# **Request for Proposal**

# For

# Selection of Concessionaire for Implementing Intelligent Poles Hubballi-Dharwad on BOOT model

Reference No: HDSCL/Intelligaent Pole/2018-19

Date: 14.03.2018

Hubballi-Dharwad Smart City Ltd, Hubballi-Dharwad Karnataka

# Disclaimer

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This RFP is not an Agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this RFP is to provide interested parties with information that may be useful to them in making their financial offers (BIDs) pursuant to this RFP. This RFP includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This RFP may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP. The assumptions, assessments, statements and information contained in the Bidding Documents, especially the Feasibility Report, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

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The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this RFP. The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that the Authority is bound to select a Bidder or to appoint the Successful Bidder JV or Contractor, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or BIDs without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its BID including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority or any other costs incurred in connection with or relating to its BID. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other

costs or other expenses incurred by a Bidder in preparation or submission of the BID, regardless of the conduct or outcome of the Bidding Process.

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# List of Definitions/Acronyms

# Acronyms

Acronym	Description	
ABG	Advance Bank Guarantee	
A&M	Approach & Methodology	
BG	Bank Guarantee	
BOOT	Built Own Operate and Transfer	
BoQ	Bill of Quantity	
HDSCL	Hubballi-Dharwad Smart City Ltd	
Capex	Capital Expenditure	
Consortium	The consortium consist of multiple members (not more than 4 parties) entering into a Consortium Agreement for a common objective of satisfying the HDSCL requirements & represented by Lead member of the consortium	
DD	Demand Draft	
DF	Discounting Factor	
EMD	Earnest Money Deposit	
EV	Electronic Vehicle	
FRS	Functional Requirement Specification	
GoI	Government of India	
ICT	Information and Communication Technology	
ISP	Internet Service Provider	
INR	Indian National Rupee	
HDSCL	Hubballi-Dharwad Smart City Ltd	
LD	Liquidated Damages	
LoA	Letter of Award	
LoI	Letter of Intent	
MoU	Memorandum of Understanding	
MSA	Master Services Agreement	
NPV	Net Present Value	
OEM	Original Equipment Manufacturer	
Opex	Operational Expenditure	
PoA	Power of Attorney	
PoC	Proof of Concept	
PPP	Public Private Partnership	
QCBS	Quality Cum Cost Based Selection	
RFP	Request for Proposal	
RI	Road Re-instatement	
SLA	Service Level Agreement	
SOW	Scope of Work	

## 1 Introduction

### 1.1 Background Information

- 1.1.1 Twin City of Hubballi-Dharwad participated in the Smart City Challenge (Phase 2) and is one of the 27 shortlisted cities by MoUD for implementing Smart City projects. The selected Smart City Proposal is to leverage the available resources and focus on larger development amounting to large share of public investment for smart implementing smart solutions. The SCP has a compelling three pronged vision of improving public life through quantum jump in quality of services, simplifying governance and aligning incentives of city functionaries. The idea is to:
  - Maximize reuse of existing infrastructure (ICT/non ICT)
  - Creating a backbone for smarter initiatives in the future.
  - Modernize service delivery.
- 1.1.2 Over a period of time Hubballi-Dharwad has faced the following key challenges including;
  - High floating population with unscientific and uncoordinated traffic management system
  - Lack and underutilization of city infrastructure
- 1.1.3 To mitigate aforementioned challenges pan-city smart solutions are considered to benefit the entire city through application of ICT and resulting improvement in local governance and delivery of public services. In line to the guidelines issued by Ministry of Urban Development (MoUD)/ Government of India (GoI) Government of Karnataka has created a Special Purpose Vehicle (SPV) Hubballi-Dharwad Smart City Ltd (HDSCL) for implementing the Smart City mission at the city level. HDSCL will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects. HDSCL is headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board.
- 1.1.4 In line to the guidelines issued by Ministry of Urban Development (MoUD)/Government of India (GoI) Government of Karnataka has created a Special Purpose Vehicle (SPV) Hubballi-Dharwad Smart City Ltd (HDSCL) for implementing the Smart City mission at the city level. HDSCL will plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects.
- 1.1.5 The key functions and responsibilities of HDSCL are to;
  - Approve and sanction the projects including their technical appraisal
  - Take measures to comply with the requirements of MoUD with respect to the implementation of the Smart Cities Programme
  - Undertake review of activities of the Mission including budget, implementation of projects, etc. and co-ordination with other missions / schemes and activities of various ministries

