

## Support Contract - Scope of Work

### 1.1 Scope of Work

The brief Scope of work activities are given below:

- Annual Maintenance of the DIGIT-DCR Application by deploying the necessary manpower resources as per the requirements of KMC.
- Implementation of new changes in the application software as and when required and incorporation of any new business rules, when come into effect.
- Development of new forms & reports as and when needed from time to time.
- Fine Tuning and code changes for the optimal and efficient performance of the system.
- Module Version Controls of the application software.
- Debugging & fixing of the problems arising during the day to day functioning of the application.
- Updation and maintenance of the system and user documentation manuals of the DIGIT-DCR system
- Regular periodic hand holding and training to the end-users and the systems personnel on a day to day basis.
- Validation of the data as and when required
- Migration of the data as and when required

A detailed note on the features of the system is attached in **Appendix-A**.

### 1.2 DETAILED ACTIVITIES TO BE CARRIED OUT BY THE BIDDER

- The bidder shall maintain the DIGIT-DCR system so as to ensure its effective day to day operational usage. The job includes support maintenance to all the related functionalities and features.
- The bidder shall deploy the following manpower in house at KMC as per the qualifications and experience indicated, to carry out the maintenance activities, during the contract period in consultation with Designated Manager of the KMC who will be Program Manager on behalf of KMC.

**Project Manager**

**- 1 No**

**Software Development Engineer**

**- 1 No**

## **Support Engineers + Training + Testing**

**- 1 No**

- The bidder shall designate the onsite Project Manager as the Team Lead who will be the single point of contact for the day-to-day maintenance and management of the system as per the timelines defined. The Project Manager will be reporting to the **Designated Program Manager of KMC**, both technically and also on the administrative issues.
- The bidder shall provide the necessary hardware resources such as laptops etc., to carry out the development work by the deployed manpower.
- The bidder shall debug and fix the operational problems, perform error handling while running the system by the users at the KMC Office Sites.
- The bidder shall generate additional reports and modify the existing reports & queries, as per user's requirements
- The bidder shall provide hands-on assistance to the users to resolve any operational doubts as and when needed while the system is in operation.
- Project Management: The bidder shall also nominate one Off-site Project Manager for KMC at a senior level. The Project manager shall visit KMC once in every fortnight or as-and-when required for the periodical review of the maintenance activities. Similarly KMC shall identify a Project Manager from its side separately. The responsibility of the Project Manager of the either side, is to review the ongoing operation of the e-governance system at the respective Sites and to permit the system changes subject to the written approval of the competent authority. Status of the project shall be reviewed by the KMC management once in a month/as and when necessary, with the respective Project Managers of either side and shall be recorded.
- The bidder shall be responsible for the data integrity and will also identify the type & nature of data errors based on which the reports will be handed over to the concerned users for correction and resubmission. Data has to be corrected upon confirmation from the user(s).
- Any Interface Software routines by which data is populated from other Systems to the DIGIT-DCR system, the bidder shall provide the support towards the smooth functioning of the Interface as long as it is compatible with the database structure of the existing system.
- The Bidder shall document all the changes incorporated in the software and also improves the documentation of the existing user / system reference manuals wherever and whenever it is necessary.

