



Government of Kerala

Abstract

Local Self Government Department – Special Working Group Meeting - Computerization of 3 tier Panchayats - Administrative sanction accorded – Orders issued.

Local Self Government (IB) Department

G.O.(Rt) No. 2244 /2014/LSGD

Dated, Thiruvananthapuram, 27.08.2014.

Read: - 1. Letters No. 2694/Plan-1/2014/IKM dated 07.05.2014 and 4075/Plan-2/ 2014/IKM dated 19.06.2014 from the Executive Director, Information Kerala Mission.
2. Decision No. 1 of the Special Working Group held on 30.06.2014.

ORDER

In the current years' Budget, an amount of Rs. 800 lakh is provided under the head of account 2515-00-800-86-99(P) for IKM. The Executive Director, Information Kerala Mission had furnished components of the scheme 'Computerization of 3 tier Panchayats' to place before the Special Working Group as detailed below:

Sl.No	Name of Component	Estimates		Total (in Lakh)
		Non-Recurring	Recurring	
1.	Application Software Development	-	100.00	100.00
2	Technical Support, Testing & Handholding	-	100.00	100.00
3	Infrastructure Development and Maintenance	107.00	43.00	150.00
4	Implementation, Capacity building and field level monitoring	63.00	87.00	150.00
5	Roll out of application, software, project management & monitoring	-	300.00	300.00
	Grand Total			800.00

The meeting of the Special Working Group held on 30.06.2014 considered and approved the above scheme for issuance of Administrative Sanction for Rs. 800 lakh subject to certain conditions.

In the above circumstances, administrative sanction is accorded to the above scheme 'Computerization of 3 tier Panchayats' for an amount of Rs. 800 lakh for the year 2014-15 under the head of account 2515-00-800-86-99(P) subject to the following conditions:

- No fund shall be utilized for development of service delivery software and development of GIS Products.

- The expenditure would be met from the provision available under the appropriate head of account.
- The fund release will be based on actual requirement and the fund released should not be parked in banks.
- Store Purchase Rules shall be strictly adhered to.
- Tender / e-tender and other stipulated formalities shall be followed wherever necessary.
- For civil works, CPWD rates shall be followed.
- Post creation and purchase of vehicles are not admissible under the scheme (s).
- IKM should ensure integration of IKM software with Service Portal of Government of Kerala so that any one can navigate through Government Service Portal for availing services offered by Panchayat Department, within one month.
- IKM shall develop any new service software using Service Plus software. IKM will focus on Panchayat specific functioning related exclusive software as per the need.
- IKM shall complete the integration of IKM softwares with the softwares developed by NIC for the Ministry of Panchayati Raj, Government of India and also streamline Social Security Pensions.

Information Kerala Mission will be the Implementing Agency of the schemes and Local Self Government and Finance Departments in Government will monitor the implementation.

The Executive Director, Information Kerala Mission will furnish proposal for release of funds based on above conditions and actual requirement.

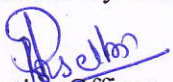
The components and other details of the scheme are appended.

By Order of the Governor,
Dr. RAJAN KHOBRADE
Secretary to Government

To

The Executive Director, Information Kerala Mission.
The Director of Panchayats, Thiruvananthapuram.
The Finance (Development) Department (vide U O No. 64662/Dev3/2014/Fin dated 12.08.2014)
The Finance (Planning B) Department
The Planning & Economic Affairs Department
The Principal Accountant General (Audit) Kerala, Thiruvananthapuram
The Principal Accountant General (A & E) Kerala, Thiruvananthapuram
SF/OC.