- 1.1.6 Hubballi-Dharwad Smart City Ltd (Hereinafter referred to as "Authority" or "HDSCL") intends to appoint a Concessionaire **for Implementing Intelligent Poles in Hubballi-Dharwad** on Build, Own, Operate and Transfer (BOOT) model on Public Private Partnership (PPP) Basis (the "Project") for a specified Concession Period i.e. implementation period of 12 months, operation and maintenance period of 14 years (post go-live) comprising a total of 15 years (the "Concession Period").
- 1.1.7 The Successful Bidder (the "Concessionaire"), shall be responsible for designing, engineering, financing, procurement, construction, operation and maintenance of the Project under and in accordance with the provisions of a long-term concession agreement (the "Concession Agreement") to be entered into between the Successful Bidder and the Authority in the form provided by the Authority as part of the Bidding Documents pursuant hereto.
- 1.1.8 The scope of work includes the activities as mention in the Section 8 of this RFP.
- 1.1.9 An Agreement will be drawn up between the Authority and the Successful Bidder on PPP basis (the "Concession Agreement"). The Concession Agreement sets forth the detailed terms and conditions, including the scope of the Concessionaire's services and obligations (the "Concession"). Revenues from the proposed Project will accrue to the Successful Bidder undertaking the Project (the "Project Company" or the "Concessionaire") and would be appropriated as per the provisions of the Concession Agreement provided as Annexure V
- 1.1.10 The statements and explanations contained in this RFP are intended to provide a better understanding to the Bidders about the subject matter of this RFP and should not be construed or interpreted as limiting in any way or manner the scope of services and obligations of the Concessionaire set forth in the Concession Agreement or the Authority's rights to amend, alter, change, supplement or clarify the scope of work, the Concession to be awarded pursuant to this RFP or the terms thereof or herein contained. Consequently, any omissions, conflicts or contradictions in the Bidding Documents including this RFP are to be noted, interpreted and applied appropriately to give effect to this intent, and no claims on that account shall be entertained by the Authority.
- 1.1.11 The Authority shall receive Bids pursuant to this RFP in accordance with the terms set forth in this RFP and other documents to be provided by the Authority pursuant to this RFP, as modified, altered, amended and clarified from time to time by the Authority (collectively the "Bidding Documents"), and all Bids shall be prepared and submitted in accordance with such terms on or before the date specified in Clause 1.3 for submission of Bids (the "Bid Due Date").
- 1.1.12 A Bidder shall be considered as a Successful Bidder for the project of the Authority, where the Letter of Award (LoA) has been issued.

#### 1.2 Brief description of Bidding Process

- 1.2.1 The Authority has adopted a single stage two cover bidding process wherein the interested parties are required to submit the Bid (collectively referred to as the "Bidding Process") for selection of the Bidder for award of the Project. The Bid in response to the RFP is to be submitted in two parts, viz.:
  - PART 1: Bid Security & Tender Fee (proof) + Qualification + Technical Bid The first stage would involve test of responsiveness, technical and financial capability for undertaking the Project based on the qualification and evaluation criteria as per the RFP. Only those bids that meet the Qualification Criteria, and secure marks as per

Evaluation Criteria as set out in this RFP would be qualified for opening of Financial Bid

• PART 2: Financial Bid - Opening and Evaluation of Financial Bid

On the basis of this evaluation process, Authority will issue a Letter of Award to the Successful Bidder.

