# GOVERNMENT OF KARNATAKA REQUEST FOR PROPOSAL

DSC/SPV/PMC/6/2016-17/PKG

# APPOINTMENT OF PROJECT MANAGEMENT CONSULTANT

**FOR** 

IMPLEMENTATION OF SMART CITY MISSION PROJECT

OF

DAVANAGERE CITY

Office of the Managing Director
Davangere Smart City Limited,
P.B Road, Opposite to Railway Station,
Davanagere -577 002,
Karnataka, India

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# DAVANAGERE SMART CITY LIMITED

**B.H. Narayanappa,** K.M.A.S. (SI Grade) Managing Director, Davangere Smart City Limited. Office Address: # 255, P.B. Road Opp Railway Station, Corporation Office, **Davanagere,** Karnataka 577002

Date: 15-07-2016

### **SECTION-1. LETTER OF INVITATION**

### No. **DSC/SPV/PMC/6/2016-17/PKG**

1. The Davanagere Smart City Limited , invites bids for the "Appointment of Project Management Consultants" for implementation of Smart City mission projects in Davanagere city. Details of the sservices required is provided in the attached Terms of Reference (ToR)

2. The RFP has been addressed to the following shortlisted consultants:

[List of Shortlisted Consultants]

No	Firm	Address	Contact No.	e-mail
1	Das Ananda Kishore (	B1 E27, Mohan	91-11-26973950 /	lasa@lasaindia.com
			91-11-41678150 /	
	Asia Private Limited )	Estate Mathura Road, New	91-11-26971062	
	Joint Venture with Price	Delhi, Delhi, India		
	Water House Cooper Pvt,			
	Ltd.			
2	Sathyanarayana V	9/7 KCN Bhavan, Yamuna	91-8861391000 /	ideckinfo@idfc.com
	(Infrastructure	Bai Road Madhava Nagar	91-80-43448001	
	<b>Development Corporation</b>	Extn Off Race Cour,		
	Karnataka Limited) Joint	BANGLAORE, Karnataka,		
	Venture with Fichtner	India		
	Consulting Engineers			
	India (Private) Limited,			
	(Fichtner India) and Delhi			
	Integrated Multi-Modal			
	Transit System Limited			
	(DIMTS)			
3			91-124-4698500 /	rgaur@lahmeyer.in
	(Lahmeyer International		91-9818886081 /	
	India Private Limited)		91-124-4698585	
		Haryana, India		
	Tractebel, Engineering			
	S.A. Brussels - Belgium			
4	Satish Deshpande (Tata			svdeshpande@tce.co.in
		park, lbs marg, Vikhroli		1
	Limited)	west, MUMBAI,	91-22-61148067	
		Maharashtra, India		
5	Varma Nilaya (KPMG		91-22-39836401 /	nilaya@kpmg.com
	<b>Advisory Services Private</b>		91-22-65735798 /	, ,
	Limited )	Maharashtra, India	91-9810085997 /	
			91-22-30901615	
6	Tushar Madan (IPE	C 2, Green Park Extension,	91-11-24339533 /	akbansal@ipeglobal.com
	Global Pvt. Ltd.)	New Delhi, Delhi, India	1-9818998144 /	-F - 9-1 - 10-1
	Ź		91-11-24339534	

3. The Consultant will be selected under Quality-and Cost-Based Selection (QCBS) and as per procedure described in this RFP.

- 4. The RFP includes the following documents:
  - Section 1 Letter of Invitation
  - Section 2 Information to the Consultant
  - Section 3 Technical Proposal Standard Forms
  - Section 4 Financial Proposal Standard Forms
  - Section 5 Terms of Reference
  - Section 6 Standard Form of Contract.
  - Section 7 Appendix
- 5. Please inform us, upon receipt:
  - That you have received the letter of invitation; and
  - Whether you will submit a Proposal alone or in association with other entity as Joint Venture with joint and several responsibilities.

Yours sincerely,

Sd/-

Phone: 08192-252899 / 08192-232537

Facsimile: 08192-252899

E-mail: commissioner\_davanagere@yahoo.com

www.eproc.karnataka.gov.in www.davanagerecity.mrc.gov.in

(B.H. NARAYANAPPA)

Managing Director,

Davangere Smart City Lt.,

Karnataka State

### **SECTION-2. INFORMATION TO CONSULTANTS**

### 1. INTRODUCTION

- **1.1.** The Employer named in the "Data Sheet" will select a firm, in accordance with the method of selection indicated in the Data Sheet.
- 1.2. The Consultant are invited to submit a Technical Proposal and a Financial Proposal, as specified in the Data Sheet (the Proposal) for consulting services required for the Assignment named in the Data Sheet through the e-procurement platform. The Proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected Consultant.
- 1.3. The Assignment shall be implemented in accordance with the phasing indicated in the Data Sheet. When the Assignment includes several phases, the performance of the Consultant under each phase must be to the Employer's satisfaction before work begins on the next phase.
- 1.4. The Consultant must familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment and on the local conditions, Consultant are encouraged to pay a visit to the Employer before submitting a Proposal and to attend a Pre-Proposal Conference as specified in the Data Sheet. Attending the Pre-Proposal Conference is optional. The Consultant's representative should contact the officials named in the Data Sheet to arrange for their visit or to obtain additional information on the pre-Proposal conference. Consultant should ensure that these officials are advised of the visit in advance and obtain their concurrence to allow them to make appropriate arrangements.
- 1.5. The Employer will provide the inputs specified in the Data Sheet, assist the firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports.
- 1.6. Please note that (i) the costs of preparing the Proposal and of negotiating the contract, including a visit to the Employer, are not reimbursable as a direct cost of the Assignment; and (ii) the Employer is not bound to accept any of the Proposals submitted without assigning any reasons.
- 1.7. The Employer expects Consultant to provide professional, objective, and impartial advice and at all times hold the Employer's interests paramount, without any consideration for future work, and strictly avoid conflicts with other assignments or their own corporate interests. Consultant shall not be hired for any assignment that would be in conflict with

their prior or current obligations to other Employers that may place them in a position of not being able to carry out the assignment in the best interest of the Employer.

- 1.7.1 Without limitation on the generality of this rule, Consultant shall not be hired under the circumstances set forth below:
  - a) A firm which has been engaged by the Employer to provide goods or works for a project, and any of their affiliates, shall be disqualified from providing consulting services for the same project. Conversely, firms hired to provide consulting services for the preparation or implementation of a project, and any of their affiliates, shall be disqualified from subsequently providing goods or works or services related to the initial assignment (other than a continuation of the firm's earlier consulting services) for the same project.
  - b) Consultant or any of their affiliates shall not be hired for any assignment which, by its nature, may be in conflict with another assignment of the Consultant.
- 1.7.2 As pointed out in para. 1.7.1(a) above, Consultant may be hired for downstream work, when continuity is essential, in which case this possibility shall be indicated in the Data Sheet and the factors used for the selection of the Consultant should take the likelihood of continuation into account. It will be the exclusive decision of the Employer whether or not to have the downstream assignment carried out, and if it is carried out, which Consultant will be hired for the purpose.
- 1.8. It is GOK's/Employers policy to require that Consultant observe the highest standard of ethics during the execution of such contracts. In pursuance of this policy, the GoK/Employer:
  - a. defines, for the purposes of this provision, the terms set forth below as follows:
    - i. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution; and
    - ii. "fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of GoK, and includes collusive practices among Consultant (prior to or after submission of Proposals) designed to establish prices at artificial, non-competitive levels and to deprive GoK of the benefits of free and open competition.

- will reject a Proposal for award if it determines that the firm recommended for award has engaged in corrupt or fraudulent activities in competing for the contract in question;
- c. will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded GoK-financed contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing a GoK-financed contract; and
- d. will have the right to require that, GoK to inspect Consultant's accounts and records relating to the performance of the contract and to have them audited by auditors appointed by GoK.
- **1.9.** Consultant shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by GoK in accordance with the above sub para 1.8 (d).
- **1.10.** Consultant shall be aware of the provisions on fraud and corruption stated in the standard contract under the clauses indicated in the Data Sheet.

### 2. CLARIFICATION AND AMENDMENT OF RFP

- 2.1 Consultants may request a clarification of any item of the RFP document up to the number of days indicated in the Data Sheet before the Proposal submission date. Any request for clarification must be sent in writing by paper mail, cable, telex, facsimile, or electronic mail to the Client's address indicated in the Data Sheet. The Client will respond by cable, telex, facsimile, or electronic mail to such requests and will send copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited consultants who intend to submit proposals.
- 2.2 Before the deadline for submission of proposals, the Employer may modify the RFP documents by issuing online addendum. The addendum will appear on the web page of the website https://eproc.karnataka.gov.in/eprocurement/common/ eproc\_tenders\_list.seam. Any addendum thus issued shall be part of the RFP documents and deemed to have been communicated to all the prospective Consultants. To give prospective Consultants reasonable time in which to take an addendum into account in preparing their proposals, the Employer may extend as necessary the deadline for submission of proposals.

### 3. PREPARATION OF PROPOSAL

3.1 Consultants are requested to submit a Proposal (para 1.2) written in the language specified in the Data Sheet.

### **TECHNICAL PROPOSAL**

- 3.2 In preparing the Technical Proposal, Consultant is expected to examine the documents comprising this RFP in detail. Material deficiencies in providing the information requested may result in rejection of a Proposal.
- 3.3 While preparing the Technical Proposal, Consultant must give particular attention to the following:
  - i. If a Consultant considers that he does not have all the expertise for the Assignment, he may obtain a full range of expertise by associating with individual Consultant(s) and/or other Consultant or entities in a joint venture or sub-consultancy, as appropriate. Consultant may associate with the other Consultant invited for this Assignment only with approval of the Employer as indicated in the Data Sheet. Consultant must obtain the approval of the Employer to enter into a Joint Venture with Consultant not invited for this assignment.
  - ii. For assignments on a staff-time basis, the estimated number of key professional staff-months is given in the Data Sheet. The Proposals shall, however, be based on the number of key professional staff-months estimated by the firm.
  - iii. It is desirable that the majority of the key professional staff proposed be permanent employees of the firm or has an extended and stable working relation with it.
  - iv. Proposed key professional staff must at a minimum have the experience indicated in the Data Sheet.
  - v. Alternative key professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.
  - vi. Reports to be issued by the Consultant as part of this assignment must be in the language(s) specified in the Data Sheet. It is desirable that the firm's personnel have a working knowledge of the Employer's official language.
- 3.4 The Technical Proposal should provide the following information using the attached Standard Forms (Section 3):
  - i. A brief description of the Consultant's organization and an outline of recent experience on assignments (Section 3B) of a similar nature. For each assignment, the outline should indicate, inter alia, the profiles and names of the staff provided, duration of the assignment, contract amount, and firm's involvement.

- ii. Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by the Client (Section 3C) .
- iii. A description of the methodology and work plan for performing the assignment (Section 3D).
- iv. The list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member, and their timing (Section 3E).
- v. CVs recently signed by the proposed key professional staff and the authorized representative submitting the Proposal (Section 3F). Key information should include number of years working for the firm in the last 10 years
- vi. Estimates of the total staff effort (professional and support staff; staff time) and tools, equipments and machines to be provided to carry out the Assignment, supported by bar chart diagrams showing the time proposed for each key professional staff team member. (Sections 3E and 3G).
- vii. A detailed description of the proposed methodology, staffing, and monitoring of training, if the Data Sheet specifies training as a major component of the assignment.
- viii. Any additional information requested in the Data Sheet.
- 3.5 The Technical Proposal *shall not include any financial information*.

### FINANCIAL PROPOSAL

- 3.6 In preparing the Financial Proposal, Consultant is expected to take into account the requirements and conditions of the RFP documents. The Financial Proposal should follow Standard Forms (Section 4). It lists all costs associated with the Assignment, including (a) remuneration for staff, and (b) reimbursable such as subsistence (per diem, housing), transportation (national and local, for mobilization and demobilization), services (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents, surveys; and training, if it is a major component of the assignment. If appropriate, these costs should be broken down by activity.
- 3.7 Consultant shall express the price of their services in *Indian Rupees*.
- 3.8 The Data Sheet indicates how long the Proposals must remain valid after the submission date. During this period, the Consultant is expected to keep available the key professional staff proposed for the assignment. The Employer will make its best effort to complete negotiations within this period. If the Employer wishes to extend the validity period of the Proposals, the Consultant who do not agree have the right not to extend the validity of their Proposals.