- The bidder and the manpower deployed and involved in the maintenance support of the system, shall maintain the confidentiality of data, logic or any other matters related to KMC on their part.
- The maintenance / development activities shall be carried out on the basis of problem report (PR), to be issued by the members of the core team of KMC.
- KMC will assign and mark the jobs as **minor** or **major** or **critical** after analysing the nature of issues. The major problems will be attended to within 24 hours from the time it is reported. The minor problems will be attended within 3 working days and the time frame for the critical problems will be attended within 12 hours. The time frame finalized, will be binding on the development team.
- The software engineers deployed must have a good sufficient knowledge and working experience and expertise on the software tools namely J2EE, JAVA/PLSQL programming. They should be well conversant with JBoss, Forms & Report Builder, and Deployment of the Web application on Oracle platform, Database server / application server and OS level knowledge.
- The team members deployed will observe KMC duty hours and calendar of holidays. However, in exceptional cases, the team will have to work beyond normal working hours as well as on holidays.
- The manpower engaged for the maintenance support will be required to learn the features of the DIGIT-DCR system during the initial 4 weeks period and they will be assisted by the KMC core team members to understand the system. The date of commencement of actual maintenance support, will start after the learning period is over. The time spent during learning period will not be charged to KMC. However if the manpower engaged has better understanding of the system, the learning period may be reduced after mutual discussions or dropped.
- The bidder will submit the bio data of the software engineers engaged for the maintenance support for screening purposes. At the time of review if it is found that any of the specific works could not be completed due to the poor quality of manpower, the bidder shall replace them with suitable substitutes within 7 days, as required. Any change of personnel during the period of contract, should be done only with the prior consent of KMC. For whatsoever reasons provided, the maintenance support activities should not be suffered.
- The bidder shall not have the right to use the features of the DIGIT-DCR system software developed during the contract period, in whatsoever manner after the end of this contract period.

- The bidder shall be responsible to ensure that all the persons employed in the execution of the work under the contract, shall not disclose to any third party, without prior permission, any information furnished to them by KMC or which may be necessary in carrying out their obligation under this contract and shall treat all such information as confidential.
- The bidder shall warrant absolute satisfactory performance of 95% of the application system components developed and delivered, during the validity period of contract. The bidder shall extend full operational support in respect of such application system components during the contract period and shall undertake to remove all bugs that may be noticed during this period.
- At the end of the contract period, the bidder shall provide the soft copy of the source code and the details of new programs developed within the scope of work / changes in the existing program, their functions, flow charts, documentation manuals and the operational procedures.

### **1.3 Classification of activities:**

The various activities to be carried out under the contract are given below:

- Maintenance
- Bug fixing
- Enhancement/Modification
- Optimization
- Data validation/correction
- Data Migration
- Documentation
- Reports & MIS
- Training

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**1.3.1 Maintenance:**

The bidder shall maintain all the features of the DIGIT-DCR system including database(s). The source code of the project shall remain the property of KMC.

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**1.3.2 Bug fixing**

The bidder shall remove the bugs that are already identified/ will be identified during the contract period. The list of already identified bugs shall be shared at the time of commencement of the contract.

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**1.3.3 Enhancements/ Modifications**

The bidder shall enhance / modify the existing code as per changes in the requirements/ change in business rules/ as and when required by the KMC.

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**1.3.4 Optimization**

The bidder will review the existing code and modify so as to increase the efficiency of the application. A detailed report on the proposed changes and the risks involved along with the implications shall be handed over to the KMC and the approval shall be sought before making the necessary changes.

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**1.3.5 Data validation/ correction/migration**

During the tenure of the contract, as and when required, the bidder shall perform data validation/ correction/migration to enable smooth operations of the e-governance system at KMC. The bidder will be responsible for the data integrity which is getting populated after the commencement of the contract period. The bidder will also identify the type & nature of data errors and reports will be handed over to concerned users for corrections and resubmission.

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**1.3.6 Documentation**

The bidder shall prepare a detailed user document; administration document for the changes carried out in the e-governance system and also will incorporate any changes made during the tenure of the contract in the existing / new documents.

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**1.3.7 Reports & MIS**

The bidder shall generate MIS reports based on the user requirements from the data available in the database.

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**1.3.8 Training**

The bidder shall train the users as and when required. The successful bidder shall provide hands-on assistance to the users to resolve any operational doubts as and when needed

while the system is in operation.

Bidder should maintain the version control of the system and has to keep track of all the changes made to the system. At the end of the contract period, the bidder shall hand over the source code along with all the versions to the KMC.

