementing Agency (IA) or Implementing Partner (IP). The community organization acknowledge receipt of the Work Order within 7 days of issuing the Work Order along with a list of engaged wage seekers

This module shall have following functionalities:

- a) Option for SMS/ email Intimation to the Community organization
- b) Provision to open, view, accept work details community organization
- Provision for the implementing agency to acknowledge the work order within 7 days of receipt

3.7.4 Engagement of Wage-Seeker by IA/IP

This App in MUKTA-Soft enables the community organization to select the wage-seekers from the wage-seekers' database and engage them to the works. This mobile app also facilitates to disengage the wage-seeker from the works, if needed. Any wage-seeker disengaged by community organization cannot further mark attendance on the muster roll. MUKTA-Soft intimate concerned field engineer about engaged or disengaged wage-seekers in any works on real time basis.

This module shall have below functionalities:

- a) Provision to select the wage seeker database by the implementing agency
- b) After selection provision to tag with work list
- c) Provision to un tag a wage seeker in case of any requirements
- d) Option to send intimation regarding the engaging/ dis engaging worker to the field engineer

3.7.5 Engaged Wage-Seekers Acknowledged by Field Engineer

Concerned field engineer of the works gets notification on all wage-seekers engaged or disengaged by the community organizations. The MUKTA-Soft enables the field engineers to acknowledge engaged and disengaged wage-seekers. The wage seeker is allowed to mark attendance only after her/his engagement is acknowledged by the field engineer.

This module shall have below functionalities:

- a) Provision for the field engineer to acknowledge against the wage workers engagement
- b) Facility for the field engineer to generate wage worker list against the work assigned

3.8 Execution of Works

3.8.1 Commencement of the Works

The MUKTA-Soft enables the IA/ IP to fill in this Project Initiation Form to mark the commencement of the works. This Form has following checklist of basic facility to be ensured at the worksite.

- a) Availability of portable drinking water
- b) Availability of rest shade
- c) Availability of first aid box with adequate material for emergency treatment for minor injuries and other health hazards
- d) Availability of support for child-care

Geo-tagged and time-stamped photographs of the work-site before commencement of works shall be captured and stored using this tool. MUKTA-Soft will enable the stakeholders to carry-out activities like attendance of wage-seekers, measurement of works, issuing purchase order, receipt of invoice from material supplier only when the works is commenced.

The module shall have following functionalities:

- a) Provision for the IA? IP to fill in the project initiation form
- b) Option to capture Geo- tagged and Time stamped photographs
- c) Option to capture the attendance of wage seeker, works measurement
- d) Provision to capture information related to purchase order issuance
- e) Invoice receipt information also required to be captured

3.8.2 E-Measurement Book

This mobile app component in MUKTA-Soft enables IA/IP for recording the physical progress of the works digitally on the basis of approved estimate. It also allows to capture and store proof of physical progress by taking geo-tagged, time-stamped photographs of the works site. This tool enables the users to use non-repudiable instrument to record the measurement. Editing of recorded measurement is not allowed. Facility to record check measurement is available for AE/JE. The measurement can be finalized by the ME through a sample check measurement. Check

measurement can be monitored through workflow. Audit trail of all measurements is also available.

The module shall have below functionalities:

- a) Provision for the IA/IP to record the physical progress of the works digitally on the basis of approved estimate.
- b) Option to capture and store proof of physical progress by taking geo-tagged, timestamped photographs of the works site.
- c) Facility to use non-repudiable instrument to record the measurement. However, editing of recorded measurement is not allowed.
- d) Facility to record check measurement is available for AE/JE. The measurement can be finalized by the ME through a sample check measurement.
- e) Check measurement can be monitored through workflow.
- f) Audit trail of all measurements.

3.8.3 Works Completion Report

On completion of every works, a Works Completion Report (WCR) shall be prepared as per the prescribed format available in the MUKTA-Soft by the concerned AE/JE. No further the new Asset built through this project must be assigned with an Identity number and name. Geo-tagged and time-stamped photographs of the asset to be uploaded in the MUKTA-Soft. All executed works shall be closed upon completion in the MUKTA-Soft as per the prescribed procedures.