### 4. SUBMISSION, RECEIPT, AND OPENING OF PROPOSALS

- 4.1 The Technical Proposal and Financial Proposal; see para 1.2 shall be uploaded in the e-procurement portal. The documents and details mentioned in clause 3 above shall be submitted online on website https://eproc.karnataka.gov.in. Details and process of online submission of the tender and relevant documents are given in the website mentioned above
- 4.2 The proposal under this contract is electronic proposal submission through website <a href="https://eproc.karnataka.gov.in">https://eproc.karnataka.gov.in</a>. Detailed guidelines for viewing proposals and submission of online proposals are given on the website. The *Invitation for Proposals is published on this website*. Empanelled Consultant can logon to this website and view the Invitation for Proposals and can view the details of works for which proposals are invited. The prospective Consultant can submit proposals online; For this, the Consultant is required to have enrolment/registration in the website and should have valid Digital Signature Certificate (DSC). The DSC can be obtained from any authorized certifying agencies. The Consultant should register in the web site <a href="https://eproc.karnataka.gov.in">https://eproc.karnataka.gov.in</a>. After this, the Consultant can login the site through the secured login.
- 4.3 Consultants are requested to go through the RFPs carefully and submit the required information without exception otherwise proposals will be rejected.
- 4.4 The completed proposal comprising documents indicated in clause 3, should be uploaded on the website given above through e-tendering along with scanned copies of requisite certificates as are mentioned in different sections in the RFP document
- 4.5 Proposals must be received by the Employer on line not later than time specified in the proposal data sheet. The electronic system would not allow any late submission of proposals after due date and time as per server time.
- 4.6 After the deadline for submission of Proposals the Technical Proposal will be opened after 2 working days from the date & time of submission of proposals. The Financial Proposal of the successful Consultants only will be opened after completion of technical proposal evaluation.

### 5. PROPOSAL EVALUATION

### General

5.1 From the time the Proposals are opened to the time the contract is awarded, if any Consultant wishes to contact the Employer on any matter related to its Proposal, it should do so in writing at the address indicated in the Data Sheet. Any effort by the firm to influence the Employer in the Employer's Proposal evaluation, Proposal comparison or contract award decisions may result in the rejection of the Consultant's Proposal.

5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, including its approval by competent authority is obtained

### **Evaluation of Technical Proposals**

5.3 The evaluation committee appointed by the Employer as a whole, and each of its members individually will evaluate the Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria (typically not more than three per criteria) and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.

### Public Opening and Evaluation of Financial Proposals; Ranking

- 5.4 After the evaluation of technical Proposal is completed, the Employer shall notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will not be opened after completing the selection process. The Employer shall simultaneously notify the Consultant those have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall not be sooner than one week after the notification date. The notification may be intimated through the e-procurement portal.
- 5.5 The Financial Proposals shall be opened publicly in the presence of the Consultants' representatives who choose to attend. The name of the Consultant, the quality scores, and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. The Employer shall prepare minutes of the public opening.
- 5.6 The evaluation committee will determine whether the Financial Proposals are complete, (i.e., whether they have costed all items of the corresponding Technical Proposals, if not, the Employer will cost them and add their cost to the initial price), correct any computational errors.

### 6. **NEGOTIATIONS**

- 6.1 Negotiations will be held at the address indicated in the Data Sheet and through the eprocurement portal. The aim is to reach agreement on all points and sign a contract.
- 6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the firm to improve the Terms of Reference. The Employer and Consultant will then work out final Terms of Reference, staffing, and bar charts indicating activities, staff, periods in the field and in the home office, staff-months, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the "Description of Services" and form part of the contract. Special attention will be paid to getting the most the Consultant can offer within the available budget and to clearly defining the inputs required from the Employer to ensure satisfactory implementation of the Assignment.
- 6.3 Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff (no breakdown of fees) nor other proposed unit rates.
- 6.4 Having selected the Consultant on the basis of, among other things, an evaluation of proposed key professional staff, the Employer expects to negotiate a contract on the basis of the experts named in the Proposal. Before contract negotiations, the Employer will require assurances that the experts and the tools and equipment's will be actually available. The Employer will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the assignment. If this is not the case and if it is established that key staff was offered in the Proposal without confirming their availability, the Consultant may be disqualified.
- 6.5 The negotiations will conclude with a review of the draft form of the contract. To complete negotiations the Employer and the Consultant will initial the agreed contract. If negotiations fail, the Employer will invite the firm whose Proposal received the second highest score to negotiate a contract.

### 7. AWARD OF CONTRACT

7.1 The contract will be awarded following negotiations. After negotiations are completed, the Employer will promptly notify other Consultant on the shortlist that they were unsuccessful and return the Financial Proposals of those Consultant who did not pass the technical evaluation (para 5.3).

7.2 The Consultant is expected to commence the Assignment on the date and at the location specified in the Data Sheet.

### 8. CONFIDENTIALITY

8.1 Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultant who submitted the Proposals or to other persons not officially concerned with the process, until the winning Consultant has been notified that it has been awarded the contract.

# A. DATA SHEET Information to Consultant

Clause Ref.	
1.1	The name of the Employer is: <b>Davanagere Smart City Limited(DSCL)</b> The method of selection is: <b>Quality &amp; Cost Based Selection (QCBS)</b>
1.2	Technical and a Financial Proposals are requested: <b>Yes</b> The name, objectives and description of the Assignment are: "APPOINTMENT OF PROJECT MANAGEMENT CONSULTANT FOR IMPLEMENTATION OF SMART CITY MISSION PROJECTS IN DAVANAGERE CITY" Objective:
	The objective of the Project Management Consultant's (PMC) is to provide strategic & project
	management assistance to DSCL for ensuring timely completion of projects and achieving the
	outcomes outlined in the Smart City Proposal (SCP), based on the Smart City Mission Guidelines.
1.3	The Assignment is phased: <i>Yes</i> 1. Design Phase 2. Implementation Phase
1.4	A Pre-Proposal conference will be held: <b>Yes</b> Date: <b>01-08-2016</b> Time: 11:00 AM  The name(s), address(es), and telephone/numbers of the Employer's Official(s) are: The Managing Director, DSCL Davanagere  P.B Road, Opposite to Railway Station, Davanagere -577 002, Karnataka, India Telephone : 91-8192-232208; Fax : 91-8192-252899  commissioner_davangere@yahoo.com
1.5	<ul> <li>The Employer will provide the following inputs:</li> <li>1. Necessary assistance in coordinating with the Consultant for ensuring availability of existing data, records, reports etc.</li> <li>2. The Smart City proposal submitted to MoUD.</li> </ul>
1.7.2	The Employer envisages the need for continuity for downstream work: No.
1.11	The clauses on fraud and corruption in the contract are Sub-Clause 2.7.1 of G.C.C.
2.1	Clarifications may be requested <i>up to one day prior</i> to Pre-Proposal conference
3.1	Proposals should be submitted in the following language(s): <i>English</i>

Clause Ref.	
3.3	<ul> <li>i. Shortlisted consultant may associate with other shortlisted consultant: Yes Consultant may associate with other Consultant on the following lines:   ✓ JV is restricted to 3 Numbers.  ✓ All JV partners combined together shall meet the Qualification Criteria.  ✓ The partner with the maximum qualification criteria shall be the lead partner  ii. The estimated number of key professional staff months required for the assignment is: 360 (6 *60 months) man months  iii. Reports which are part of the assignment must be written in the following language: English  iv. The minimum required experience of proposed key professional staff whose CV will be evaluated is: </li> </ul>

No	Position	Qualifications &Skills	Experience	
1	Team Leader cum Urban Management specialist	Masters in Engineering/ Urban Planning with MBA or equivalent (or)	<ul> <li>15 Years experience in Urban Sector</li> <li>Experience of Project Management in Urban Infrastructure Works. Experience as Team leader/ Deputy Team leader for minimum one project.</li> <li>Knowledge of urban development issues and Project experience</li> </ul>	
		Bachelor in Engineering/ Urban Planning with MBA or equivalent	<ul> <li>20 Years experience in Urban Sector</li> <li>Experience of Project Management in Urban Infrastructure Works. Experience as Team leader/ Deputy Team leader for minimum one project.</li> <li>Knowledge of urban development issues and Project experience</li> </ul>	
2	Infrastructure/ Engineering Specialist (Water Supply & Sewerage Expert)	Masters Degree in Civil Engineering	<ul> <li>At least 10 yrs experience in related assignment.</li> <li>Experience in working in water and sewerage projects which shall include preparation of infrastructure master plans / CDPs &amp; DPRs.</li> </ul>	
3	Infrastructure/ Engineering Specialist (Road Expert)	Masters Degree in Civil Engineering	<ul> <li>At least 10 yrs experience in related assignment.</li> <li>Experience in working in Roads projects which shall include preparation of infrastructure master plans/ CDPs &amp; DPRs.</li> </ul>	
4	Urban Finance Specialist	Masters Degree in Finance/ Economics/ Chartered Accountant/ Commerce/ ICWA / Post Graduate in Economics with specialization in Public Finance.	<ul> <li>At least 10 years relevant experience.</li> <li>Experience of municipal finance analysis, municipal budgeting and accounting and financial projections.</li> <li>Experience in Financial Modeling in Urban Infrastructure, PPP &amp; Market borrowing are desirable.</li> </ul>	

5	PPP Specialist	Degree in Civil Engineering/ Master of Business Administration	<ul> <li>At least 10 years relevant experience.</li> <li>Experience of procurement related activities for urban infrastructure projects.</li> <li>Experience in PPP contract structuring and concluding concession Agreements.</li> </ul>
6	E-Governance Specialist	Degree in Information Technology/ Electronics Engineering or equivalent	<ul> <li>At least 5 years' relevant experience</li> <li>Experience in MIS for institutional / Governance level and integration of various user data</li> <li>Experience in preparation of technical requirements document of the e-Services and solution to implementing the IT related infrastructure services /e-services, networking infrastructure etc.</li> <li>Proven knowledge of modern Internet technologies and experience in software development projects/ GIS;</li> <li>Working experience in network administration and use of hardware/software, telecommunications facilities,</li> <li>Experience in databases development, programming and web designing; Crowd sourcing on e and m - platforms</li> </ul>

Clause No			
3.4	vii. Training is an important feature of this Assignment: Yes (Impart training to personnel authorized by SPV on aspects like O&M, QAP etc) viii. Additional Information in the Technical Proposal includes –Nil		
3.10	Proposals must remain valid <b>90 days</b> after the submission date		
4.5	Proposals must be submitted no later than the following date and time 18-08-2016 & 16:00 Hrs		
5.1	The address to send information to the Employer is The Managing Director, , Davanagere Smart City Limited, P.B Road, Opposite to Railway Station , Davanagere -577 002, Karnataka, India Telephone : 91-8192-232208 ; Fax : 91-8192-252899 Commissioner davangere@yahoo.com		

Clause No	
5.3	<ul> <li>The number of points to be given under each of the evaluation criteria are:</li> <li>Specific experience of the Consultant related to the Assignment in the last 5 years: - 10 Marks <ul> <li>a) Provided project management consultancy services in similar Urban Infrastructure Projects -4 marks</li> <li>b) Implemented ICT based smart solution projects in urban areas – 3 marks</li> <li>c) Successfully structured and signed concession agreement for PPP project – 3 marks</li> </ul> </li> <li>2. Adequacy of the proposed work plan and methodology in responding to the TOR - 25 Marks <ul> <li>a) Technical approach &amp; Methodology – 10Marks</li> <li>b) Work Plan – 10 Marks</li> <li>c) Organization &amp; Staffing – 5 Marks</li> </ul> </li> </ul>
	<ol> <li>Qualifications and competence of key professionals - 65 Marks         <ul> <li>Team Leader cum Urban Management specialist -15</li> <li>Infrastructure/ Engineering Specialist (Water Supply &amp; Sewerage Expert (10), Road and other Infrastructure Expert(10) - 20</li> <li>Urban Finance Specialist-10</li> <li>PPP Specialist -10</li> <li>E-Governance Specialist -10</li> </ul> </li> <li>The number of points to be given for qualifications and competence of the key professional staff for the assignment are:         <ul> <li>General qualifications - 20 Marks</li> </ul> </li> <li>Adequacy for the project - 50 Marks</li> <li>Experience of working as Resident Engineer/Expert in Tire -2 cities -20 Marks</li> </ol>
	4. Experience in region & language -10 Marks  The minimum technical score required to pass is : 75 Points
5.8	The formula for determining the financial scores is the following:  [Sf = 100 x Fm/F, in which Sf is the financial score, Fm is the lowest price, and F the price of the proposal under consideration]  The weights given to the Taghnical and Financial Proposals are: T= 0.75 % P=0.25
6.1	The weights given to the Technical and Financial Proposals are: T= 0.75 & P=0.25  The address for negotiation is: The Managing Director, Davanagere Smart City Limited, P.B Road, Opposite to Railway Station, Davanagere -577 002, Karnataka, India Telephone : 91-8192-232208
7.2	The Assignment is expected to commence on [Month, Year] at [Location]: Tentative Date: Within 10 days of signing of agreement @ Davanagere

# SECTION 3. TECHNICAL PROPOSAL - STANDARD FORMS

## Content

3A.	Technical Proposal submission form.
3B.	Consultant's references.
3C.	Comments and suggestions on the Terms of Reference and on data services, and facilities to be provided by the Employer.
3D.	Description of the methodology and work plan for performing the assignment.
3E.	Team composition and task assignments.
3F.	Format of Curriculum Vitae of proposed key professional staff.
3G.	Time schedule for professional personnel
3Н.	Activity (work) schedule

### 3A. TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

FROM: (Name of Consultant)

To: The Managing Director,

Davanagere Smart City Limited

Madam/Sir:

Subject: "Appointment of Project Management Consultants for implementation of Smart City Mission project in Davanagere city" - Technical Proposal.