Forwarded / By Order


Section Officer

INFORMATION KERALA MISSIONAnnual Plan proposals 2014-15 - Scheme wise details

1	Name of the Scheme	Computerization of Local Governments
2	New / Continuing / Spill over / Continuing scheme with modifications	Continuing
3	Type of the Scheme (State Plan Scheme / CSS / ACA / SCA / EAP)	State Plan
4	Funding Pattern other than State Plan Scheme (In case of CSS, specify State Share)	Not applicable
5	Financial Target / Outlay	800 lakhs
6	Physical Target (unit)	<i>Attached</i>
7	Scheme / Project phasing (year - wise)	2014-15
8	Details about implementing agency & Monitoring Mechanism	Information Kerala Mission Local Self Government Department Finance Department

9. Component wise breakup and details

Sl No.	Components	Financial Target (Rs.in Lakhs)	Physical Targets (In units)
1.	Application Software Development	100	<i>Attached</i>
2	Technical Support, Testing & Handholding	100	
3	Infrastructure Development and Maintenance	150	
4	Implementation, Capacity building and field level monitoring	150	
5	Roll out of application, software, project management & monitoring	300	
Grand Total		800	

10. Implementation Time line:

Period	Financial (in lakh)	Progress (5%)
April-June	175	21.9
April-September	175	21.9
April-December	200	25
April-March	250	31.2

11. The components and activity wise split ups for the period 2014-15 are provided below:

Sl. No.	Components	Activities
1	Application Software Development	<ul style="list-style-type: none">• Software development and management• Development of GIS Products - Linking of Spatial Database• Technology migration to FOSS• Development of Web based services and M-governance
2	Technical Support, Testing and Handholding	<ol style="list-style-type: none">1. Helpdesk2. Software Application Testing3. Processing and Database Audits
3	Infrastructure Development and Maintenance	<ul style="list-style-type: none">• Infrastructure Upgrade/Replacement/ Maintenance
4	Implementation, Capacity Building and Field level Monitoring	<ul style="list-style-type: none">• Linking up Implementing Offices- Extending the Pilot Project to More Locations• Piloting of New software/Schemes• Capacity Building
5	Project Management and Monitoring	<ol style="list-style-type: none">1. Process Reengineering2. Project Management3. Best practices sharing and advocacy

The details of activities to be implemented during 2014-15 are as follows:

1.0 Application Software Development

1.1 Software development and management:

IKM has developed many software applications for e-governance, which can be effectively used in various levels of government. Many of them have been rolled out state wide. Some of the remaining applications are in various stages of rollout, with data capture for making them online in progress. The main thrust is on integration of various software suites to form an enterprise level functionality, and setting up a central database for

providing Internet services. The rollout of application software developed by IKM is progressing in all local governments and the 1st, 2nd and 3rd phase of application software deployment has completed in all locations. The e-governance programmes in local governments had made considerable progress during the past one year. The rollout of Phase 4 is envisaged in 2014-15. Now the entire plan monitoring system is web based. More emphasis is given on web services. Electronic payment gateway is functional now and e-Payment facility is using in various local governments. Mobile based services were also introduced in local governments for improving the service delivery. Extensions of these services to all local governments are planned in 2014-15.

The customisation of existing software and incorporation of business process changes has to be undertaken.

Objectives:

- ☐ To ensure *Sanketham* (KMBR) application deployment in Municipalities and Grama Panchayats, currently under pilot deployment and to deploy Sanketham web based version
- ☐ Web based online systems for *Sakarma* (council and committee meeting agenda and minutes) in all local governments
- ☐ To implement Saankhya the accrual based double entry system in all local governments.
- ☐ To develop the backend integration of IKM application software to transform the different software applications to an integrated enterprise architecture – especially with the accounting and workflow applications
- ☐ To ensure that customisation and change requirements are met by modifying the software as required
- ☐ Update the software based on any bug reports or feature requests from the operational locations.
- ☐ Making available a centralised database for each application area for providing Internet based services.

Components / Activities:

System study, finalisation of system requirements, development of proto model, stakeholder consultations, finalisation of requirements, development, testing, evaluation and QA of applications, piloting at selected local bodies, workshops for stakeholder consultation, application deployment, feedback and rectification.

Physical Targets

Updated Software applications as per requirement and support for its trouble free operations at 1209 local governments.

Financial Targets : ₹ 88.95 lakh

Time lines : April 2014 to March 2015

1.2 Development of GIS Products - Linking of Spatial Database

IKM had developed a methodology for mapping all buildings in a cadastral based Geographic Information System (GIS) map. The premises maps for Perinthalmanna Municipality, Attingal Municipality, and Tanalur Grama Panchayat were prepared by IKM using GIS. Spatial data such as electrical power lines, road network, water bodies, land use, etc were also mapped on the premises maps in different layers. This information can be utilised for better plan formulation process and for better citizen services.