- In the Bid Stage, the aforesaid short-listed Applicants, including their successors, (the "Bidders", which expression shall, unless repugnant to the context, include the Members of the Consortium) are being called upon to for opening of their financial offers (the "Bids") in accordance with the terms specified in the Bidding Documents. The Bid shall be valid for a period of not less than 180 days from the date specified in Clause 1.3 for submission of bids (the "Bid Due Date").
- 1.2.3 A Bidder is required to deposit, along with its Bid, bid security as mentioned in the clause 1.3 of the RFP (the "Bid Security")
- During the Bid Stage, Bidders are invited to examine the project in greater detail, and to carry out, at their cost, such studies as may be required for submitting their respective Bids for award of the Concession including implementation of the Project.
- 1.2.5 Subject to Clause 2.15, the Project will be awarded to the Bidder scoring Highest Score (the "Highest Bidder") based on evaluation of bids on technical and financial criteria as set out in this RFP. In the event of a tie, the bid with the highest technical score will be rated as the best bid and follow the provisions of Clause 3.5.3 of the RFP.
- 1.2.6 Further and other details of the process to be followed at the Bid Stage and the terms thereof are spelt out in this RFP. Any queries or request for additional information concerning this RFP shall be submitted by e-mail to the officer designated in Clause 1.3 below.
- 1.2.7 Interested parties may obtain the RFP document from the <a href="https://eproc.karnataka.gov.in/eprocportal/pages/index.jsp">https://eproc.karnataka.gov.in/eprocportal/pages/index.jsp</a> with non-refundable fee as mentioned in the clause 1.3 by way of online payment. Further, all the parts of the Bid (PART 1: Qualification Bid + Technical, PART 2: Financial Bid) must be submitted online only.

#### 1.3 Schedule of Bidding Process

The Authority shall endeavor to adhere to the following schedule:

#	Information	Details	
1.	Name of Work	Selection of Concessionaire for	
		Implementing Intelligent Poles for Smart	
		City Projects in Hubballi-Dharwad on BOOT	
		model	
2.	RFP No. and Date	Reference No: HDSCL/Intelligaent	
		Pole/2018-19	
		Date: 14.03.2018	
3.	Last date for submission of written queries	04.04.2018	
	for clarifications along with email for		
	sending queries		
4.	Date pre-bid conference	10.04.2018 at 11:00 hrs	
5.	Release of response to clarifications	Through e-portal only	

6.	Bid validity period	180 days from the last date (deadline) fo submission of proposals.	
7.	Bid available online from	14.03.2018, 11:00 hrs onwards	
8.	Last date (deadline) for submission of bids document online	30.05.2018 at 16:00 hrs	
9.	Last date (deadline) for submission of bids document hardcopy	NA	
10.	Opening of Technical Bids	01.06.2018 at 11:00 hrs	
11.	Method of selection	Commercial Bids of all the qualified bidders with minimum 80% marks in Technical Evaluation will be opened. Among the technically qualified bids, whosoever shares the highest revenue with HDSCL will be awarded the contract.  Note: Although the e-procurement portal will rank the bidders based on Quality cum Based Selection (QCBS), the award of contract will be based on the above mentioned criteria.	
12.	Technical Presentation by the Concessionaire	Will be intimated at a later stage	
13.	Opening of Financial Bids	Will be intimated at a later stage	
14.	Website for downloading RFP	https://eproc.karnataka.gov.in/eprocureme nt/login.seam	
15.	Earnest Money Deposit/Bid Security	Earnest Money Deposit of amount INR 48,00,000/- should be paid as per requirement of e-portal.	
16.	Tender Fee	Please refer e-portal	
17.	Submission of Bid	Online	
18.	Contact person	Shri S H Naregal, Special Officer, Hubballi Dharwad Smart City Limited, Hubballi Ph 0836-2355331	
19.	Total Concession Period	15 years (12 months implementation period and 14 years of O&M)	