In addition, the bidder is expected to appraise and advise KMC, current trends and best practices in the market in relation to the application software and the components being used by KMC.

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#### **1.3.9 Infrastructure:**

KMC will provide the necessary space with power, connectivity, furniture etc., for the deployed manpower. All other requirements including stationery shall be within the scope of the bidder.

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#### **1.3.10 Security Auditing:**

KMC shall take care of the expenses related to the security auditing of the egovernance system, on a periodical basis as per the CERT-In guidelines during the contract period. The bidder shall be responsible in the fixing of the bugs/issues reported during the security auditing of the egovernance system till it is cleared.

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#### **1.3.11 Development of the new modules:**

KMC will carry out all the modifications/changes/fine tuning of the system with the help of the deployed on site resources during the contract period. When there is a necessity to develop a new feature, the deployed team will study the new requirements and arrive at the developmental efforts in terms of man month for which the bidder shall make available (Off Site team from eGovernments Foundation who are the developers of the system) additional resources, based on approval from KMC, as per the manpower rate contract finalised through this tender, to get the work done within the timeline.

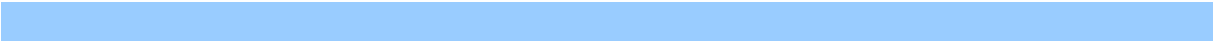
### **1.3.12 Evaluation of the performance bidder:**

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KMC shall evaluate the successful bidder's performance on two aspects as given below:

- a) Based on the performance of the deployed manpower team to carry out the fine tuning and support maintenance activities as per the defined services levels
- b) Based on the uptime of the availability of the system to all the users of KMC

The successful bidder shall ensure that the expected services levels are maintained failing which suitable penalties shall be levied.



## 1.4 Service Level Agreement (SLA)

The aim of this agreement is to provide a basis for the close co-operation between KMC and *the Successful Bidder*, towards the services to be provided to KMC, thereby ensuring that timely and efficient support services are available to KMC and its end-users and to make the eGovernance system available above 95% per month. The objectives of this agreement are detailed below. This agreement is contingent upon each party knowing and fulfilling their responsibilities and generating an environment conducive to the achievement and maintenance of targeted service levels.

### 1.4.1 Service Level Compliance of the eGovernance system:

The bidder shall ensure that the eGovernance system, be available on 24X7 basis with 95% uptime during the supported Working hours on a monthly basis failing which, suitable penalties will be levied, which will be deducted from the pending payments due to the bidder.

### 1.4.2 Service Level compliance of the manpower support

Depending on the criticality and severity of the calls, KMC will decide the type of calls as critical, major and minor and the development team shall fix them as per the service levels defined below:

Severity level	Severity type	Resolution time
S1	Critical problems	With in 12 Working hours
S2	Major problems	With in 24 hours
S3	Minor Problems	With in 3 working days

### 1.4.3 Service Level Targets of the development team:

The following table defines Service Level Targets for the Response and Resolution time covering all the requirements.

Severity level	Response Time	Resolution time	Calculation window
S1 (Critical)	10 minutes	With in 12 working hours	Monthly
S2 (Major)	15 minutes	With in 24 hours	
S3 (Minor)	20 minutes	With in 3 working days	



#### 1.4.4 Measurement Metrics for the service levels of the development team

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Actual Resolution time will be measured as follows:

$$\text{Resolution Time ( \% )} = \frac{\text{Calls closed within the stipulated resolution time} \times 100}{\text{Total number of calls received in the month}}$$

#### 1.4.5 Availability of the Human Resources

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Although this contract is SLA based, the bidder is required to maintain the minimum level of resources throughout the contract period. The bidder shall deploy manpower resources as per staffing requirements prescribed in this document. The bidder shall ensure the availability of resources as per the defined Service Window for each resource category failing which penalties will be levied.