IKM is in possession of almost 83% of cadastral data in the state. In addition to this, we have completed premises mapping at several locations as stated above. These data need to be converted into usable GIS products through application development. The data analysis and its outcome would enable meaningful decision making for better local level planning. State level management of cadastral information system is one of the objectives of IKM. Development and implementation of new projects like Satellite digital data base for decentralised planning in the Kerala State and GIS /GPS based Vehicle tracking and management system are also planned during the year.

Components / Activities

System study; workshops for stakeholder consultation; Finalisation of System requirements; Development of proto model; Stakeholder consultations; Finalisation of requirements; Development, testing, evaluation & QA of applications; Piloting at selected local bodies; Feedback and rectification. Since Govt. have taken a policy decision to co-ordinate and unify the initiatives taken by different agencies in GIS activities, IKM has decided to make available the data already in store for better co-operation and co-ordination. Update and finalisation of the existing cadastral base map and publishing on web.

IKM shall collect cadastral maps from various offices. Digitisation of maps. Collection of control points by using handheld GPS units. Correlation of control points with known landmarks. Referencing and transformation of Ground control points. The expertise that

IKM has accrued so far in this field will be disseminated to those departments and Govt. agencies that require it.

Physical Targets

Availability of GIS based software tools for better development programme formulation and management.

Financial Targets : ₹ 2.45 lakh

Time lines : April 2014 to March 2015

1.3 Technology migration to FOSS

Following the policy announcement by the Government of Kerala, IKM has decided to take up all fresh software development activities on the Free Open Sources platforms while continuing to maintain and support the existing applications on Microsoft platform. Most of the applications developed so far are suited for decentralised operations in the LSGI. Maintenance, version controls and patch updates, in more than 1000 locations at a time, is cumbersome. There is enough scope in all the existing systems for some process reengineering and software optimisation. This can be taken up on the Open Source platform for the centralised deployment and maintenances. Also we can ensure that strong security features are incorporated, especially where the money transactions are taking place over the net. Applications such as "Sevana Pension (Social Security Pension)" could be used by other departments / Institutions in Kerala. Also "Sevana Birth and Death Registrations" could be used in other states, provided they are developed in FOSS Technology under Unicode for portability in other languages.

Components / Activities

Development of proto model, finalisation of requirements, testing, evaluation and QA of applications, piloting at selected local bodies, feedback and rectification.

Physical Targets

Migration of existing software (selective) to FOSS. Scope for extended use at other locations. Earnest effort will be taken to migrate as many as the existing software to FOSS, for which capacity building programs will be conducted. Necessary additional infrastructure will also be provided during the plan period for achieving the goal.

Financial Targets : ₹ 5.40 lakh

Time lines : April 2014 to March 2015

1.4 Development of Web based services and M-governance

IKM proposes to transfer the total field level implementation of various operations like monitoring of developmental projects, accounting and budgeting, financial management,

work estimation and various services to public like issue of civil registration certificates and distribution of welfare pensions, salary and PF account of LSGI employees through web based services. Now the entire Plan Monitoring system is made web based. The development of Web modules of the applications like Sugama, Sakarma, Sanketham are in the final stages.

Mobile based services were also introduced in local governments for improving the service delivery. Shortly Kerala will have online access to the valid birth and death certificates registered since 1970 which will be a major achievement. Web services ensure total e-governance implementation in local governments and a vision of a paperless office with more transparency in all transactions.

Physical Targets

All service deliverables to the citizens will be available at their finger tips by providing necessary information on the web.

Financial Targets : ₹ 3.20 lakh

Time lines : April 2014 to March 2015

2 Technical Support, Testing and Handholding

2.1 Helpdesk

The helpdesk of IKM attends to the field level issues in hardware, software and domain related matters related to the software. The state level helpdesk is operational at IKM headquarters for each application. It handles queries from the local governments and other offices in which the applications are operational. The helpdesk facility at headquarters acts as the level-3 support for application deployment, operations and the hardware installation at site, which cannot be handled at the level-2 support provided by the district technical officers. Level-1 support is provided by the technical support personnel at block, municipality level. In the case of Corporations, Municipalities, District Panchayats and District Planning Offices, a Technical Assistant is positioned permanently at the location for providing troubleshooting, maintenance and handholding. In the case of Block Panchayats and Grama Panchayats one Technical Assistant is available per block for these support functions. They visit the locations periodically and also on-call.