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We, the undersigned, offer to provide the consultancy services for the above in accordance with your Request for Proposal dated [*Date*], and our Proposal. We are hereby submitting our Proposal which includes the Technical Proposal, and a Financial Proposal sealed under a separate envelope.

We are submitting our Proposal in association with: *Insert a list with full name and address* of each joint venture partner

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, i.e., before [*Date*] we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorised Signatory [In full and initials]:
Name and Title of Signatory:
Name of Firm:
Address:

### **3B. CONSULTANT'S REFERENCES**

### **Relevant Services Carried Out in the Last Five Years**

## **That Best Illustrate Qualifications**

Using the format below, provide information on each reference assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted.

Assignment Name:		Country:		
Location within Country:		Key professional staff Provided by Your Firm/entity(profiles)		
Name of Employer:		No. of Staff:		
Address:		No. of Staff-Months; duration of assignment:		
Start Date (Month/Year):	Completion Date (Month/Year):	Approx. Value of Services (Rs.M):		
Name of Associated Consu	ltant, if any:			
		No. of Months of Key professional staff, provided by Associated Consultant:		
Name of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:				
Narrative Description of Project:				
Description of Actual Services Provided by Your Staff:				

# 3C. COMMENTS AND SUGGESTIONS OF CONSULTANT ON THE EXISTING PROJECT FACILITIES (WASTE PROCESSING PLANT AND LANDFILL SITE) TO BE PROVIDED BY THE EMPLOYER

On the Terms of Reference
1.
2.
3.
4.
5
On the data, services, and facilities to be provided by the Employer
1.
2.
3.
4.
5

### **CONSULTANT'S NAME:**

# 3D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

Technical approach, methodology and work plan are the key components of the Technical Proposal. You shall present your Technical Proposal (maximum of 25 pages, inclusive of charts and diagrams) divided into the following three chapters which will be submitted for the Design Phase and the Implementation Phase of the Project:

- a) Technical Approach and Methodology
- b) Work Plan, and
- c) Organisation and Personnel
- a) Technical Approach and Methodology: In this chapter you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.
- b) Work Plan. In this chapter you should propose the main activities of the assignment, their content and du-ration, phasing and interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-8.

Organisation and Personnel: In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible and proposed technical and support personnel. You shall also specify if you will be the lead firm in a joint venture or in an association with Sub-Contractor. For joint ventures, you must attach a copy of the joint venture agreement.]

# **3E. TEAM COMPOSITION AND TASK ASSIGNMENTS**

# 1. Technical/ Managerial Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			
5			
6			

# 2. Support Staff

Sl. No.	Name	Position	Task
1			
2			
3			
4			
5			_
6			

# 3F. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PROFESSIONAL STAFF

Il name of staff member:	
[Signature of staff member and authorized representative of the Consultant]	Day/Month/Year
	Date:
I, the undersigned, certify that to the best of my knowledge and beli describe me, my qualifications, and my experience.	ef, these data correctly
Certification:	
[For each language indicate proficiency: excellent, good, fair, or poor; in writing ]	n speaking, reading, and
Languages:	
[Starting with present position, list in reverse order every employment he by staff member since graduation, giving dates, names of employing positions held, and locations of assignments. For experience in last ten activities performed and Employer references, where appropriate. Use abo	organisations, titles of years, also give types of
Employment Record:	
[Summarise college/university and other specialised education of staff n schools, dates attended, and degrees obtained. Use about one quarter of a	
Education:	
[Give an outline of staff member's experience and training most pertinent Describe degree of responsibility held by staff member on relevant previodates and locations. Use about half a page.]	
Key Qualifications:	
Detailed Tasks Assigned:	
Membership in Professional Societies:	
Years with Firm/Entity:Nationality:	
Date of Birth:	
Profession:	
Name of Staff:	
Name of Consultant:	
Proposed Position:	

## **3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL**

			Reports						Mo	nths	(in	the f	orm		Bar art)*	
Sl. No.	Name	Position	Due/Activities	1	2	3	4	5	6	7	8	9	10	11	12	Number of Months
1.																Subtotal (1)
2.																Subtotal (2)
3.																Subtotal (3)
4.																Subtotal (4)
Full-tim Reports			Part-time:		_											

Full-time:	Part-time:		
Reports Due:			
Activities Duration:	<u></u>		
		Signature:	
* The Schedule should be for	the period of completion of assignment	(Authorized Representative)	_
		Full Name:	_
		Title:	
		Address:	

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# 3H. ACTIVITY (WORK) SCHEDULE

No.	Item of Activity (Work)	Month-wise Program (in form of Bar Chart) [1st, 2nd, etc. are months from the start of assignment]						
		1st 2nd 3rd 4th 5th 6th						
1								
2								
3								
4								
5								

# **B.** Completion and Submission of Reports

No	Reports:	Programme: (Date)
1	Inception Report	
2	Interim Progress Report (a) First Status Report (b) Second Status Report	
3	ix.	
4	Draft Report	
5	Final Report	

# SECTION 4 FINANCIAL PROPOSAL - STANDARD FORMS

## Content

4A.	Financial Proposal submission form.
4B.	Summary of Costs
4C.	Break Down Of Costs (Rs.)

### **4A. FINANCIAL PROPOSAL SUBMISSION FORM**

[Location, Date]

FROM: (Name of Consultant)

To: The Managing Director, DSCL,

**Davanagere** 

Madam/Sir:

Subject: Appointment of Consultant for "Appointment of Project Management Consultants for implementation of Smart City Mission project in Davanagere city" - Financial Proposal.

We, the undersigned, offer to provide the O&M services for the above in accordance with your Request for Proposal dated [Date], and our Proposal (technical and Financial Proposals). Our attached financial Proposal is for the sum of [Amount in words and figures]. This amount is exclusive of the local taxes, which shall be identified during negotiations and shall be added to the above amount.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e., [Date].

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorised Signatory: Name and Title of Signatory: Name of the Consultant: Address

### **4B. SUMMARY OF COSTS**

### 1.0 General

1.1 The Price Schedules are divided into separate Schedules as follows:

Schedule 1 Price Schedule

Schedule 2 Break down of Prices

The Breakdown of Prices is FOR INFORMATION ONLY.

- 1.2 The Price Schedules do not give a full description of the services to be provided by the Consultants. Consultants are deemed to have read the RFP and schedule to ascertain the full scope of the requirements of the Contract included in each item prior to filling in the prices. The entered prices are deemed to include the full scope as aforesaid, including overheads, and profit.
- 1.3 If Consultants are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Consultants in the RFP Documents prior to submitting their Proposal.

### 2.0 Pricing

- 2.1 The prices shall be fixed and firm for the duration of the Contract, except as adjusted in accordance with the Contract, if applicable.
- 2.2 The Proposal Price shall be quoted in the manner indicated and in the currencies specified in the Instructions to Consultants in the RFP Documents. For each item, Consultants shall complete each appropriate column in the respective Schedule 4B, giving the price breakdown as indicated in the Schedule 4c. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in the ToR or elsewhere in the RFP Documents.
- 2.3 When requested by the Employer for the purposes of making payments or part payments, valuing changes or evaluating claims, or for such other purposes as the Employer may reasonably require, the Consultant shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.
- 2.4 The Total Estimated Project value likely to be executed by the SPV is Rs. 1,310 cr. of which, Rs. 810 cr is towards area based development and Rs. 500 cr is towards Pan city/smart ICT solution.

2.5 The Consultant is supposed to quote his fee in terms of % of the whole project value. The % quoted shall be with maximum 2 decimal places. Based on the same the consultancy fee would be arrived.

Description	Estimated Project	% of Consultancy	Amount
	Size	Remuneration	(A XB)
	(A)	(B)	
PMC fee towards - Goods, Works &	Rs. 13,10,00,00,000		
Services			

The above quote shall include all the taxes, duties, fees, levies and other impositions likely to be levied under the existing, amended or enacted laws during life of this contract except Service Tax.

Service Tax shall be paid extra as per prevailing rates from time to time, by the Employer

Note: The ceiling cost of the project is as shown in the Summary of Costs. Payments will be made as per stipulations of the Special Conditions of Contract. The break-up of cost as given in formats 4C is to facilitate assessment of reasonableness of costs and conducting negotiations in accordance with clause 6 of the Information to Consultant.

Name and Title of Signatory: Name of the Consultant: Address:

## 4C. BREAK DOWN OF COSTS (Rs.)

Payment will be made only on % basis, however the following details needs to be provided by the Consultants

### 1. REMUNERATION FOR STAFF/Annum

No.	Position	Name	Rate* (Rs.)	SM	Amount (Rs)
	Key professional staff				
	Sub Total				
	Sub-Key professional staff				
		_	_	_	_
	Sub Total				
	TOTAL				

SM = Staff Month

II. Support Staff/Annum

No.	Position	Name	SM	Rate* (Rs.)	Amount (Rs)
				_	_

<sup>\*</sup>Rate to cover all costs. No further overheads would be reimbursed.

III	Transportation/ Annum (Reimb	ursable)*	Total:	
IV.	Duty Travel to Site/ Annum (Rei	mbursable <u>)*</u>	Total:	
v	Office Rent/Annum (Reimbursal	ble)		
			Total:	
VI. No. 1. 2.	Office Supplies, Utilities and Con Item*	nmunication/ Months	Annum Monthly Rate (Rs)	Amount (Rs)

3.

4.

Total:

\* Prepare details as appropriate for the consultancy assignment.

VII. Office Furniture and Equipment/Annum

VIII. Reports and Document Printing

No. Description\* Number No. of Copies Rate per Copy (Rs.)

1. 2. 3. 4.

**Total** 

# SECTION 5. TERMS OF REFERENCE Scope Requirement Document

### 1. Background:

The Ministry of Urban Development (MoUD), Government of India (GoI) has rolled out Smart City Mission (SCM). Karnataka Urban Infrastructure Development & Finance Corporation Limited (KUIDFC) is the State Level Nodal Agency (SLNA) for the Smart Cities Mission in Karnataka. Davanagere is one of the ULBs selected under the 1st Round Competition of SCM based on the Smart City Plan (SCP) submitted by the City through GoK. Objective of the Smart Cities Mission is to promote Cities that provide core infrastructure, give a decent quality of life to their citizens and apply smart solutions to improve services and infrastructure.

### 2. Need for Present Assignment

The ULB, based on the public consultation, has prioritized sub-projects in the SCPs, which need to be reviewed, improved, finalised and implemented. In order to implement/realise these plans a Special Purpose Vehicle (SPV) – Davanagere Smart City Limited (DSCL) is established. The assistance of Project Management Consultant is required to support DSCL for designing, developing, managing and implementing Smart City projects & hence the need for assignement.

### 3. Brief Scope of Work:

The principal objective of the Project Management Consultants (PMC) assignment is to assist the DSCL/ SLNA to realise the vision of the City, contemplated in the SCP, by preparing the final designs and implementation of sub-projects based on the Smart City Mission Guidelines. The sub-projects identified in the SCPs can be broadly classified as Area Based Development (ABD) for city improvement (retrofitting), city renewal (redevelopment), city extension (Greenfield development) and Pan-city initiative in which Smart Solutions are applied covering larger parts of the city.

### 4. An Outline of the Tasks to be carried out by the Consultant

The PMC will be responsible for dissemination of project related information to all stake holders and ensure appropriate level of community mobilization and participation. The PMC will also be responsible for implementation of the sub-projects identified under SCP. The Consultant would support the Client in overall management of Smart City project, including project planning, budgeting, supervision, monitoring & evaluation, reporting and coordination to ensure timely project development and implementation in line with Smart City Proposal and Smart Cities Mission guidelines.