### 2 Instruction to Bidders

#### 2.1 General Terms for Bidding

- 2.1.1 A bidder bidding as a lead member or consortium is not entitled to submit another bid either as individual or as consortium.
- 2.1.2 Notwithstanding anything to the contrary contained in this RFP, the detailed terms specified in the Concession Agreement shall have overriding effect; provided, however, that any conditions or obligations imposed on the Bidder hereunder shall continue to have effect in addition to its obligations under the Concession Agreement.
- 2.1.3 The Bid should be furnished in the format as defined in various forms in the RFP, clearly indicating the bid amount in both figures and words, in Indian Rupees, and signed by the Bidder's authorized signatory. In the event of any difference between figures and words, the amount indicated in words shall be taken into account.
- 2.1.4 The Bid shall consist of a Revenue Share to be quoted by the Bidder. No grant shall be payable by the Authority to the Concessionaire and the Revenue Share shall be payable by the Concessionaire to the Authority, as per the terms and conditions of this RFP and the provisions of the Concession Agreement.
- 2.1.5 The Bidder/ Concessionaire may be a sole applicant (Single Entity) or a group of entities (hereinafter referred to as 'Consortium'), coming together to implement the Project. The term Bidder/ Concessionaire used hereinafter would therefore apply to both a Single Entity and a Consortium who have submitted the Bid. The successful Bidder is the one selected by Authority to execute this Project and who has been issued LOA by the Authority. The successful Bidder would be liable for the execution of the Project in accordance with the terms of the Concession Agreement.
- 2.1.6 Any condition or qualification or any other stipulation contained in the Bid shall render the Bid liable to rejection as a non-responsive Bid.
- 2.1.7 The Bid and all communications in relation to or concerning the Bidding Documents and the Bid shall be in English language.
- 2.1.8 The documents including this RFP and all attached documents, provided by the Authority are and shall remain or become the property of the Authority and are transmitted to the Bidders solely for the purpose of preparation and the submission of a Bid in accordance herewith. Bidders are to treat all information as strictly confidential and shall not use it for any purpose other than for preparation and submission of their Bid. The provisions of this Clause 2.1.8 shall also apply mutatis mutandis to Bids and all other documents submitted by the Bidders, and the Authority will not return to the Bidders any Bid, document or any information provided along therewith.
- A Bidder shall not have a conflict of interest (the "Conflict of Interest") that affects the Bidding Process. Any Bidder found to have a Conflict of Interest shall be disqualified. In the event of disqualification, the Authority shall forfeit the Bid Security or Performance Security, as the case may be, as mutually agreed genuine pre-estimated compensation and damages payable to the Authority for, inter alia, the time, cost and effort of the Authority, including consideration of such Bidder's Bid, without prejudice to any other right or remedy that may be available to the Authority hereunder or otherwise. Without limiting the generality of the above, a Bidder shall be considered to have a Conflict of Interest that affects the Bidding Process, if:

- the Bidder, its Member or Associate (or any constituent thereof) and any other Bidder, its Member or any Associate thereof (or any constituent thereof) have common controlling shareholders or other ownership interest; provided that this disqualification shall not apply in cases where the direct or indirect shareholding of a Bidder, its Member or an Associate thereof (or any shareholder thereof having a shareholding of not more than 25% (twenty five per cent) of the paid up and subscribed share capital; of such Bidder, Member or Associate, as the case may be) in the other Bidder, its Member or Associate, is not more than 25% (Twenty five per cent) of the subscribed and paid up equity share capital thereof; provided further that this disqualification shall not apply to any ownership by a bank, insurance company, pension fund or a public financial institution referred to in section 4A of the Companies Act, 1956. For the purposes of this Clause 2.1.9, indirect shareholding held through one or more intermediate persons shall be computed as follows: (aa) where any intermediary is controlled by a person through management control or otherwise, the entire shareholding held by such controlled intermediary in any other person (the "Subject Person") shall be taken into account for computing the shareholding of such controlling person in the Subject Person; and (bb) subject always to sub-clause (aa) above, where a person does not exercise control over an intermediary, which has shareholding in the Subject Person, the computation of indirect shareholding of such person in the Subject Person shall be undertaken on a proportionate basis; provided, however, that no such shareholding shall be reckoned under this sub-clause (bb) if the shareholding of such person in the intermediary is less than 26% of the subscribed and paid up equity shareholding of such intermediary; or
- ii. a constituent of such Bidder is also a constituent of another Bidder; or
- iii. such Bidder, its Member or any Associate thereof receives or has received any direct or indirect subsidy, grant, concessional loan or subordinated debt from any other Bidder, its Member or Associate, or has provided any such subsidy, grant, concessional loan or subordinated debt to any other Bidder, its Member or any Associate thereof; or
- iv. such Bidder has the same legal representative for purposes of this Bid as any other Bidder; or
- v. such Bidder, or any Associate thereof, has a relationship with another Bidder, or any Associate thereof, directly or through common third party/ parties, that puts either or both of them in a position to have access to each other's information about, or to influence the Bid of either or each other; or
- vi. Such Bidder or any Associate thereof has participated as a consultant to the Authority in the preparation of any documents, design or technical specifications of the Project.
- vii. Notwithstanding anything stated herein a conflict of interest situation arising at the prequalification stage will be deemed to subsist only, as between such Applicants attracting conflict of interest provisions on account of shareholdings, submit bids under this document.

**Explanation:** 

i.