Objectives

- To ensure the maximum system availability and minimum downtime.
- To ensure trouble free operation of Application software.
- To ensure the effective update of software when released

- To ensure the time bound installation / deployment of application software in all local governments
- To assist Local Body in handholding the application software

Components / Activities

Support for installation of hardware, software and software updates. Ensure periodic check up for trouble free operation of the hardware. Hand holding of the application software. Call-centre type computer-telephony integrated helpdesk facility; Internet and other communication facilities

Physical Targets

Trouble free operation of the hardware and software at 1209 local governments. Effective handholding ensures the usage of application by the local body. Timely implementation of software updates. Setting up of a full fledged computer-telephony integrated call-centre type helpdesk facility.

Financial Targets : ₹ 94.75 lakh

Time lines : April 2014 to March 2015

2.2 Software Application Testing

The application software suites developed by IKM have to be tested by a third party and certified as per the e-governance guidelines. The *Sanchaya* (Revenue) application is already under testing by STQC IT Services, DIT, Government of India. The first iteration of the testing is over for *Sanchaya* (Revenue) and the bug fixing is in progress. Steps for testing *Saankhya* (KMAM) has been initiated. In addition to this the following software applications are to be submitted for testing during the year 2014-15:

- *Saankhya* (KPRAR),
- *Sevana* (Civil Registration),
- *Sugama* (Works & Purchase)
- *Sthapana*
- *Sanketham* (KMBR)
- *Sakarma*
- Sulekha web based version
- Other online services

Third party testing of the application software will improve the reliability, and quality level of application. This will also help integration of the software for secure Internet transactions and secure web applications.

Components / Activities

Preparation of System Requirement Specification and test plans. Application is to be submitted to STQC IT Services, DIT, and Government of India for testing. Refining the application based on the test result / feedback. Different iteration of testing

Physical Targets

Improved quality of software, conformance of software for integrating with other websites for web based transactions

Financial Targets : ₹ 2.00 lakh

Time lines: April 2014 to March 2015

2.3 Processing and Database Audits

The e-governance processes at local governments are still in its infancy and a lot of interventions are required to ensure expected outcome of the programme. The applications are deployed with a set of processes that are found to be essential either for the completion of transactions involved or to deliver expected level of service delivery. Among the various components integrated in the operation of application software for transparency and efficiency some are controlled by application itself while some others invariably requires manual interventions to get the expected result of the entire operation. Apart from this, these applications are exposed to a community familiar with manual system of governance and without any self-assurance in the use of new technologies. So it is imperative to conduct random process and database audits to make sure that all components involved in the procedure are functioning as expected.

Process and database audits are to be done periodically for performance assessment of e-governance activities at local governments. This needs invariably to be linked with the present performance audit mechanism of the local governments in due course of time.

Components/Activities

Preparing formats for process audit and development of application tools for database audit. Conduct of process and data audit at selected local governments. Analysis of audit outputs for identifying obstacles in the implementation and to put forth suggestions for the improvement of processes and applications.

Physical Targets

- Process and data audit on different application software at five percent of local bodies where applications are operational.

- Recognition and classification of problems associated with the processes and application software.
- Rectification of issues in the processes and application.
- More efficient e-governance system with user-friendly applications at local governments.

Financial Targets : ₹ 3.25 lakh

Time lines : April 2014 to March 2015

3 Infrastructure Development and Maintenance

3.1 Infrastructure Upgrade/Replacement/ Maintenance

IKM has to manage a wide area network (WAN) covering 1209 local bodies (Corporations have zonal and circle office in addition), 14 district planning offices and other offices of the Local Self Government Department. The networks are to be integrated with the State Information Infrastructure (SII) and the State Wide Area Network being set up by the Government of Kerala. In this context, it is highly essential that IKM has the minimum facility to test, simulate and troubleshoot network problems. Network management and monitoring software, and some equipment would be required for managing the LAN and WAN. Also protection tools for the network such as firewall and antivirus software also would have to be updated.