The assignment is in two Phases, the first phase - Design Phase for Planning, designing and

procurement assistance; and the second phase – Implementation Phase for Implementation assistance. The PMC will work under the overall supervision, direction and guidance of the SPV/ SLNA. The broad scope of work shall cover, but not limited to:

- Support Client to identify, conceptualize, develop and execute projects on models such as joint ventures, subsidiaries, public-private partnership (PPP), turnkey contracts, etc to implement SCM projects.
- Advice the Client on technical, commercial, financial, and legal aspects of project development and implementation based on Client requirements.
- Support Client in preparation of feasibility study, develop project structures, designs, prepare detailed project reports, tender documents and provide bid process management support for selection of implementing agency.
- Provide transaction advisory and bid process management support including preparation of bid documents, managing bid process including bid evaluation, preparation of bid evaluation report, preparation of letter of intent, contract agreement for appointment of Contractors/suppliers/service providers.
- Prepare proposals for consideration of various project development, financing and implementation partners including concept notes, presentations, and follow-ups.
- Provide implementation support including contract negotiation, contract management and contract closure.
- Support Client to frame policies, regulations and bye-laws required in accordance with proposed smart city projects and their project development and implementation activities.
- Support client in bringing convergence with other ongoing schemes of the city
- Shall ensure compliance & monitoring of project activities by using latest Project
   Management Tools such as real time monitoring of work progress on field
- Assist the client in conducting project review meetings, preparation of minutes of meeting etc.

The tasks to be completed under this assignment are detailed below:

### 4.1 Phase-I: Planning, designing and procurement assistance

### a. Brief Scope of Work for Area based/ Greenfield development

- Review of earlier studies & project reports/documents relevant to to the project.
- Carrying out all necessary surveys, studies and site investigations for sub-project preparation
- Identify under ground utilities.
- Establish baseline data wherever necessary
- Prepare a feasibility study including technical, commercial, financial, institutional and safeguards aspects in accordance with the prevailing guidelines.

- Prepare a road map for guiding the overall investment, specifying the physical and non physical investments, a financiers' matrix and the corresponding resources needed.
- Explore options of project financing to optimise financial leveraging.
- Prepare, review and finalise the preliminary designs for each of the identified sub-projects.
- On approval of the preliminary designs by the competent authority, prepare Detailed Project
  Reports which shall include detailed engineering designs that are cost effective and use
  appropriate technology and materials, cost and quantity estimates, BoQs, specifications,
  consistent with relevant standards and designs, construction drawings and tender
  documentations. DPRs shall also include design of O&M phase, both in terms of the
  institutional arrangements and the financial means to ensure the subprojects provide
  sustainable services during their lifetime.
- Establishing the subproject costs, ensuring that they are within the acceptable cost limits.
- Assisting the SPV/SLNA in tendering, bid evaluation and award of contract.

### b. Brief Scope of Work for Pan city development

- Examine the Pan-city proposal submitted in the SCPs and prepare proposal for development of selected Smart Solutions to the existing city-wide infrastructure which shall involve the use of technology, information and data to make infrastructure and other allied services better.
- Prepare the functional & non-functional requirement specifications.
- Prepare Networking and connectivity requirements
- Identify & prepare Data digitisation requirements
- Identify & prepare Training requirements
- Identify & prepare the list of necessary software & hardware
- Study of various technologies and suggest the most viable techno economical solution:
- Prioritize the activities of the projects/components and prepare a tentative implementation plan.
- Identify the risk & prepare mitigations measures.
- The Consultant shall engage Standard Testing and Quality Consultant (STQC) to conduct the assessment/review for the system before rolling it out. The Consultant shall review and inspect all the procedures and systems relating to the solution.

### c. Brief scope of work for PPP projects:

- The Consultant shall play the role of transaction advisor in all PPP projects and shall do all the
  detailed financial, technical and legal work required to prepare the Project Sponsor to
  implement the proposed project.
- The transaction advisor will complete a feasibility study to a standard that will enable the SPV to establish the commercial attractiveness and bankability of the project.

- During the procurement phase, the transaction advisor will advise the SPV on optimum risk allocation and the resultant contract structure including preparation of all necessary documentation and requisite approvals.
- In broad terms, the TA shall provide his services in two phases:
  - Phase I: Initial project review and technical due diligence prior to financial closing.
  - Phase II: Construction and performance test monitoring and operations monitoring during commercial operation and after financial closing.

#### 4.2 Deliverables

# Detailed Project Reports and detailed engineering for Area based/ Greenfield & Pancity Development

- Review SCP and understand the SPV/ULB's priorities and situation
- For the identified sub-projects, conduct all necessary investigations, surveys and tests as required for the preparation of DPRs, taking into account possibilities of optimising existing assets / systems.
  - Necessary topographical survey (frequency).
  - Necessary soil testing as per standard engineering practice and determine the soil strata
- Assess need and demand for each particular service along with the expected impact & outcome.
- Preparation of comprehensive designs and DPRs for infrastructure projects as required.
- Reconfirm the desired service level improvements through the respective sub-projects and in accordance with such desired levels, finalize/update the preliminary engineering designs, and prepare detailed engineering designs and drawings. While preparing the designs, follow the Sector Investment Guidelines prepared by SPV if any or else follow standard engineering practices. The designs and drawings shall be sufficiently detailed to enable the SPV and the contractor for easy interpretation and execution of the works. The detailed designs and working drawings prepared along with necessary test reports shall be incorporated into a detailed design report, to be submitted for the approval of the SPV/Government. All necessary calculations shall be prepared to determine and justify the engineering solution proposed for each subproject / component, and the same shall be incorporated in the design reports. The design should also include life cycle cost analysis.
- Ensure quality planning through good engineering practices and adoption of appropriate design standards.
- Prepare all detailed cost estimates as per the prevailing PWD/ other applicable Schedule of Rates, (KUWS & DB, NH, Irrigation, etc), and where such Schedule of Rates are not available prepare data rates based on market rates.

- Prepare designs for Infrastructure projects, especially of water supply, underground drainage system using standard softwares like WaterCAD, WaterGem, SewerCAD, SewerGem or equivalent.
- Prepare appropriate tender packages, procurement and implementation plan in consultation with SPV/SLNA.
- Prepare implementation schedules for each contract package considering working season, critical activities of construction etc and suggest financial flow. (Disbursement schedule)
- Project cost must take into account market prices, and must include estimated price escalation, depending on the proposed implementation schedule for the works.
- Prepare detailed specifications and bill of quantities(BoQs) for all items of works, goods and equipment.
- Preparation of the designs and cost estimate should be accurate and that during execution contract variation if any, shall not be beyond 10% above or below the estimated costs. The PMC will have to justify any such variations going beyond 10%.

## ii. Detailed Project Reports and detailed engineering for PPP projects

- Phase I Technical Due Diligence
  - Basic Design and Assesment of Capex
  - Project Documentation and preparation of concession agreement
  - Technical Review of the bids submitted by EPC contractor
  - Assist SPV in signing Concession Agreement
- Phase-II –Prior construction Phase
- Acts as owners engineer and review and opine on the construction related activity as follows:
  - Construction schedule including construction and payment milestones and contractors' and subcontractors' execution plans;
  - Assessment of reasonableness of Project Cost estimation (including potential scenarios of cost overruns), including spare parts;
  - Safety assurance program;
  - Site conditions, including site accessibility as well as adequacy of the available infrastructure (ports, roads, vehicles) to transport to the Project site the different components of the wind farm including the turbines;
  - Review of the commissioning and start-up plan including performance testing and acceptance criteria. The PMC should plan to observe and attend the full plant commissioning.
  - Provide an independent estimation of the Project completion date as well as recommendation for delay contingencies.

## iii. Project Finance

- Review financing and implementation plan of Smart City Proposal and assess project cost estimates, financing requirements, future cash flows, and sources of funds and financing modalities.
- Develop revenue model for SPV, identify revenue streams, support SPV to operationalize revenue streams such as user fees, beneficiary charges and impact fees, land monetization, debt, loans, etc.
- Develop financial models, capital investment plans, finance and operating plans and resource mobilization strategy for smart city sub projects.
- Support SPVs to conceptualize and implement financing instruments and tools such as municipal bonds with credit rating of ULBs, pooled finance mechanism, tax increment financing (TIF), transit oriented development, transfer of development rights (TDR), FSI incentives etc. to raise financial resources from the market and attract private investments.
- Support SPV to access financing from State government institutions and Financing Institutions and other government and quasi-government sources as per need.
- Support SPV in dowtailing with other ongoing Government schemes for technical completeness.
- Develop business cases and bankable projects to leverage borrowings from financial institutions and potential investors, including but not limited to bilateral and multilateral development aid institutions.
- Support Client in identifying and reaching out potential partners and investors and organizing investment road shows and shall also ensures funding tie-ups.
- Support Client in preparing financial pitches to potential investors.

### iv. Operation and Maintenance (0&M) & Financial Assessments

- Review O&M options and prepare a strategy for improved implementation, including technical procedures to ensure efficiency and sustainability and proper financial, accounting and managerial arrangements for O&M.
- Examine the current provision of the subproject services, and propose/design the institutional arrangements. Hence, as part of the same, the consultant shall undertake:
  - A detailed institutional assessment of those departments/sectors within the SPV where the proposed intervention is focused on. This will include as assessment of institutional structure and systems, procedures, human resources, types of IT systems, etc.
  - In addition, this will also include a financial assessment in terms of extent of O&M costs involved (before and after the project) and budgets, extent of cost recovery in case of sectors where user charges are involved, tariff implications and modelling of various scenarios; including financial projections for 5-10 years.

- Based on the aforesaid assessment, the Consultant will arrive at an O&M plan for each sector where intervention is proposed, including a plan for routine and recurring operations (costs for O&M etc), action plan for maintenance, etc, a human resource plan and strategies for meeting institutional capacity gaps (outsourcing, new IT systems, new staff positions, etc.)
  - The same shall include financial analysis for the proposed subprojects working out the financial means to cover O&M expenses, and designing the respective mechanisms (for instance tariffs in water, budget allocations in roads) to guarantee reliable adequate funding during the O&M period.
- The Consultant shall update the financial assessments for the ULB carried out during the SCP process, based on updated sub-project costs, sources of finance/financing plan, revised repayment schedules if any, sub-project related cash-flow statements etc.
- The output from the aforesaid exercise shall be a Financial and Operating Plan (FOP) for the SPV as a whole, including 5-10 year financial projections separately for both the operating and capital budgets (a capital investment plan), taking into account also the likely impact of the prioritized sub-project proposed to be undertaken over the medium term.
- This will include financial impact of service improvement interventions in terms of additional costs / revenues, etc.

## v. Environment Safeguards

- Conduct and prepare environmental impact assessment and management plans. The Environmental Assessment shall necessarily (but not limited to) cover the following details:
  - Review applicable environmental laws/rules/regulations with a view to define the specific clearances/approvals required to be obtained by ULB/SPV and contractors from different organisations. Also prepare necessary documentation to facilitate SPV to obtain necessary clearances.
  - Screen the proposed sub-projects to identify sensitive environmental features and obtain relevant baseline information/data specific to the sub-project. The data collected shall include primary as well as secondary data for meaningful environmental assessment.
  - Based on the screening, define specific environmental concerns/issues to be addressed and conduct meaningful stakeholder consultations at various stages of subproject's preparation.
  - Analyse the possible alternatives for the sub-project components (e.g. Infrastructure proeject, UGD/Road network alignments, source of water, setting of STPs, disposal

points, etc.)

- Cost effective mitigation measures in the form of implementable and budgeted EMP and integration of the same in to bidding documents (bidding documents shall necessarily integrate EMP in the form of Technical specifications., drawings, BOQ items, etc.)
- Define monitoring plan for the proposed EMP, responsible institutions. Such plans shall reflect the requirements during construction and operational phases.

## vi. Social Safeguards

- Conduct and prepare Social Impact Assessment and management plans. The Social Assessment shall necessarily (but not limited to) cover the following details:
  - Screen the proposed sub projects to identify sensitive social features and obtain relevant baseline information specific to the sub project.
  - Based on the screening, define specific social concerns/issues to be addressed and categorisation of the sub project and conduct meaningful stakeholder consultations at various stages of sub-project's preparation.
  - Conduct socio-economic survey among the affected population with potentially adverse social impacts.
  - Confirm the requirement of land to be acquired for each sub-project (land required for the sub-project would have been tentatively identified by the SCP consultants) and estimate cost implications of such land acquisition.
  - Analyse the possible alternatives for the sub-project components (e.g. Infrastructure projects, UGD/Road network alignments, source of water, setting of STPs, disposal points, etc.) with a view to minimizing adverse social impacts.
  - Assist ULB/SPV in getting clearances from the other government departments where ever necessary.
  - When required, confirm the requirement of land to be acquired for each sub-project and estimate cost implications of such land acquisition, including rehabilitation & resettlement plan.
  - Training of ULB/SPV staff on procurement, planning and engineering.

#### vii. Procurement

The PMC would be required to comprehensively assist the SPV in procurement of goods//equipments/Hardware/Software/works (as per tasks listed below), as per KTPP guidelines, in the context of implementation of smart city sub-projects.