MUKT-Soft no more allows the stakeholders to carry-out activities like attendance of wageseekers, measurement of works, issuing purchase order, receipt of invoice from material supplier once work completion report is prepared for a specific works

This module shall have below functionalities:

- a) Provision to generate Works Completion Report (WCR) as per the prescribed format available in the MUKTA-Soft by the concerned AE/JE.
- b) Option to assign the project with an Identity number and name.
- c) Provision for Geo-tagged and time-stamped of the photographs of the asset
- d) Provision to close the tasks upon completion

3.9 Attendance of Wage-Seeker

The MUKTA-Soft enables the IA/ IP to record the attendance of the wage-seeker at the works site. An e-Muster roll in English and Odia language having a unique identity number, electronic signature, date and names of the workers will be generated electronically by the ICT solution, MUKTA- Soft by the ULB functionaries/resource persons and issued to the IA/IP. The ICT solution will ensure that it is not possible for a worker's name to appear on more than one e-Muster Roll

in a given week. The Muster shall be closed by the IA/IP with the support of ULB functionaries/ resource persons on every Monday. The date of closure of muster roll is termed as "T". There are two different tools available in MUKTA-Soft for this purpose.

This module shall have following functionalities:

- a) Provision to record the attendance of the wage-seeker at the works site.
- b) The e-Muster will be made in English and Odia language having a unique identity number, electronic signature, date and names.
- Provision to close the Muster by the IA/IP with the support of ULB functionaries/ resource persons.

3.9.1 E-Muster

This is web-based tool to record attendance. For every ongoing work, E-Muster module enables the concerned AE/JE to issue a paper-based muster roll with unique id in the name of IA/IP at the beginning of every week. The name of all wage-seekers engaged in the works, those are reported by IA/IP and acknowledged by AE/JE, are populated on the muster roll. The system ensures that it is not possible for a worker's name to appear on more than one e-Muster Roll in a given week. A few blank rows are also available to take manual entry of any additional wage-seekers joined to the works later in the week. The attendance of the wage-seeker is taken manually on respective column of the day of the week. At the end of the week, MUKTA Coordinator enters the information on paper-based muster roll into the MUKTA-Soft. On completion of recording of the muster roll for the week, the muster roll is marked as closed. The scanned copy of the paper-based muster roll is also stored into the database. New muster roll cannot be opened or issued in case there is an opened muster roll exists for the works.

- a) System shall have the provision to record attendance in the system.
- b) The name of all wage-seekers engaged in the works, those are reported by IA/IP and acknowledged by AE/JE, will be populated on the muster roll.
- c) System shall have the provision to generate list with a few blank rows to take manual entry of any additional wage-seekers joined to the works later in the week.
- d) Provision to capture the attendance information on into the MUKTA-Soft.
- e) On completion of recording of the muster roll for the week, the muster roll will be marked as closed.
- f) The scanned copy of the paper-based muster roll will also be stored into the database.
- g) New muster roll cannot be opened or issued in case there is an opened muster roll exists for the works.

3.9.2 M-Muster

This is a mobile app based tool to record attendance. The IA/IP should report concerned JE on the list of wage seekers engaged in the works or disengaged. The JE acknowledge all engaged or disengaged wage seekers. The system ensures that it is not possible for a worker's name to appear on more than one M-Muster Roll in a given week. Then, the mobile app enables all wage-seekers, engaged by IA/IP and acknowledged by JE, to mark attendance by taking a time-stamped selfie or groupfie within the geo fenced worksite. The mobile app will have AI/ ML based Facial recognition feature which shall authenticate the user both in online as well as offline mode. In case, the attendance of a wage-seeker is not marked due to any technical fault, it allows the IA/IP to record the attendance manually on the mobile app. Any attendance marked manually are flagged as exception for future reference. The M-Muster should also work offline.

This module shall have following functionalities:

- a) Provision to record attendance through mobile app
- b) Provision for the JE to acknowledge all engaged or disengaged wage seekers.
- c) The mobile app will enable all wage-seekers, engaged by IA/IP and acknowledged by JE, to mark attendance by taking a time-stamped selfie or group-fie within the geo-fenced worksite.
- d) Provision to allow the IA/IP to record the attendance manually on the mobile app too with a flag mentioning exception
- e) Provision for facial recognition through mobile App while capturing Selfie/gruopfie.

3.10 Purchase of Material and Hiring of Equipment

In case the works up to Rs.10 lakhs, all materials required for the works shall be procured by the IA from empaneled vendor of ULB under the general control and supervision of the AE/JE. In case the works up to Rs.10 lakhs, all materials required for the works shall be procured by the AE/JE in accordance with the procedures prescribed by the Government of Odisha.