A substantial part of the equipment at IKM headquarters have been procured about 11 years back. These have almost reached their end of life and maintaining them is becoming unviable in terms of expenditure and time lost due to failures. It is proposed to upgrade/ replace very old and unserviceable equipment. Some software also would have to be upgraded to suit the new hardware, and software development requirements.

In order to ensure proper upkeep of the development environment, handle the connectivity from the local bodies, and data received from them, a data storage solution using high-end servers with redundancy features and clustering/network-attached data storage facility would be required in the State Data Centre. For this and hosting an Internet web site and mail server, IKM would be utilising the facilities of the State e-Governance Data Centre of the Government of Kerala. Hardware and necessary software would have to be provided for this.

In order to ensure the effective functioning and upkeep of the hardware, some spares, backup/portable equipments and a few additional client computers would be required. So many computers in IKM head quarters are either out dated or become old. These computers have to be either replaced or upgraded. The software engineering

practices would also be streamlined using tools. Renewal of annual maintenance contract and upkeep of the infrastructure is will continue throughout the year.

Components / Activities

- Procurement of equipment and software.
- Renewal/ update of annual maintenance contracts
- Internal infrastructure upgrade/ maintenance – personnel expenses

Physical Targets

Availability of hardware and software at IKM office, Improved technical facility at IKM and Improvement in operational efficiency.

Financial Targets : ₹ 150.00 lakh

Time lines : April 2014 to March 2015

4 Implementation, Capacity building and Field level Monitoring

4.1 Linking up Implementing Offices-Extending the Pilot Project to more Locations

IKM had conducted a pilot at Kizhuvilam Grama Panchayat in Thiruvananthapuram district, for connecting the Implementing Offices to the Grama Panchayat. This activity is planned to extend the programme to all other districts. Hardware, connectivity, deployment of software and training of staff needs to be provided to local government and Implementing Office personnel for operationalising this programme. Once the system is implemented, the Implementing Officers can process their fund request for development projects, and settlement of accounts through this system. The local body can electronically process the fund request and release the allotment letter.

Components / Activities

- Providing Hardware, Peripherals, COTS software, application software, connectivity etc. to the Implementing Offices.
- Training and handholding of Staff in implementing offices.

Physical Targets

Connectivity between Implementing Offices. Online process of fund request and release.

Financial Targets : ₹ 3.25 lakh

Time lines : April 2014 to March 2015

4.2 Project Implementation

The amount of Rs. 107.25 lakhs has been provided for setting up of infrastructure in the new office accommodation at Swaraj Bhavan – for the smooth implementation of the project.

Components / Activities

UPS wiring, Networking, Building electrification, Aluminium partition and other civil works.

Physical Targets

New office premises with enhanced competence.

Financial Targets : ₹ 107.25 lakh

Time lines : April 2014 to September 2014

4.3 Piloting of New Software / Schemes

IKM envisaged a phased transformation of the existing systems to electronic systems and has developed methodologies that suit this purpose. The deployment of the software and its operationalisation involves readying of infrastructure, network connectivity, training to the staff, and handholding and support for its continued operation, for which the respective local governments play an important role.

One of the Pre conditions required for full scale implementation is Pilot implementation before full scale rollout because of the massiveness of the scale of implementation (1209 locations) spread over the state.

Physical targets

On the basis of feedbacks received from the pilot implementation, modifications can be made in the software's which helps the software more user-friendly.

Financial Targets : ₹ 5.50 lakh

Time lines : April 2014 to March 2015

4.4 Capacity Building

Training for the technology upgrade and improvement of processes in technical support, software development, training and LoBE members are envisaged. Areas covered include IT Systems, security systems, database management, software engineering systems, etc. The field support team has to be given regular refresher trainings based on the update of software applications. Strengthening of information repository is also part of this activity.