- Prepare procurement plan duly indicating the method of procurement
- Prepare the necessary procurement documentation as per the KTPP guidelines and GoK

procurement Policy. The tender and contract documents shall include instruction to bidders; pre-qualification criteria, general and special conditions of contract, technical specifications, bill of quantities, good for construction drawings, and forms of contract agreement. The specifications will be detailed and use locally applicable standards (CPHEEO, IS, IRC, MORTH, etc). The bill of quantities will be based on detailed calculations of quantities and estimate based on (i) schedule of rates and (ii) market prices. The tender documents will also take into account the Environment Management Plan (EMP), if applicable, for the sub-project.

- Assist SPV in pre-qualification, pre-bid meetings, issuance of addendums/corrigendums, bid
  opening and evaluation including preparation of evaluation reports, award of bids, and any
  other assistance as may be required for overall management of bidding process.
- Assist the SPV in the negotiations as appropriate with the successful bidders and award of tender.

## 4.3 Phase-II: Implementation Assistance

Providing implementation assistance and quality control services, which includes:

- Preparation of Implementation Plan with roles and responsibilities of each of the stake holders
- Acting as an early warning system for the ULB/SPV/SLNA.
- Contract management, progress monitoring & reporting.
- Capacity building of the SPV staff, on-job training on implementation and quality and contract management and O&M.
- Scrutinise the Contractor's detailed work programme and guide the constructor in preparation supervision schedule & workplan for each sub-project.
- Scrutinise construction method proposed by contract including environmental safety, personnel & public issues.
- Assess the adequacy of the contractors'input in material, labour and construction methodology and provide advisories when required.
- Monitor the implementation of environmental standards and safeguards and resettlement plans, if any.
- Establish Quality assurance system including verification of source of material and certification.
- Assist the Client in final certification of the bills for payment
- Assistance for resolution of all contractual issues including examining the contractors'claims
  for variations/extensions or additional compensations etc and prepare recommendations for
  approval by the Client.
- Assist third party inspections, if necessary, as decided by the Client.

- Proof checking & issuance for execution of contractors'design and drawing for lump sum turnkey contracts.
- Review and finalise the "as built" drawings submitted by Contractor
- Assist the Client in issue of completion certificates
- Prepare monthly project progress reports describing the physical and financial progress of
  each subprojects, highlighting impediments to the quality and progress of the works and
  remedial accounts.

## i. Quality Assurance, Quality Control and Certification

The role of PMC during implementation is as follows:

- Assist SPV for day to day construction supervision, contract administration, recording measurements, processing & certifying bills for payment release etc.
- Deploy full time well qualified and adequately experienced site engineer to each sub component to assist SPV during implementation phase.
- Assist the SPV with respect to quality control procedures and quality control of the works.
- Ensure quality implementation by establishing quality control procedures and preparing and disseminating quality control manual.
- Ensure setting up of quality control laboratory by the contractor or list out Government laboratories/established laboratories/Reputed engineering colleges/institutions for conducting quality control tests
- Conduct/Supervise quality tests as required on materials/equipment supplied/ works
  executed at site and in the approved labs approved and assist the ULB/SPV engineers in
  witnessing tests at manufacturers site as per the standard procedures and best engineering
  practice laid down and certify the test results.
- Advise the SPV on carrying out and documenting the planned quality control tests as part of the works progress reports.
- Assist SPV/contractor in preparation of completion reports that include as-built drawings and certify the as-built drawings.

## ii. Sub-Project Implementation Management

- Prepare Project Implementation framework highlighting the roles and responsibilities various stakeholders of project, contract management procedures;
- Deciminate the same to all stakeholders of the project by conducting workshops. Based on this framework:
- Provide technical, financial and project management advice to the SPV for preparing subproject implementation management checklist. This checklist would be focusing on the procurement management, contract management, time and input management and social and

environmental management with regard to actions to be initiated for smooth and timely implementation.

- Oversee the sub-project performance, physical and financial, from the date of Project commencement and report to the ULBs/ SPV periodically.
- Prepare quarterly sub-project budgets including financial allocations to sub-projects and sub-project accounting. Prepare monthly monitoring reports for submission to ULB/SPV. The budgetary requirement and achievement should be on quarterly basis and should be for both calendar year and financial year.
- Suggest mid-course corrections as required for sub-project control.
- Prepare O&M Plan for the assets created
- Assist the ULB/SPV staff on establishing and operationalizing the institutional and financial arrangements envisaged for O&M.
- During the PMC's contract period, assist the ULB/SPV in overseeing contractor's responsibilities during defect liability period

#### iii. Training

• Training of ULB/SPV staff on procurement, planning management and engineering related to project implementation as well as 0&M phase.

## iv. Legal

- Assist ULBs/SPV in addressing and complying with all legal, statutory and mandatory requirements with regard to social and environmental issues.
- Assist ULBs/SPV in interpreting and applying the various legal provisions of the contract documents, and in amicably resolving disputes.
- Assist ULBs/SPV in getting clearances from the other government departments/ agencies where ever necessary

#### 5. Time Frame for the Assignment

The overall duration of the engagement will be 5 years i.e. for the entire duration of the Smart City Proposal implementation.

## 6. Output, Deliverables, Payment Terms:

The following outputs are expected to be delivered in stages in total duration of assignment. The details are provided in Appendix -B

## 7. Team Composition - Please Refer - Appendix - C

The Position of professionals is illustrative and Smart City/SPV may change as per the requirement of the project. The Consultant shall deploy Support Team as per the requirement. The Support Team may also include office manager, research associates,

analysts, surveyor, draughtsman, quantity surveyors, office manager etc. The details are provided vide Appendix C

# SECTION 6: CONTRACT FOR CONSULTANT'S SERVICES Between

NAME OF EMPLOYER
and
[Name of Consultant]
Dated:

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#### I. FORM OF CONTRACT

This CONTRACT (hereinafter called the "Contract") is made the day of the month of
$\_$ , 200 $\_$ , between, on the one hand, $\_$ (hereinafter called the "Employer")
and, on the other hand,(hereinafter called the "Consultant").
[*Note: If the Consultant consist of more than one entity, the above should be partially amended to read as follows:
"(hereinafter called the "Employer") and, on the other hand, a joint venture consisting of the
following entities, each of which will be jointly and severally liable to the Employer for all the
Consultant' obligations under this Contract, namely, and
(hereinafter called the "Consultant.")"]
WHEREAS

- (a) the Employer has requested the Consultant to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services");
- (b) the Consultant, having represented to the Employer that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract;

NOW THEREFORE the parties hereto hereby agree as follows:

- The following documents attached hereto shall be deemed to form an integral part of this Contract:
- (a) The General Conditions of Contract (hereinafter called "GC");
- (b) The Special Conditions of contract (hereinafter called "SC");
- (c) The following Appendices:

Appendix A: Description of the Services

Appendix B: Reporting Requirements

Appendix C: Key Personnel and Sub-Contractor

Appendix D: Services and Facilities to be provided by the Employer

Appendix E: Breakdown of Contract Price

Appendix F: Form of Guarantee for Advance Payments

The mutual rights and obligations of the Employer and the Consultant shall be as set forth in the Contract, in particular:

(a) The Consultant shall carry out the Services in accordance with the provisions of the Contract; and

(b) the Employer shall make payments to the Consultant in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

FOR AND ON BEHALF OF

[NAME OF EMPLOYER]

By

(Authorised Representative)

FOR AND ON BEHALF OF

[NAME OF CONSULTANT]

By

(Authorised Representative)

[**Note**: If the Consultant consist of more than one entity, all of these entities should appear as signatories, e.g., in the following manner:]

FOR AND ON BEHALF OF EACH OF

THE MEMBERS OF THE CONSULTANT

[Name of Member]

By

(Authorised Representative)

[Name of Member]

By

(Authorised Representative)

#### II. GENERAL CONDITIONS OF CONTRACT

#### 1. General Provisions

#### 1.1. Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the laws and any other instruments having the force of law in India, as they may be issued and in force from time to time;
- (b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;
- (c) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1
- (d) *"Contract Price"* means the price to be paid for the performance of the Services, in accordance with Clause 6;
- (e) "GC" means these General Conditions of Contract;
- (f) "Government" means the Government of Karnataka;
- (g) "Local currency" means Indian Rupees;
- (h) "Member", in case the Consultant consist of a joint venture of more than one entity, means any of these entities, and "Members" means all of these entities; 'Member in Charge' means the entity specified in the SC to act on their behalf in exercising all the Consultant' rights and obligations towards the Employer under this Contract.
- (i) "Party" means the Employer or the Consultant, as the case may be, and Parties means both of them;
- (j) "Personnel" means persons hired by the Consultant or by any Sub-Contractor as employees and assigned to the performance of the Services or any part thereof; and 'key personnel' means the personnel referred to in Clause GC4.2 (a)
- (k) **"SC"** means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;
- (l) "SCM" means Smart Cities Mission
- (m) "SCP" means Smart City Proposal
- (n) "Services" means the work to be performed by the Consultant pursuant to this Contract as described in Appendix A; and
- (o) **"Sub-Contractor"** means any entity to which the Consultant subcontract any part of the Services in accordance with the provisions of Clauses 3.5 and 4.

(p) "Third party" means any person or entity other than the Government, the Employer, the Consultant, or a Sub-Contractor.

## 1.2. Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the *Applicable Law*.

#### 1.3. Language

This Contract has been executed in *English language*, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

#### 1.4. Notices

Any notice, request or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorised representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the SC.

#### 1.5. Location

The Services shall be performed at such locations as are specified in *Appendix A* and, where the location of a particular task is not so specified, at such locations, whether in Karnataka or elsewhere, as the Employer may approve.

#### 1.6. Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Employer or the Consultant may be taken or *executed by the officials specified in the SC.* 

#### 1.7. Taxes and Duties

The Consultant, Sub-contractors and their Personnel shall pay such taxes, duties, fees and other impositions as may be levied under *the Applicable Law*, the amount of which is *deemed to have been included in the Contract Price*.

#### 2. Commencement, Completion, Modification and termination of Contract

#### 2.1 Effectiveness of Contract

This Contract shall come into effect *on the date the Contract* is signed by both Parties or such *other later date as may be stated in the SC.* 

#### 2.2 Commencement of Services

The Consultant shall begin carrying out the Services within *thirty (30) days after the date the Contract becomes effective*, or at such other date as may be specified in the SC.

## 2.3 Expiration of Contract

Unless terminated earlier *pursuant to Clause 2.7*, this Contract shall terminate *at the end of such time period after the Effective Date as is specified in the SC*.

#### 2.4 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, *may only be made by written agreement between the Parties.* 

### 2.5 Force Majeure

#### 2.5.1 Definition

For the purposes of this Contract, "Force Majeure" means an *event which is beyond the reasonable control of a Party*, and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

#### 2.5.2 No Breach of Contract

The failure of a Party to full-fill any of its obligations under the contract **shall not be considered to be a breach of**, or default under this Contract insofar **as such inability arises from an event of Force Majeure**, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

#### 2.5.3 Extension of Time

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

## 2.5.4 Payments

During the period of their *inability to perform the Services* as a result of an event of Force Majeure, the Consultant *shall be entitled to continue to be paid* under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

## 2.6 Suspension:

The Employer may by written notice of suspension to the Consultant, suspend all payments to the Consultant hereunder if the Consultant fail to perform any of their obligations under this contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Consultant to remedy such failure

within a period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

#### 2.7 Termination

## 2.7.1 By the Employer

The Employer may *terminate this Contract*, by *not less than thirty (30) days' written notice of termination to the Consultant*, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 2.7.1 and sixty (60) days' in the case of the event referred to in (e):

- (a) if the Consultant *do not remedy a failure* in the performance of their obligations under the Contract, *within thirty (30) days of receipt* after being notified or within such further period as the Employer may have subsequently approved in writing;
- (b) if the Consultant (or any of their Members) *become insolvent or bankrupt*;
- (c) if, as the result of *Force Majeure*, the Consultant are unable to perform a material portion of the Services *for a period of not less than sixty (60) days*; or
- (d) if the Consultant, in the judgment of the Employer *has engaged in corrupt or fraudulent practices* in competing for or in executing the Contract.

For the purpose of this clause:

"corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of GOK, and includes collusive practice among Consultant (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive GOK of the benefits of free and open competition.

(e) if the **Employer, in its sole discretion and for any reason whatsoever**, decides to *terminate* this Contract.

#### 2.7.2 By the Consultant

The *Consultant* may terminate this Contract, by *not less than thirty (30) days' written notice to the Employer*, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause 2.7.2:

- (a) if the *Employer fails to pay any monies due* to the Consultant pursuant to this Contract and not subject to dispute pursuant *to Clause 7 hereof* within forty-five (45) days after receiving written notice from the Consultant that such payment is overdue;
- (b) If the Employer is *in material breach of its obligations* pursuant to this Contract and has not remedied the same with in forty-five (45) days (or such longer period as the

- Consultant may have subsequently approved in writing) following the receipt by the Employer of the Consultant' notice specifying such breach;
- (c) if, as the result of *Force Majeure*, the Consultant are unable to perform a material portion of the Services for a period of *not less than sixty (60) days*.