3.10.1 Purchase Order

MUKTA-Soft automates a draft purchase order (PO) for a works on the basis of material quantity analysis in approved estimate. MUKTA-Soft can select a vendor from empaneled list as per guideline and suggest to IA or AE/JE to place the PO. The IA or AE/JE can place the PO in the name of the vendor to supply the material or equipment.

- a) Provision to select a vendor from empaneled list as per guideline.
- b) Provision to generate the PO in the name of the vendor to supply the material or equipment by IA or AE/JE.

3.10.2 Receipt of Material

On approval of MB, MUKTA-Soft automatically calculates consumption quantity of each type of material on the basis of incremental physical progress recorded in the measurement book. The value of the consumed material is calculated by multiplying the quantity with the rate of material as mentioned in the approved estimate of the works. Accordingly, MUKTA-Soft creates Good Receipt Note and take necessary entry on the respective vendor's page in material receipt register of the works. The vendor is entitled to raise invoice only according to the material receipt register.

This module shall have below functionalities:

- a) Provision for auto calculation of consumption quantity for each type of material on the basis of incremental physical progress recorded in the measurement book.
- b) Provision to create Good Receipt Note.
- c) Option to raise invoice according to the material receipt register.

3.10.3 Penalty and Withheld

This module in MUKTA-Soft enable the AE/JE to initiate a proposal for imposing penalty or withholding payment of the supplier for negligence in delivery. This should be approved by the ME in a workflow. Such penalty and withhold amount will be considered at the time of billing.

This module shall have following functionalities:

- a) Provision to generate penalty as per the SLA
- b) Provision for the ME to approve the penalty imposed
- c) Option to generate the penalty list.

3.10.4 Vendor's Invoice

Respective page of Material Receipt Register is transparent to the vendor. MUKTA-Soft keeps track of the material supplied by the vendor, the invoice raised against the supply and balance supply for which the vendor is entitled to raise invoice. Accordingly, the vendor may raise invoice with valid GSTN manually.

MUKTA-Soft allows the IA or AE/JE to scan the invoice received from the vendor using mobile app and record necessary detail from the scanned image. The MUKTA-Soft keeps track of works wise invoices, received from each vendor, included in any bill or due for billing.

- a) Provision to display the material supplied and balance to be supplied by the vendor for which the vendor will be entitled to raise invoice.
- b) Provision for the IA or AE/JE to scan the invoice received from the vendor through mobile app
- c) Option to record necessary detail from the scanned image.
- d) System shall have the provision to track the works wise invoices, received from each vendor, included in any bill or due for billing.

3.11 Billing & Payment Disbursement

This module in MUKTA-Soft will enable the engineering team to select a works to prepare its running bill or final bill.

3.11.1 Preparation of Bill

The respective AE/JE select closed muster roll, finalized measurement book, and invoice from supplier due for payment. On selection of above artifacts MUKTA-Soft automatically prepares the bill for the wage-seekers and the material suppliers. Copies of supporting documents relating to selected artifacts are also attached to the Bill. Following deductions are computed on the bill for material supplier

- a) Labour cess @1% of the material supply
- b) IT-TDS @1% of the material supply
- c) Security Deposit @3% or as applicable as per A/B/C/D class contractor
- d) Royalty on minerals (@Rs.130/cum on stone product, @Rs.35/cum on sand/morum/crusher dust or as per rates applicable)
- e) Empty cement bag @Rs.3.19/ bag
- f) GS-TDS @2% of the material invoice if invoice amount is more than Rs.2.5lakhs.
- g) Withheld amount as decided earlier by authorities.

- a) Provision for auto preparation of the bill for the wage-seekers and the material suppliers by selecting closed muster roll, finalized measurement book, and invoice from supplier due for payment.
- b) Provision to upload Copies of supporting documents relating to selected artifacts
- c) Following deductions will be computed on the bill for material supplier.
 - Labour cess @1% of the material supply
 - IT-TDS @1% of the material supply

- Security Deposit @3% or as applicable as per A/B/C/D class contractor
- Royalty on minerals (@Rs.130/cum on stone product, @Rs.35/cum on sand/morum/crusher dust or as per rates applicable)
- Empty cement bag @Rs.3.19/ bag
- GS-TDS @2% of the material invoice if invoice amount is more than Rs.2.5lakhs.
- Withheld amount as decided earlier by authorities.

3.11.2 Approval of Bill

The bill, prepared by AE/JE, is sent to ME for checking over the workflow. The ME may forward the bill to MC/EO if found correct or return to AE/JE for necessary correction. MC/EO approves the bill and issue the pay order in case it is within Rs.2lakhs. In case the bill amount is more than Rs.2lakhs, MC/EO forwards the bill for countersign of the Chairperson/Administrator. Chairperson shall countersign the bill and sends back to the MC/EO. Finally, MC/EO issue the pay order.