### 1.5 Qualification and experience of the resources

S No	Name of Resource	No. of Resources	Qualification	No. of Years of Experience
1.	Project Manager (12 Marks)	1	BE/BTech(CS/IT)/ MCA/MSc(IT/CS) with MBA (4 marks)	Overall experience of 8 years in Open Source development in ERP, out of which, a minimum of 3 years as Project Leader. Domain Knowledge of Local body functions is required. Should have managed more than 2 projects. (8 Marks)
2.	Software Development Engineer (4 Marks)	1	BE/BTech(CS/IT)/ MCA (2 Marks)	Minimum of 2 years experience in live Java & Oracle projects and also in SQL/PLSQL to generate reports

				from the DB (2 marks)
3.	Support Engineer (4 Marks)	1	BE/BTech(EEE/ CS/IT)/MCA/MSc (Electronics/CS/IT ) (2 Marks)	Minimum of 2 years experience in maintenance and support in the ERP environment. Domain Knowledge of Local body functions is required. (2 Marks)

The above resources will be evaluated as per the marks indicated against each based on the profiles submitted by the bidder as per Appendix-B.

### 1.6 Continuity of Resources

- The bidder is required to take utmost care in identifying the resources to be deployed at KMC location and should continue in the project for long time within the contract period and should not leave the project in short periods.
- Resources deployed at KMC site, should not be removed from the site by the bidder without written approval from KMC. If any resource to be replaced from KMC location, a request / advance notice of 15 days to be given to KMC. Only after approval from KMC, resources can be replaced.
- In case, all on-site resources have to be replaced at a time, the following are to be ensured by the bidder:

A request / advance notice of 30 days to be given to KMC. Only after approval from KMC, resources can be replaced.

New resources (who will replace the existing resources) have to be deployed at KMC location, at least 10 days before the date of relieving of the existing resources. i.e. a transition period of 10 days is required. No additional payment will be made by KMC for this purpose.

- No additional resources should be deputed at KMC location without written approval from KMC.

### **1.7 Evaluation of the resources:**

The software support engineers should also be well conversant with Java 1.4 or above, Struts 1.1 or above, JSP, Oracle 11g or above, CSS, Java Script, JDBC, Ajax and XML.

The bidder shall fill up and submit the profile of the resources required as per the proforma indicated in **Appendix B** along with the proof documents in the technical bid.

KMC will evaluate the Bio-data of the resources for selection before deployment. After confirmation from KMC, selected resources have to be deployed.

### **1.8 Working Days / Hours:**

- Team shall be available on Saturdays also (i.e. 6 days a week)
- Resources provided to KMC should be ready to work in staggered duty hours (like one resource timing may be between 09:30AM to 06:30PM and the other resource timing may be 11:30AM to 08:30PM). Duty hours will be finalised at the commencement of the contract period and may be changed in between as per the requirements of the KMC.
- In exceptional cases, the team will have to work beyond normal working hours as well as on holidays.
- The holidays of the KMC will be applicable to the deployed resources.
- The attendance of team deployed at KMC premises shall be certified by the authorised personnel from KMC towards the release of the payment.

### **1.9 Responsibilities of the Project Manager:**

- Project Manager is required to steer the project with respect to Project Plan, Schedules, Resource Management, providing weekly / monthly project report, Review of pending / ongoing / future tasks.
- Act as a single point of contact to KMC and is completely responsible for level 1 to level 4 support.
- Software tweaking and performance improvements
- Troubleshooting, debugging and error corrections
- Additional features developments- arriving at the application software requirements
- Query design and report design as per any specific requests from time to time
- Maintain version controls for the application software, database and documentations
- Lead the application software project development activities and manage the teams
- Monthly progress report submission to KMC
- Coordinate with the users on requirements gathering, software demonstration and reporting
- Attend the periodical review meetings of the KMC departments
- Fine tuning of the existing queries/functions/procedures
- Master data maintenance
- Monitor the day to day data base activities