## 2.7.3 Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clause GC 2.7, or upon expiration of this Contract pursuant to Clause GC 2.3, all rights and obligations of the Parties hereunder shall cease, except:

- i. such rights and obligations as may have accrued on the date of termination or expiration;
- ii. the obligation of confidentiality set forth in Clause GC 3.3 hereof;
- iii. any right which a Party may have under the Applicable Law.

#### 2.7.4 Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.7.1 or GC 2.7.2 hereof, *the Consultant shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner* and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Consultant and equipment and materials furnished by the Employer, the Consultant shall proceed as provided, respectively, by Clauses GC 3.7 and GC 3.8.

#### 2.7.5 Payment upon Termination

Upon termination of this Contract pursuant to Clauses 2.7.1 or 2.7.2, the Employer shall make the following payments to the Consultant:

- (a) **remuneration pursuant to Clause 6** for Services satisfactorily performed **prior to the effective date of termination**;
- (b) **except in the case of termination pursuant to paragraphs (a) and (b) of Clause 2.7.1,** reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract.

## 3. Obligations of the Consultant:

## 3.1 General

The Consultant shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Employer, and shall at all times support and safeguard the Employer's legitimate interests in any dealings with Sub-contractors or third parties.

#### 3.2 Conflict of Interests

#### 3.2.1 Consultant Not to Benefit from Commissions, Discounts, etc.

The **remuneration** of the Consultant pursuant to Clause 6 shall constitute the Consultant' **sole remuneration in connection with this Contract or the Services,** and the Consultant **shall not accept** for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub-Contractors, and agents of either of them, similarly shall not receive any such additional remuneration.

## 3.2.2 Procurement Rules of Funding Agencies

If the Consultant, as part of the Services, have the responsibility of advising the Employer *on the procurement of goods, works or services, the Consultant shall comply with any applicable procurement guidelines of the funding agencies* and shall at all times exercise such responsibility in the best interest of the Employer. Any discounts or commissions obtained by the Consultant in the exercise of such procurement responsibility shall be for the account of the Employer.

## 3.2.3 Consultant and Affiliates Not to engage in certain Activities

The Consultant agree that, during the term of this Contract and after its termination, the Consultant and their affiliates, as well as any Sub-Contractor and any of its affiliates, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

## 3.2.4 Prohibition of Conflicting Activities

Neither the Consultant nor their Sub-Contractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

- (a) during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract; or
- (b) after the termination of this Contract, such other activities as may be specified in the SC.

#### 3.3 Confidentiality

The Consultant, their Sub-Contractors, and the Personnel of either of them shall not, *either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information* relating to the Project, the Services, this Contract, or the Employer's business or operations without the prior written consent of the Employer.

#### 3.4 Insurance to Be Taken out by the Consultant

The Consultant (a) shall take out and maintain, and shall cause any Sub-Contractors to take out and maintain, at their (or the Sub-Contractors', as the case may be) own cost but on terms and

conditions approved by the Employer, *insurance against the risks, and for the coverage, as shall be specified in the SC*; and (b) at the Employer's request, shall provide evidence to the Employer showing that such insurance has been taken out and maintained and that the current premiums have been paid.

## 3.5 Consultant' Actions Requiring Employer's Prior Approval

The Consultant shall obtain the Employer's prior approval in writing before taking any of the following actions:

- (a) entering into a subcontract for the performance of any part of the Services, it being understood (i) that the selection of the Sub-Contractor and the terms and conditions of the subcontract shall have been approved in writing by the Employer prior to the execution of the subcontract, and (ii) that the Consultant shall remain fully liable for the performance of the Services by the Sub-Contractor and its Personnel pursuant to this Contract;
- (b) appointing such members of the Personnel not listed by name in Appendix C ("Key Personnel and Sub-Contractors"), and
- (c) any other action that may be specified in the SC.

## 3.6 Reporting Obligations

The Consultant shall submit to the Employer the *reports and documents specified in Appendix B* in the form, in the numbers, and within the periods set forth in the said Appendix.

## 3.7 Documents Prepared by the Consultant to Be the Property of the Employer

All *plans, drawings, specifications, designs, reports and other documents and software* submitted by the Consultant in accordance with Clause 3.6 shall become and remain the property of the Employer, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents and software to the Employer, together with a detailed inventory thereof. The Consultant may retain a copy of such documents and software. Restrictions about the future use of these documents, if any, shall be specified in the SC.

## 3.8 Equipment and Materials Furnished by the Employer

Equipment and materials *made available to the Consultant by the Employer or purchased by the Consultant with funds provided by the Employer* shall be the property of the Employer and shall be marked accordingly. Upon termination or expiration of this Contract, the Consultant shall make available to the Employer an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Employer's instructions. While in possession of such equipment and materials, the Consultant, unless otherwise instructed by the Employer in writing, shall insure them at the expense of the Employer in an amount equal to their replacement value.

#### 4. Consultant' Personnel and Sub-Contractors

#### **4.1 Description of Personnel**

The titles, agreed job descriptions, minimum qualifications and estimated periods of engagement in the carrying out of the Services of *the Consultant' Key Personnel are described in Appendix C*. The Key Personnel and Sub-Contractors listed by title as well as by name in Appendix C are hereby approved by the Employer.

#### 4.2 Removal and/or Replacement of Personnel

- (a) Except as the Employer may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, it becomes necessary to replace any of the Key Personnel, the Consultant shall forthwith provide as a replacement a person of equivalent or better qualifications.
- (b) If the Employer finds that any of the Personnel have (i) committed serious misconduct or has been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Consultant shall, at the Employer's written request specifying the grounds therefor, forthwith provide as a replacement a person with qualifications and experience acceptable to the Employer.
- (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

## 5. Obligations of the Employer

## **5.1 Assistance and Exemptions**

Unless otherwise specified in the SC, the Employer shall use its best efforts to ensure that the Government shall:

- (a) issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;
- (b) assist the Consultant and the Personnel and any Sub-Contractors employed by the Consultant for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;
- (c) provide to the Consultant, Sub-Contractors and Personnel any such other assistance as may be specified in the SC.

#### 5.2 Services and Facilities

The Employer shall make available to the Consultant and the Personnel, for the purposes of the services and free of any charge, the services, *facilities and property described in Appendix D* at the times and in the manner specified in said Appendix D, provided that if such services, facilities and property shall not be made available to the Consultant as and when so specified, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Consultant for the performance of the Services, (ii) the manner in which the Consultant shall

procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Consultant as a result thereof.

## 6. Payment to the Consultant:

#### **6.1 Lump Sum Remuneration**

The Consultant's total remuneration shall not exceed the Contract Price and shall be a fixed lump sum including all staff costs, Sub-Contractors' costs, printing, communications, travel, accommodation, and the like, and all other costs incurred by the Consultant in carrying out the Services described in Appendix A. Except as provided in Clause 5.2, the Contract Price may only be increased above the amounts stated in clause 6.2 if the Parties have agreed to additional payments in accordance with Clause 2.4.

#### **6.2 Contract Price**

The Contract price is set forth in the SC.

## 6.3 Payment for Additional Services

For the purpose of determining the remuneration due for *additional services as may be* agreed under Clause 2.4, a breakdown of the lump sum price is provided in Appendices A and E.

### 6.4 Terms and Conditions of Payment

Payments will be made to the account of the Consultant and *according to the payment schedule stated in the SC.* Unless otherwise stated in the SC, the first payment shall be made against the provision by the Consultant of a bank guarantee for the same amount, and shall be valid for the period stated in the SC. Any other payment shall be made after the conditions listed in the SC for such payment have been met, and the Consultant have submitted an invoice to the Employer specifying the amount due.

#### 6.5 Interest on Delayed Payments

If the Employer has delayed payments **beyond fifteen (15) days after the due date** stated in the SC, **interest shall be paid** to the Consultant **for each day of delay at the rate stated in the SC**.

#### 7. Settlement of Disputes

#### 7.1 Amicable Settlement

The Parties shall use their *best efforts to settle amicably* all disputes arising out of or in connection with this Contract or its interpretation.

## 7.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to this Contract that *cannot be settled amicably within thirty (30) days* after receipt by one Party of the other Party's request

for such amicable settlement may be submitted *by either Party for settlement in accordance with the provisions specified in the SC.* 

## III. SPECIAL CONDITIONS OF CONTRACT

Number of General GC Clause	Amendments of, and Supplements to, Clauses in the Conditions of Contract				
1.1 (h)	The Member incharge is: Managing Director, Davanagere Smart City Limited				
1.4.1 (Notices)	The addresses are:  Employer:  The Managing Director, Davanagere Smart City Limited  P.B Road, Opposite to Railway Station, Davanagere -577 002, Karnataka, India Telephone - 91-8192-232208;  Fax-91-8192-252899  Consultant:				
1.4.2 (Notices)	Notice shall be deemed to be effective as follows:  (a) in the case of personal delivery or registered mail, on delivery;  (b) in the case of telexes/e-mail, 24 hours following confirmed transmission;  (c) in the case of telegrams, 24 hours following confirmed transmission; and  (d) in the case of facsimiles, 24 hours following confirmed transmission.]				
1.6 (Authorized Representatives)	The Authorized Representatives are: For the Employer: The Managing Director, Davanagere Smart City Limited  For the Consultant:				
1.7 (Taxes and Duties)	The Consultant and the personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or enacted laws during life of this contract.				
1.7.2	However the Services tax payable for this Services shall be paid/reimbursed by the Employer separately				
2.1 (Effectiveness of contract)	The date on which this Contract shall come into effect is:  On the date of signing of agreement				
2.2 (Commencement of Contract)	The time period shall be <b>15 days</b>				
2.3 (Expiration of Contract)	The period shall be 60 Months from the date of signing of agreement.				

Number of General GC Clause	Amendments of, and Supplements to, Clauses in the Conditions of Contract			
3.4 (Insurance to Be Taken out by the Consultant)	<ol> <li>Professional liability insurance, with a minimum coverage equal to total contract value for this consultancy; and</li> <li>Employer's liability and workers' compensation insurance in respect of the Personnel of the Consultant and of any Sub-Contractor, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and</li> <li>Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Consultant's property used in the performance of the Services, and (iii) any documents prepared by the Consultant in the performance of the Services.</li> </ol>			
3.5 (c) (Consultant' Actions Requiring Employer's Prior Approval)	The other actions are – <i>Refer Appendix A</i>			
3.7 (Documents Prepared by the Consultant to Be the Property of the Employer)	The Consultant shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Employer			
5.1 (Assistance and Exemptions)	Nil			
6.1	The Contract Price will be arrived based on the % quoted by the Consultant towards his Consultancy Fee and Payment will be made as per Appendix E			
6.2 (Contract Price)	The Contract Amount is			
6.4 (Terms and Conditions of Payment)	Refer Appendix E			
6.5 (Interest on Delayed Payments)	5% per annum.			

Number of General GC Clause	Amendments of, and Supplements to, Clauses in the Conditions of Contract					
7.2 (Dispute Settlement- Reference to the Deputy Commissioner for Settlement)						
7.3 (Governing Law and Jurisdiction)	All disputes arising out of or in connection with this <i>Contract shall be</i> governed by the Indian laws for the time being in force, and as amended from time to time and the Civil Courts at Davanagere, India shall have jurisdiction over all matters arising out of or relating to this Agreement.					
8. Know- How and Transfer and Training	The Consultant shall:  Transfer such know-how, management systems, manuals and similar knowledge if any, tools and capacity for managing a utility  The cost towards the same shall be included in Consultants remuneration					
9. Variations	Refer Appendix E, Clause 5					
10. Liquidated Damages	Refer Appendix E, Clause 6					
11.Performance Security	<ul> <li>11.1 The Performance Security for an amount of <i>Rs.</i> 1,00,00,000 shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and the <i>form provided in Appendix F</i> and by a scheduled commercial bank or surety acceptable to the Employer, and denominated in Indian Rupees.</li> <li>11.2 The Performance Security shall be valid until 28 days from the Intended date of Completion of the project Period.</li> <li>11.3 The Operator shall keep the Performance Bank Guarantee valid and enforceable throughout the Term and for a period of 28 days after the Term. In case the Performance Bank Guarantee provided by the Operator to the Employer is set to expire for any reason whatsoever at any time before expiry of 28 days after the Term, the Operator shall renew and provide to the Employer renewed Performance Bank Guarantee at least 30 days prior to its date of expiry. Upon any failure on part of the Operator to renew the Performance Bank Guarantee or to keep it valid and enforceable in terms of this Clause, the Performance Bank Guarantee will be en-cashed by the Employer without giving any notice to the Operator or to any other Party.</li> </ul>					

Number of General GC Clause	Amendments of, and Supplements to, Clauses in the Conditions of Contract
	11.4 This is without prejudice to any other action that may be taken by the Employer under the terms and conditions of this Contract.  The Employer, without prejudice to any of its rights or remedies under this Contract, is free to en-cash the Performance Bank Guarantee in part or in full, in terms. In the event of the invocation of any amount of the Performance Bank Guarantee by the Employer under this Contract, the Operator shall immediately take appropriate steps to establish the Performance Bank Guarantee at its full value contemplated under this Contract within 15 days of the date when the Performance Bank Guarantee is wholly or partially invoked by the Employer.