Components and Schedule

- Preparation and management of training material of Application Software, based on updates
- Finalisation of computer based training material
- Strengthening information repository
- Conducting training programme

Physical Targets

- Training of over 300 members of Technical Support team in IT Systems, processes and best practices.
- Training of over 300 Technical Support personnel on FOSS
- Trained Software personnel in FOSS and its uses

Financial Targets : ₹ 34.00 lakh

Time lines : April 2014 to March 2015

5 Roll out of application software, Project Management and Monitoring

5.1 Process Reengineering

Most of the current processes and structure of governance were formulated in the 19th and 20th centuries. Even though they were simple and efficient at the time of its invention it became difficult and complex with passage of time. Many are now not being followed. There had been many Administrative Reforms Commissions which have looked into these aspects. With the introduction of Information Communication Technologies through various e-government initiatives, a whole new dimension has come up.

An e-government system is not for replicating all manual processes electronically. Such a replication will not yield any improvement and may result in more complications and difficulties for the stakeholders. Therefore an e-governance system shall invariably have mechanisms to evolve new processes for making the system more transparent, efficient and user friendly, leveraging the power of information communication technologies. This business/ government process reengineering will have a major role for the effective implementation of e-governance at the local governments. Many such reengineering proposals have been submitted by IKM to Government for acceptance. Some have been incorporated, and some are awaiting approval.

Components/Activities

Organising workshops for the purpose, preparing documentations, Change management. First one to identify processes to be reengineered and then to finalise proposal of reengineering for onward submission to the government.

Physical Targets

- Modified set of norms and structures of governance suitable to deal with application software deployed at local governments.
- Automation of existing inefficient governing systems with outcome based, customer friendly efficient system of governance.

Financial Targets : ₹ 1.95 lakh

Time lines : April 2014 to March 2015

5.2 Project Management

Project Management envisages the entire management of the smooth running of the project and time bound completion of the objectives. It also facilitates timely rollout of all application developed / being developed by IKM. The activity covers:

- Human resource management including selection, recruitment and in ensuring general service conditions.
- Financial management including overall budgeting, cash flow management, internal audit, expenditure controls, preparation of financial statements.
- Materials management including vendor empanelling or short listing procurement of products and services, post procurement support and maintenance, in house maintenance, inventory management including notifying lead times for procurement and delivery.
- Corporate Management including handling of agenda notes and minutes for Implementation Committee, Technical Committee, Empowered Committee Meetings, management of corporate and public domain documentation, establishing and maintaining systems.
- Overall project management including general communications, preparation of project proposals, progress reports, interim reports, completion reports and maintaining documents in this regard.
- To organise systems for activity based budgeting, expenditure reporting and management and to prepare and communicate reports to various departments and agencies to ensure achievement of the overall objectives.
- To ensure systems for project management including preparation of project documents, activity budgets, expenditure statements, progress reports, completion reports, replies to internal audit queries, legislative assembly interpellations,

parliament questions, CAG audit queries, IT audit queries, inspection or enquiry reports etc

And also to ensure the systems for project management including preparation of:

1. project documents
2. activity budgets
3. expenditure statements
4. progress reports
5. completion reports
6. replies to internal audit queries
7. legislative assembly interpellations, parliament questions
8. CAG audit queries
9. IT audit queries
10. Inspection or enquiry reports etc.

Physical Targets

Improvement in the service delivery aspects as well as the completion of objectives of the Mission in a time bound manner. The vision is total e-governance implementation in local governments which functions as paperless office with increased transparency in all transactions.

Financial Targets : ₹ 296.25 lakh

Time lines : April 2014 to March 2015

5.3 Best practices sharing and advocacy

To organise environment management and advocacy including designing vetting and finalising newsletters, websites, handouts, brochures etc. for IKM. Preparations of materials for various campaigns, including a series of advertisements in newspapers, Videos and documentaries to be telecasted through all the prominent channels, Press releases etc. are the activities covered. Overall environment management including press briefings, press notes, television interviews, phone in programmes, radio programmes etc. are also aimed.

Physical Targets

Building awareness to the Public regarding the various services offered by IKM through e-Governance.

Financial Targets : ₹ 1.80 lakh

Time lines : April 2014 to March 2015