This module shall have following functionalities:

- a) The bill, prepared by AE/JE, will be forward to ME for checking over the workflow.
- b) Provision to forward the bill to MC/ EO if found correct or return to AE/JE for necessary correction.
- c) Approval of the bill by MC/EO and issuance of the pay order in case it is within Rs.2lakhs.
- d) Option to forward the bill amount to MC/EO in case it is more than Rs.2lakhs, further this will be forwarded to the Chairperson/Administrator for approval.
- e) Provision for the Chairperson/Administrator to countersign the bill and send back to the MC/EO.
- f) Provision for the MC/EO to issue the pay order.

3.11.3 Smart Payment to Wage-Seeker, Material Supplier and IA/IP

MUKTA-Soft enables the Accounts Department to submit the bill with request for payment to IFMS through PL/ PD account. MUKTA-Soft is integrated with IFMS to submit the payment request and obtain the confirmation of successful payment of wages to Wage-Seeker, sale proceed to Material Supplier and the works supervision charge to IA/IP.

- a) Enable the Accounts Department to submit the bill
- b) Provision to request for payment to IFMS through PL/ PD account.

c) Update the status on confirmation of successful payment of wages to Wage-Seeker, sale proceed to Material Supplier and the works supervision charge to IA/IP.

3.11.4 Book Keeping

The ULBs are already equipped with Financial Accounting System with DIGIT platform or with Honeywell platform. MUKTA-Soft automatically converts bill to vouchers and push the voucher information to Financial Accounting System for book keeping.

This module shall have below functionalities:

- a) Provision for auto conversion bill to vouchers
- b) Option for the accounts officer to push the voucher information to Financial Accounting System for book keeping.

3.12 Training & Knowledge Sharing

3.12.1 Training Repository

Training Repository enables the State Level Authorities to upload training content. Training content could be PDF documents, Power-point presentation, and audio-visual content. The training contents can be classified through audience matrix (i.e. Starter, Seeker, Believer, Influencer), level of users (i.e. State Level, District Level, ULB Level and Community Level) and through proficiency level (i.e. beginner, regular user, expert). The index with #tag should be used for the training content for quick search. The training repository should be presented in a personalized manner for each user according to her/his past usage and search.

- a) Provision to upload training contents in pdf format
- b) Provision to maintain proper versioning of the documents
- c) Quick search option to be provided for the easy searching of the training content
- d) Maintain user wise search log and accordingly set provision on training content as per user login

3.12.2 Training Planner

This module in MUKTA-Soft facilitate State-Level, ULB level authorities to plan training programme. Online invitation can be sent to the prospective trainees to attend the training. Pretraining material reference can also be circulated amongst the invitees.

This module shall have below functionalities:

a) Facilitate State-Level, ULB level authorities to create training programme.

- b) Provision for Online invitation to be sent to the prospective trainees to attend the training.
- Option to upload the pre-training materials which can be shared further with trainees.

3.12.3 Training Report

This module enables the user to record Training Completion Report. Trainees' performance, trainers performance can also be recorded.

3.13 Grievance Redress & Chatbot

The MUKTA-Soft enables multi-modal grievance recording. Automated routing mechanism as well as escalation matrix is adapted for resolution of such grievance

3.13.1 Lodging Complaint/ Grievance

Common citizen, wage-seeker, material supplier/ vendor and community organization, can lodge a complaint or grievance. The grievance can be classified to pre-defined category and subcategory. Specific information can be asked for specific category or sub-category. The complainant is free to submit grievance through online form in MUKTA-Soft directly. The aggrieved may write e-mail, make telephone call to central help desk or write letters to public representatives, senior bureaucrats during public hearing or field visit. The central help desk can record all such grievance using online form. MUKTA-Soft is capable to get the feed from other important grievance portal.

This module shall have below functionalities

- a) Provision to lodge a complaint by Common citizen, wage-seeker, material supplier/vendor and community organization.
- b) Option to classify the grievance
- c) Provision to categories the grievance as per predefined category or sub category
- d) Provision to capture Specific information for specific category or sub-category.
- e) Option to choose the type of grievance as E-mail, telephone call, letters to public representatives.
- f) Provision for the central help desk to record all grievance using online form.
- g) Option to integrate with other important grievance portal to capture the grievance information

3.13.2 Routing of Grievance

The grievance recorded in the system can be routed and assigned to appropriate authorities for resolution. MUKTA-Soft is capable to track the journey of the grievance. All communication

occurs amongst the assignor and assignee can be recorded. The assignee can return the grievance or forward it, if thinks suitable.