## IV. APPENDICES

# Appendix A: Description of the Services

As detailed in the Terms of Reference

## **Appendix B: Reporting Requirements**

The following outputs are expected to be delivered in stages in total duration of assignment

## 1 Infrastructure Development Work & ICT work -BoQ Based

## 1.1 Stage-A (Design Phase)

No.	Deliverable	Elapsed Timeframe (To from the time project approval is given by the Employer	
A	Design		
1	Inception Report (approach and methodology)	To + 2Weeks	
2	Final Concept Plan and Updated Preliminary Design Reports, with Maps and Drawings etc	To + 2 Months	
3	Draft Design and Detailed Project Report for each ULBs (maps and drawings, detailed designs, cost estimates, economic analysis, draft environmental assessment, construction drawings etc.,)	To + 4 Months	
4	Final Design and Detailed Project Report for each ULBs including final EA and EMP  Implementation Plans Contract Packages Procurement and Implementation Plans Quality Assurance and Management Plans Customer house connection management programme Construction and Contract Management Framework	To + 5 Months	
В	Bid Process		
1	Draft Bid Documents for each Package (EMP to be integrated in to the bidding documents)		
2	Final Bid Documents for each Package (include applicable environmental approvals and clearances)	T <sub>0</sub> + 6 Months	
3	Bid Evaluation report	To . 7 Mantha	
4	Award of Contract	To + 7 Months	

## 1.2 Stage-2 (Project Implementation Support)

В	Project Implementation Support (The duration of	T1 is the date of
	construction of various Packages would be different.	appointment of
		implementing agency
1	For ABD Modules	T1+ 30 Months (Max)
2	For Smart Solution Module	T1+ 30 Months (Max)
	a) Submission & acceptance of User Acceptance Test	
	(UAT) Reports	For a, b, and c : 2(two)
	b) Submission of Standardization Testing and Quality	Months during
	Certification (STQC) Certificate(s)	implementation by System
	c) Submission & acceptance of "Go-Live" Report	Integrator (SI)

The deliverables to be submitted during Phase 2 are as follows:

Monthly	Progress	Reports	including	5 copies + 1 soft copy
compliance	with EMP <sub>l</sub>	provisions a	nd relevant	
monitoring	details)			

Quarterly and Periodic Reports			5 copies + 1 soft copy		
Quality Assurance Plans			5 copies + 1 soft copy		
Asset Management	Plans	for	the	assets	5 copies + 1 soft copy
created					

## 2 Infrastructure Development Work based & ICT work -PPP based

## 2.1 Stage-A (Design Phase)

No.	Deliverable	Elapsed Timeframe (To from the time project approval is given by the Employer		
Α	Design			
1	Inception Report (approach and methodology)	T <sub>0</sub> + 2Weeks		
2	Final Concept Plan and Updated Preliminary Design Reports, with Maps and Drawings along with necessary financials etc	To + 2 Months		
В	Bid Process			
1	Preparation of Draft Concession Agreement			
2	Preparation of Final Concession Agreement	T <sub>0</sub> + 3 Months		
3	Bid Evaluation report	To Months		
4	Signing of Concession Agreement	T <sub>0</sub> + 5 Months		

## 2.2 Stage-2 (Project Implementation Support)

В	Project Implementation Support (The duration of construction of various Packages would be different)	T1 is the date of appointment of
		implementing agency
1	Vetting of DPR submitted by the Concessioner and freezing	T1+ 2 Months
	the Capital Investment	
2	Construction Supervision	T1+ 30 Months (Max)

The deliverables to be submitted during Phase 2 are as follows:

Monthly	Progress	Reports	including	5 copies + 1 soft copy
compliance with EMP provisions and relevant				
monitoring	g details)			
Quarterly a	and Periodic	Reports		5 copies + 1 soft copy
Quality Ass	surance Plan	S		5 copies + 1 soft copy
Asset Mai	nagement	Plans for	the assets	5 copies + 1 soft copy
created				

## **Appendix C: Key Personnel and Sub-Contractor**

## List of Key Positions whose CV and Experience would be evaluated

The Consultant has to estimate the staff requirement to satisfactorily complete the assignment. The staffing input requirement given below is only indicative and some positions need not be on full time basis, the Consultant has to make assessment of the requirements and submit the technical and financial Proposals accordingly. The following key professionals CVs will be evaluated.

The Consultant shall provide the Consultant's Personnel to fill the positions as listed in this Appendix throughout the term of the Contract.

No	Position	Qualifications &Skills	Experience
1	Team Leader cum Urban Management specialist	Masters in Engineering/ Urban Planning with MBA or equivalent (or)	<ul> <li>15 Years experience in Urban Sector</li> <li>Experience of Project Management in Urban Infrastructure Works. Experience as Team leader/ Deputy Team leader for minimum one project.</li> <li>Knowledge of urban development issues and Project experience</li> </ul>
		Bachelor in Engineering/ Urban Planning with MBA or equivalent	<ul> <li>20 Years experience in Urban Sector</li> <li>Experience of Project Management in Urban Infrastructure Works. Experience as Team leader/ Deputy Team leader for minimum one project.</li> <li>Knowledge of urban development issues and Project experience</li> </ul>
2	Infrastructure/ Engineering Specialist (Water Supply & Sewerage Expert)	Masters Degree in Civil Engineering	<ul> <li>At least 10 yrs experience in related assignment.</li> <li>Experience in working in water and sewerage projects which shall include preparation of infrastructure master plans / CDPs &amp; DPRs.</li> </ul>
3	Infrastructure/ Engineering Specialist (Road Expert)	Masters Degree in Civil Engineering	<ul> <li>At least 10 yrs experience in related assignment.</li> <li>Experience in working in Roads projects which shall include preparation of infrastructure master plans/ CDPs &amp; DPRs.</li> </ul>
4	Urban Finance Specialist	Masters Degree in Finance/ Economics/ Chartered Accountant/ Commerce/ ICWA / Post Graduate in Economics with specialization in Public Finance.	<ul> <li>At least 10 years relevant experience.</li> <li>Experience of municipal finance analysis, municipal budgeting and accounting and financial projections.</li> <li>Experience in Financial Modeling in Urban Infrastructure, PPP &amp; Market borrowing are desirable.</li> </ul>
5	PPP Specialist	Degree in Civil Engineering/ Master of Business Administration	<ul> <li>At least 10 years relevant experience.</li> <li>Experience of procurement related activities for urban infrastructure projects.</li> <li>Experience in PPP contract structuring and concluding concession Agreements.</li> </ul>

6	E-Governance Specialist	Degree in Information Technology/ Electronics Engineering or equivalent	<ul> <li>At least 5 years' relevant experience</li> <li>Experience in MIS for institutional / Governance level and integration of various user data</li> <li>Experience in preparation of technical requirements document of the e-Services and solution to implementing the IT related infrastructure services /e-services, networking infrastructure etc.</li> <li>Proven knowledge of modern Internet technologies and experience in software development projects/ GIS;</li> <li>Working experience in network administration and use of hardware/software, telecommunications facilities,</li> <li>Experience in databases development,</li> </ul>
			programming and web designing; Crowd sourcing on e and m – platforms

In addition to the above staff the minimum sub key professional staff to be deployed by the Consultant shall be in accordance with the projects as proposed in the SCP and modifications therof from time to time by SPV. The C.Vs of these personnel needs to be submitted, however, the same will not be considered for evaluation. Some of Such experts are as follows:

No	Position	Qualifications &Skills	Experience
1.	Assistant Construction Manager	Graduate in     Engineering	<ul> <li>5 years' experience in construction management of Urban Service delivery (Water Supply/ Sewerage/ Drainage/ Transportation/ Drainage/ Solid Waste Management)</li> </ul>
2.	Support Engineer	Degree/Diploma in relevant branch	<ul> <li>Degree in (relevant branch) Engineering with 2 years' experience         Or</li> <li>Diploma in (relevant branch)         Engineering with 4 years' experience</li> </ul>
	<b>Development Profession</b>	nals: The following CVs shal	be submitted by the Consultant. However
	the same shall not be ev	valuated by the Employer fo	r technical scores:
1.	Urban Designer -1	Masters in Urban Design/Architecture or equivalent	

3.	Transportation Planner/ Engineer -1  Procurement Specialist -	Masters Degree in Transportation Planning/ Transportation Engineering/ Highway Engineering/ Highway Planning Degree in Engineering/	<ul> <li>10 years of experience in the area of Urban Transportation</li> <li>Experience of preparation of Transit Oriented Development (TOD) / Urban Mobility Plan</li> <li>10 years of experience in the area of</li> </ul>
	1	Management/ law / Business Administration or Equivalent	<ul> <li>public procurement</li> <li>Experience in construction contract procurement /management in infrastructure projects.</li> </ul>
4.	Landscape / pavement design Architects -1	Degree in Architecture	<ul> <li>10 years' relevant experience</li> <li>Experience in preparation of technical requirements plans / document pavement design / landscaping</li> </ul>
5.	Solar Energy/ Renewable Energy Expert -1	B-Tech in Electrical/ Power Engineering	<ul> <li>12 years of experience in power projects viz., planning/designing for power generation, transmission and distribution.</li> </ul>
6.	Electrical Engineering Expert -1	B-Tech in Electrical/ Power Engineering	12 years similar experience
7.	Affordable Housing Expert -1	Masters in Urban Planning/Housing	12 years similar experience
8.	Communication Specialist -1	Masters in mass communication	<ul> <li>10 years similar experience</li> <li>Experience in management of multimedia and activities pertaining to social media</li> </ul>
9.	Environment Management expert -1	Postgraduate in Environmental Planning / Engineering /Environmental Sciences	10 years' experience in conducting EIA, environment modelling & preparing Environmental Management plans, Clean Development mechanism.
10.	Utility Engineer -1	Degree in Civil/ Mechanical Engineering	• 10 years' similar experience
11.	Social Development Specialist -1	Masters Degree or equivalent in social development disciplines	<ul> <li>10 years relevant experience</li> <li>Experience in urban social welfare projects/ community mobilization/</li> <li>Social Development Sub-Plan</li> </ul>
12.	Structural Engineer -1	Masters in Structural Engineering	<ul> <li>10 Years in Structural Engineering.</li> <li>Should have the experience in structural design of infrastructure projects.</li> </ul>

13.	GIS & Remote Sensing Expert -1	<ul> <li>MCA/ Post Graduate in any discipline and</li> <li>Diploma / degree in GIS</li> </ul>	<ul> <li>At least 7 years of experience in working on similar projects (i.e use of remote sensing &amp; GIS technology in urban sector projects)</li> <li>Knowledge of major GIS software products, GPS, total station, coordinate reference systems, satellite remote sensing technology and GIS applications.</li> </ul>
14.	Heritage conservation expert -1	Bachelor's in     Architecture	<ul> <li>10 years experience in heritage conservation work.</li> </ul>
15.	Business Analyst/ Junior BPR Specialist -1	MCA / Post Graduate in any discipline with diploma / degree in IT / BE/B-Tech. with MBA	• 10 years experience in similar field
16.	Information Security Systems Expert -1	MCA/ B Tech / M Tech in IT with certification in CISSP/ CCSP	10 years experience in similar field
17.	Solution Architect -1	Degree in Information     Technology/ Electronics     Engineering or     equivalent	10 years experience in similar field
18.	Networking & IT Infrastructure Specialist -1	MCA/ B Tech / M Tech     in IT with certification     in CCNA	10 years experience in similar field
19.	Construction Manager -1	• Graduate in Civil Engineering	<ul> <li>10 years' experience in construction management of Urban Service delivery projects (Water Supply/ Sewerage/ Drainage / Drainage/ Solid Waste Management).</li> <li>Knowledge of different construction methodologies.</li> </ul>