### **1.10 Responsibilities of the Software Development Engineer:**

- Incorporate changes/modifications to suit the changes in the workflow and process of the KMC
- Implementation of feature enhancements
- Requirements gathering
- Documentation and sign off
- Coding & Incorporate the changes as per code review
- Release of the new changes
- Versioning of the new releases

### 1.11 Responsibilities of the Support Engineer:

- Data validation, migration and correction of errors
- Generation of specific reports
- Support to application users
- Master data updation and validation
- Necessary rectification works
- Provide L3 and L4 levels of support on the application

### 1.12 Responsibilities of the Testing Engineer (Will be performed by Support Engineer):

- Data validation and correction of errors
- Generation of specific reports
- Support to application users
- Master data updation and validation
- Necessary rectification works
- Provide L3 and L4 levels of support on the application
- Testing of any new deployment and use cases
- Training to users on the new features and retaining

### 1.13 Call escalation Matrix:

The bidder is required to submit the call escalation matrix (from level1 to level3) with name, designation, mail ID, telephone No, Mobile No. in the following format.

S.No	Level	Name	Designation	Mail ID	Telephone No	Mobile No
1	Level 1					
2	Level 2					
3	Level 3					

## 1.14 Bio-Data should include

### a) For On-site development Resources:

At least 8 bio-data with minimum qualification of BE/B.Tech (CS/IT/EEE) /MCA/ MSc (CS/IT/Electronics) and with minimum experience of 2 years should be attached along with the Bid forwarding Letter.

Bio-data should include the following details.

- Name of the Resource
- Designation
- Qualification
- Total Work Experience
- Work Experience in the present company:
- Work experience in Java Projects
- Application systems presently working
- Certifications, if any
- Experiences in the following Technologies: (Yes/No)
  - Java 1.4 or above
  - Struts 1.1 or above
  - Hibernate 3 or above
  - Oracle 11g or above
  - CSS
  - JSP
  - Java Script
  - JDBC
  - Ajax
  - XML

### b) For Project Manager Resource:

At least 4 bio-data's with minimum qualification of BE/B.Tech(CS/IT)/MCA/MSc(CS/IT) with MBA and with minimum experience of 8 years should be attached along with the Bid forwarding Letter.

Bio-data should include the following details.

- 1) Name of the Resource
- 2) Designation
- 3) Qualification
- 4) Total Work Experience
- 5) Work Experience in the present company
- 6) Work experience in Java Projects:
- 7) Project Management Skills

- 8) Certifications, if any, (PMP) in Project Management
- 9) Details of Projects presently handling and their technologies
- 10) Experience in managing the applications having the following Technologies:  
(Yes/No)
- Java 1.4 or above
  - Struts 1.1 or above
  - Hibernate 3 or above
  - Oracle 11g or above
  - CSS
  - JSP
  - Java Script
  - JDBC
  - Ajax
  - XML

#### **8.15 Special Conditions for Manpower:**

- a) Successful Bidder should provide an Identity Card with passport size photograph duly signed by the Authorized Signatory of the Successful Bidder to all the manpower deployed in the project.
- b) Successful Bidder should disburse the salaries to all the manpower before 7<sup>th</sup> day of every month.
- c) All claims which are made by the manpower under medical grounds or compensation or otherwise in respect of any compensation payable to the manpower should be borne by the Successful Bidder.
- d) Manpower deployed by the Successful Bidder cannot claim any benefits from KMC.
- e) Manpower deployed by the Successful Bidder should behave properly and any misbehaviour is reported, the person should be replaced immediately.
- f) Manpower deployed by the Successful Bidder should be present on all working days. Substitute has to be arranged if the allotted manpower is on leave.
- g) The Successful Bidder understands and agrees that the Successful Bidder shall be solely and entirely liable and responsible for the Compliance of all statutory provisions applicable to the manpower deployed like Minimum Wages Act, ESI, PF. KMC shall not be liable or responsible in this regard.