This module will have following functionalities

- a) Provision to route the grievance to appropriate authorities for resolution.
- b) Provision to track the journey of the grievance.
- c) Option to forward, return, approve, reject, hold the grievance with desired stakeholders

3.13.3 Resolution of Grievance

The authority can record action taken on the grievance on daily basis. The complainant can check the progress of her/his grievance on the grievance portal. Important stages may be intimated to the complainant during processing of grievance. On resolution of grievance the system should intimate the complainant as well as the authorities through whom the grievance has entered into the system.

This module shall have following functionalities:

- a) Provision to record action taken on the grievance on daily basis.
- b) Option for the Complainant to check the progress of her/his grievance on the grievance portal.
- c) Auto intimation shall be provided to the complainant during processing of grievance.
- d) System shall generates alerts and notification on Resolution of grievance to the complainant as well as the authorities through whom the grievance has entered into the system.

3.13.4 Queries & Response

Al/ML technique based Chatbot may be deployed to respond to queries. Complex queries can be routed to the central help desk to respond. The queries may be submitted in the form of text. Ability of the system interpreting vernacular language is preferred

- a) AI/ML technique based Chatbot shall be deployed to respond to queries.
- b) Complex gueries can be routed to the central help desk to respond.
- c) The gueries will be submitted in the form of text or voice.
- d) Ability of the system interpreting vernacular language will be preferred.

3.14 Social Audit & Compliance

This module includes aspects of transparency and accountability including community oversight, social audit through independent agency and its online follow up. This module is integrated with Grievance redress module for follow up actions. The concerned ULB officials along with project coordinators and implementation experts deployed in the ULBs shall facilitate conduct of social audit of the works taken up under the Scheme.

The findings from the social audit reports along with the action take reports will be uploaded in the ICT solution, MUKTA-Soft and will be available for public viewing.

This module shall have below functionalities:

- a) Provision to create Audit plans by the ULB officials
- b) Option to capture the audit findings and action taken information against each audit

3.14.1 Empanelment of Independent Agencies for Social Audit

The H&UDD shall engage an independent agency which is not involved in the planning and implementation of the Scheme to undertake social audit. MUKTA-Soft will enables state level authorities to empanel such agencies. (Bidding process will be done manually)

This module shall have below functionalities:

- a) Provision to capture the information of the empaneled auditors in the system
- b) Option to generate the reports of the auditor status which will include following no. of audits conducted
 - No. of audits finalized
 - Status of audits

3.14.2 Social Audit Planning

As per guideline, the social audit agency will conduct at least one social audit, in each ward every six months. MUKTA-Soft enables the state level authorities (PD, SUDA), district level authorities (PD, DUDA) and the ULB level authorities to plan the social audit in a year. The calendar of social audit can be published for reference. This calendar also get updated after completion of the social audit and present dashboard comparing plan versus actual.

- a) Provision to prepare yearly audit plans through the system
- b) The calendar of social audit shall be published for reference.
- c) Option to update the calendar on completion of the social audit
- d) Provision to show plan vs actuals

3.14.3 Input for Social Audit

MUKTA-Soft enables the social auditors to generate reports with ward level information project specific information, wage-seeker specific information. This module facilitate searching the database with multiple parameters in varied combination. The information required by the social auditors may be presented through pre-designed reports

3.14.4 Observation and Recommendation by Social Auditors

MUKTA-Soft enables the social auditors to record remark and comment based on their observations against reported information. Ward specific, project specific and wage-seeker specific reports can be published by the social auditors comparing reported information vis-à-vis reality on-ground.

MUKTA-Soft also enables the social auditors to record recommendations and action points for the ULB. This can be integrated with the Grievance Redress module of the MUKTA-Soft. The system can publish action taken report for reference of authorities of different levels.

This module shall have following functionalities:

- a) Provision for the social auditors to record remark and comment based on their observations against reported information.
- b) Option for the Ward specific, project specific and wage-seeker specific reports shall be published by the social auditors comparing reported information vis-à-vis reality onground.
- c) Provision for the social auditors to record recommendations and action points for the ULB.
- d) Option to integrate with the Grievance Redress module.
- e) Provision to publish action taken report for reference of authorities of different levels.