# Appendix D: Services and Facilities to be provided by the Employer

As detailed in Terms Of Reference

## **Appendix E: Payment of Contract Price**

- 1. Although, the Consultants have quoted for the entire project, the payments will be made for each projects individually based on the deliverables submitted as follows:
  - a) The ceiling price of consultancy fee (M) for an individual project would be M = quoted % x amount of the DPR
  - b) The said fee  ${\bf M}$  will be further divided and payment will be made as follows:
    - For Design Phase Activities (M1) = 30% of M
    - For Project Implementation Activities (M2) = 70% of M

The further breakdown of payment activity wise is as follows:

a) Payment terms for works,goods & services Based Projects:

No	Deliverables	Payment Schedule	
A	Design Phase (M1= 30% of M)		
1	Activity 1: Mobilization Advance	5 % of M1	
2	Activity 2 : Submission of Concept/Feasibility Report	10 % of M1	
3	Activity 3 : Submission of Draft DPR	10 % of M1	
4	Activity 4: Approval of Final DPR	25 % of M1	
5	Activity 5: Submission of Bid Document	20 % of M1	
6	Activity 6: Completion of BER & Award of work	30 % of M1	
Note:	<ul> <li>Payment to the Consultants for activities 1-3 will be made on the basis of project cost indicated in the SCP.</li> <li>Upon finalization of DPR difference in amount, if any, will be adjusted in future payments</li> <li>In case of convergence and DPR being prepared by other agencies the same would be considered for consultancy fee</li> </ul>		
В	Project Implementation Support (PIS) (70% of M)		
1	<ul> <li>Payment to the Consultants during implementation be made on pro rata basis every quarter for the entire duration of the project upon submission and acceptance of monthly progress report.</li> <li>In the event there is a stoppage of work of more than 3 months or for spill over of works beyond the project implementation period for reasons not attributable to the consultant s, the fee payable will be remuneration of personnel specifically deployed (as per man days) for the particular sub-project.</li> </ul>	M2/ Number of Quarters proposed for the said project	

## 2. Payment terms for PPP Projects:

No	Deliverables	Payment Schedule	
A	Design Phase		
1	Activity 1: Mobilization Advance	5 % of M1	
2	Activity 2 : Approval of Inception report including market	10 % of M1	
	assessment and prefeasibility report		
3	Activity 3: Subnmission of REIA and Social Impact Study	10% of M1	
	Report		
4	Activity 4: Approval of Concession Agreement	20% of M1	
5	Activity 5: Completion of BER	20% of M1	
6	Activity 6: Signing of Concession Agreement	35% of M1	
В	Project Implementation Support (PIS)		
1	• Vetting of DPR and Designs submitted by the	10% of M2	
	Concessioner		
Note:	Payment to the Consultants for all design activities and ac	tivity1 of	
	Implementation period will be made on the basis of project cost indicated in the		
	SCP.		
	Upon finalization of DPR difference in amount, if any, will be adjusted in future		
	payments		
2	Payment to the Consultants during implementation be		
	made on pro rata basis every quarter for the entire	90% of M2/ Number of	
	duration of the project upon submission and acceptance	Quarters proposed for	
	of monthly progress report.	commissioning the	
	• In the event there is a stoppage of work of more than 3	sheme	
	months or for spill over of works beyond the project		
	implementation period for reasons not attributable to		
	the consultant s, the fee payable will be remuneration of		
	personnel specifically deployed (as per man days) for		
	the particular sub-project.		

- 3. During implementation, if there is change in scope not attributable to the PMC, which increases the project cost beyond 10%, the consultancy fee will be increased appropriately.
  - a. Any change in scope will be reviewed by a Committee constituted by the SPV/Government. The decision of the Committee shall stand final with respect to type and extent of change in scope.
- 4. No price escalation envisaged for the entire contract duration of 5 years. In the event the consultancy services is extended beyond the project period of 5 years, then price escalation

- as per CPI will be made applicable for only the renumeration of Key Professional and support staff deployed as approved by the SPV. The CPI base rate will be taken from the end of the 5th Year.
- 5. Variations shall not be beyond 10% above or below the DPR costs. The PMC will be subjected to penal action if variations are found to be greater than the set bench mark and also for delay in submitting the DPRs, bid documents, supply of drawings, designs etc., The SPV will be responsible for monitoring the PMCs performance and initiate action / penalise for non-compliance with the ToR, wrong/incomplete specification in the bid documents, improper estimate, improper / poor progress monitoring, not informing in advance about necessary actions to be taken by the IA, etc.
- 6. For variation beyond 10% above are below, on account of faulty design and estimates, of the project value the following penalty shall be levied

Variation Amount	LD leviable
+/- 11-20% of project value	2.5 % of the consultancy fee for the said project
+/- 21-30% of project value	5 % of the consultancy fee for the said project
+/- 31-40% of project value	7.5 % of the consultancy fee for the said project
>/< 41% of project value	10 % of the consultancy fee for the said project

7. The SPV will be responsible for monitoring PMC performance and initiate actions for non-compliance with the Terms of Reference. Based on the periodic review of the performance of PMC, necessary action will be initiated. In the event of total default / failure of the firm in execution of the services, the employer reserves the right to get the work executed by any other consultancy firm at the risk and cost of the defaulting consultancy firm. Decision of employer is final & binding on the consultancy firm.

#### **Appendix -F: Format of the Performance Bank Guarantee**

To:

Whereas [name and address of the successful bidder] (hereinafter called the "Successful Bidder") has undertaken, in pursuance of Contract No. [number] dated [date] to execute [name of Contract and brief description of Services] (hereinafter called the "Contract");

And whereas it has been stipulated by you in the said Contract that the Successful Bidder shall furnish you with a Bank Guarantee by a recognised bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

And whereas we have agreed to give the Successful Bidder such a Bank Guarantee;

Now therefore we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Successful Bidder, up to a total of <code>[amount of Guarantee] [amount in words]</code>, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of <code>[amount of Guarantee]</code> as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Successful Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Services to be performed there under or of any of the Contract documents which may be made between you and the Successful Bidder shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid until a date 90 days from the date of issue of the Certificate of Completion.

Signature and seal of the Guarantor
Name of Bank
Address
1. Date

#### **Appendix-G**

## Cyber Security Requirement for Smart City - Model Framework

1. The Generic architecture of smart city generally consists of four layers - a sensing layer, a communication layer, a data layer and an application layer, and these four layers are overseen by the smart city security system. Architecture of Information Technology systems deployed in Smart city need to be open, interoperable and scalable.

The reference architecture of Information Technology (IT) infrastructure in Smart city suggested by National Institute of Standards and Technology (NIST) serves as a common starting point for system planning while promoting interoperable functional building blocks, which are required in a smart city.

- 2. The message exchange between various applications in the smart city should be fully encrypted and authenticated. Any application outside the Data Centre (DC) should talk to the applications hosted in the datacenter through only predefined APIs.
- 3. While it is necessary to converge multiple infrastructures into one Central platform for ease of management, it is mandatory that such applications hosted in the central data center support multi-tenancy with adequate authentication and Role based access control mechanism for each tenant pertaining to their respective infrastructure.
- 4. In multi-tenant architecture, there should be provisions for flow of normalized data only to respective tenant partition(s) in a predefined manner with adequate authentication and encryption mechanism.
- 5. The smart city architecture should be capable of managing heterogeneous data, which would be continuously communicated through numerous devices following different protocols. In order to ensure that the flow of data between devices does not run into latency issues, appropriate protocols need to be deployed so as to minimize latency. The following communication protocols could be used for the different layers for data flow:

Between applications and back end systems: HTIP, SQI, FTP, SNMP, SOAP, XMI, SSH, SMTP

Between back end systems and field devices: Message Queue Telemetry Transport (MQTT), XMPP, RESTful HTIP, Constrained Application Protocol (CoAP), SNMP, IPv4/6, BACnet, IONworks, low Power Wide Area Network (IoRa), Fixed, 4G/5G, Wi-Fi, WiMax, 2G/3G From field devices: Zig Bee oIP, ETSI ITN, IPv4/6, 6lowPAN, ModBus, Wi-Fi, 802.15.4, enOcean, IoRA, RFID, NFC, Bluetooth, Dash7, Fixed, ISM & short-range bands.

6. Data layer (termed as City Digital platform/ fabric) should be capable of communicating with various types of sensors/ devices and their management platforms/applications for single/multiple services irrespective of software and application they support. Data exchange between various sensors and their management applications must strictly happen through this layer, thus making it one true source of data abstraction, normalization, correlation and enable further analysis on the same. Adequate security checks and mechanisms as described in later points

to be deployed to protect data layer from data confidentiality breach and unauthorized access.

- 7. The entire Information Technology (IT) infrastructure deployed as part of Smart city should follow standards like ISO 27001, ISO 22301, ISO 37120, ISO 3712, ISO 27017, ISO 27018, BSI PAS 180,BSI PAS 181, BSI PAS 182, forWi-Fi access PEAP (Protected Extensible Authentication Protocol), 3rd Generation Partnership Project (3GPP), etc. as appropriate.
- 8. Application Program Interfaces (APIs) should be published and the IT systems be running on standard protocols like JSON / XMI or REST etc
- 9. From a network security perspective all information that flows on the network should be encrypted to ensure safety and privacy of confidential data. The devices at each endpoint of the network should be authenticated (using mechanisms based on attributes one of which could use passwords). The authentication system so used on these endpoint devices should ensure that only authorized users are sending data over the network, and there is no rogue data that is sent to the control systems to generate false alarms or sabotage the systems.
- 10. Wireless broadband plan and architecture for the specific City may be prepared detailing the existing Fiber System and other supporting infrastructure so as appropriately interfacing another or citywide wireless network.
- 11. All sensors deployed as part of IT and IT based systems in the Smart cities should talk only to the authorized wireless network, and do not hook on to the rogue networks. The guidelines to secure wi-fi networks as published by Department of Telecom must be follo

wed.

12. Wireless layer of the Smart City Network should be segmented for public and utility networks by using Virtual Private Networks (VPNs) or separate networks in the wired core, so that any traffic from the Internet users is not routed into the sensor networks and

vice-

versa.

- 13. All traffic from the sensors in the Smart city to the application servers should be encrypted Secure Socket Layer (SSL) and authenticated prior to sending any information. The data at rest and in transit must be encrypted.
- 14. Authentication of sensors in the Smart city should happen at the time of provisioning the sensors, and adding them into the system, and should be based on physical characteristics of the sensors like MAC 10, Device 10 etc.
- 15. Sensors deployed in solutions to set up Smart city should be hardened devices with the ability to be upgraded remotely for firmware through encrypted image files.
- 16. As various sensors use multiple protocols to communicate with the underlying network with varied security capability, the system should allow provisioning necessary authentication and encryption at the gateway or the nearest data aggregation level if the sensor is not able to do the same.

- 17. The Sensors or edge device deployed in Smart city should not have any physical interface for administration. Monitoring of systems and networks should be undertaken remotely.
- 18. The sensors deployed in Smart city should be of low power consumption and should work on self-sufficient power sources.
- 19. All devices and systems deployed in Smart city should be hardened and have the ability to be upgraded remotely for firmware through encrypted image files with authentication mechanism to complete the operation.
- 20. All the sensors in the Smart city should connect to a completely separate network.
- 21. The data center should be segmented into multiple zones with each zone having a dedicated functionality e.g. all sensors for one operational domain can connect to the data center in one zone, and the Internet facing side of the data center should be in another zone.
- 22. The Internet facing part of the data center should have a Demilitarized zone where all the customer application servers would be located that are customer facing. Only these servers can access the data from the actual utility application servers on predefined ports.
- 23. The customer application servers should be accessed only by the web server that is hosted in a different zone of the data center.
- 24. The following should be implemented in the data centre firewalls, Intrusion detection & Intrusion prevention systems, Web Application Firewalls, Behavioral analysis systems for anomaly detection, Correlation engine, Denial of Service prevention device, Advanced Persistent Threat notification mechanism, Federated Identity and access management system, etc.
- 25. Security Information and Event Management (SIEM) monitoring on all Smart City networks, devices and sensors to identify malicious traffic.
- 26. All "applications" and "apps" will undergo static and dynamic security testing before deployment and be tested with respect to security on regular basis at least once in a year.
- 27. All applications and "Apps" deployed as part of Smart city be hosted in India.
- 28. The said architecture provide:
  - (a) Automatic and secure updates of software and firmware etc.
  - (b) All systems and devices should provide auditing and logging capabilities.
  - (c) Ensure vendor compliance to remove any backdoors, undocumented and hard cored accounts.

- (d) End-to End solution should be provided with annual end-to-end service availability of 99.999 percent. The end to end service agreement should be in place for minimum period of five years form the date of operations of the systems.
- 29. Appropriate teams may be set up to monitor cyber incidents and mitigation of same.
- 30. All the information on incidents be shared regularly with Indian Computer EmergencyResponse Team (CERT-In) and NCIIPC (National Critical Information Infrastructure Protection Centre) and take help to mitigate and recover from the incidents.