3.14.5 Follow up Action and Compliance to Audit Remark

MUKTA-Soft enables the Community Organizer of the ULB to record action taken by ULB authorities with respect to the recommendations by the social auditors. This module automate alerts to the respective authorities to take action within stipulated time, failing which non-compliance is escalated.

- a) Provision for the Community Organizer of the ULB to record action taken by ULB authorities with respect to the recommendations by the social auditors.
- b) Provision for auto alerts to the respective authorities to take action within stipulated time, failing which non-compliance will be escalated.

4 Use of Analytical Tool & Services:

H&UD Department has decided to implement MUKTA-Soft, a comprehensive digital solution that imbibe smart payment principles for frictionless payment to the Implementing Agencies/ Implementing Partners and to the wage earners those who worked under the scheme in just-in-time manner. This application involves stakeholders like SHGs, Slum-dwellers, mission Shakti groups, Ward level committees, Migrant laborers etc covering all the 114 ULBs in Odisha. Involvement of Analytical tool shall help the departmental authorities to take necessary decision at right point of time. The major usage of analytical tool is to generate various customized reports by churning the data available in the databases and representing the data in form of dashboard

Few of the sample reports are like:

- ULB wise comparison on progress of work
- Implementing Agencies/ Implementing partner wise progress comparison
- Month wise work analysis
- Work wise progress analysis
- District wise work progress analysis
- Wage employment progress ULB wise etc.

OEM authorization certificate is mandatory for Analytical Tool services.

5 Roles and Responsibilities of Different Stockholders

5.1 Responsibility of the Department:

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.

5.2 `Responsibilities of Department/OCAC:

- OCAC will supervise and monitor project implementation, and coordinate with to facilitate smooth implementation of the project, and, for meeting the administrative requirements pertaining to the project.
- Approving Project Management Plan and Project Inception Report submitted by the SI to implement the project within a defined timeline.
- Approving the project reporting formats submitted by the SI to monitor and analyze

- the progress of the project.
- Conducting Weekly / Monthly project review with the SI in regards to the progress of the project
- Monitoring key metrics and SLA compliance by SI as per RFP terms
- Reviewing and approving/organizing approvals for all the deliverables such as SRS, SDD, Design Documents etc. submitted by the SI within a defined timeline throughout the implementation phase in consultation with Department.
- Project tracking and monitoring for ensuring to timeline.
- Establishing appropriate processes for notifying the SI of any deviations from the norms, standards or guidelines at the earliest instance after noticing the same to enable them to take corrective action
- Reviewing the UAT readiness & overseeing the UAT and the results thereof
- Overseeing the progress of user training and coordinate signoff activities
- Review and monitor the completeness of the solution with respect to requirements and performance/acceptance expectations from the solution.
- Direct and supervise the activities needed for stabilizing the system and tuning the system for meeting the performance expectations during the early phase of O&M postgo live.
- Coordinating and overseeing procedures for undertaking quality audits of the system on a periodic basis
- Timely risk analyses.
- Review and provide recommendations on the change requests identified by the SI and assist Department in approving/modifying/rejecting such requests

5.3 Responsibility of System Integrator:

- Prepare and submit the Integrated Project Management Plan (IPMP) for implementation of the project. The IPMP shall comprise of the all the components of deliverables prepared for Inception
- Prepare the project reporting formats to report the progress of the project to the Dept. for approval
- Participate in Weekly / Monthly project review in regards to the progress of the project
- Identify and escalate issues/risks Dept. and provide the mitigation plan
- Adhere to the directions of the Dept. as and when provided.
- Prepare and deliver for approval all the deliverables such as SRS, SDD, and Design Documents etc. within a defined timeline, as agreed in the IPMP and to the satisfaction of Dept., throughout the implementation phase.
- Install/configure/deploy all the components of system and get approval from the dept.

- Provide detailed training plan to the dept. and train the personnel identified by the Dept. and report the results.
- Ensure UAT readiness & conduct the UAT and report the results thereof to the dept. and obtain acceptance thereof.
- Ensure completeness of the solution with respect to requirements and performance, acceptance expectations from the solution and get signoff from appropriate authority from the dept.
- Coordinate with System Integrators of other relevant system for ensuring that system seamlessly exchanges data with them.
- Deploy and manage hand holding support for addressing the issues and incidents raised by users; resolve such issues and report the Dept. on a periodic basis
- Prepare SLA report based in the SLA parameters given in RFP on a continuous basis and deliver it to the Dept. for review and necessary action.
- Responsible for successfully delivery and implementation of the application.