In case a Bidder is a Consortium, then the term Bidder as used in this Clause 2.1.9, shall include each member of such Consortium. For purpose of this RFP Associate means, in relation to the Bidder/ Consortium Member, a person who controls, is controlled by, or is under the common control with such Bidder/ Consortium Member (the "Associate"). As used in this definition, the expression "Control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly of more than 50% (Fifty percent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, by operation of law.

- 2.1.10 This RFP is not transferable.
- 2.1.11 Any award of Concession pursuant to this RFP shall be subject to the terms of Bidding Documents.

#### 2.2 Consortium

Where the Applicant is a consortium, all the members of the Consortium shall execute a Consortium Agreement setting out clearly the roles and responsibilities of each member of the Consortium and shall submit the same with the HDSCL. Further the members of the Consortium shall not amend the Consortium Agreement without the prior written consent of the HDSCL. Additionally, the consortium shall comply with the following additional requirements:

- i. number of members in a consortium shall not exceed 3(three) including the lead member;
- ii. In case the work is awarded to a Consortium, then all parties to the Consortium shall execute the agreement with HDSCL and all terms shall apply to the consortium members mutatis mutandis.
- iii. The lead bidder shall be jointly & severally responsible for complete scope, whereas partner/s shall be severally responsible only for its/their respective scope subject to the provisions of sub-clause (i) above, the Application should contain the information required for each member of the Consortium;
- iv. Members of the Consortium shall nominate one member as the lead member (the "Lead Member"). The nomination(s) shall be supported by a Power of Attorney, as per the RFP format, signed by all the other members of the Consortium;
- in case an Applicant is a Consortium, then the term Applicant as used in this RFP document, shall include Lead Member of the consortium not exceeding four members.
- vi. The consortium members shall further commit that each such member shall, for a period of 24 months from the date of commercial operation of the Project, be a part of consortium.

#### 2.3 Cost of Bidding

The Bidders shall be responsible for all of the costs associated with the preparation of their Bids and their participation in the Bidding Process. The Authority will not be responsible or in any way liable for such costs, regardless of the conduct or outcome of the Bidding Process.

#### 2.4 Site visit and verification of information

- a) Bidders are encouraged to submit their respective Bids after doing a thorough survey of project site and ascertaining for themselves the site conditions, traffic, location, surroundings, climate, availability of power, water and other utilities for construction, access to site, handling and storage of materials, weather data, applicable laws and regulations, and any other matter considered relevant by them.
- b) It shall be deemed that by submitting a Bid, the Bidder has:
  - o made a complete and careful examination of the Bidding Documents;
  - o received all relevant information requested from the Authority;
  - accepted the risk of inadequacy, error or mistake in the information provided in the bidding documents or furnished by or on behalf of the Authority relating to any of the matters;
  - satisfied itself about all matters, things and information including matters hereinabove necessary and required for submitting an informed Bid, execution of the Project in accordance with the bidding documents and performance of all of its obligations thereunder;
  - o acknowledged and agreed that inadequacy, lack of completeness or incorrectness of information provided in the bidding documents or ignorance of any of the matters referred to in clause 2.5.1 hereinabove shall not be a basis for any claim for compensation, damages, extension of time for performance of its obligations, loss of profits etc. from the Authority, or a ground for termination of the Concession Agreement by the Concessionaire
  - o acknowledged that it does not have a Conflict of Interest; and
  - agreed to be bound by the undertakings provided by it under and in terms hereof.

2.4.1 The Authority shall not be liable for any omission, mistake or error in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP, the Bidding Documents or the Bidding Process, including any error or mistake therein or in any information or data given by the Authority.

#### 2.5 Verification and Disqualification

- 2.5.1 The Authority reserves the right to verify all statements, information and documents submitted by the Bidder in response to the RFP or the bidding documents and the Bidder shall, when so required by the Authority, make available all such information, evidence and documents as may be necessary for such verification. Any such verification, or lack of such verification, by the Authority shall not relieve the Bidder of its obligations or liabilities hereunder nor will it affect any rights of the Authority thereunder.
- 2.5.2 The Authority reserves the right to reject any Bid and appropriate the Bid Security if:
  - a) at any time, a material misrepresentation is made or uncovered, or
  - b) the Bidder does not provide, within the time specified by the Authority, the supplemental information sought by the Authority for evaluation of the Bid.

Such misrepresentation/ improper response shall lead to the disqualification of the 2.5.3 Bidder. If the Bidder is a Consortium, then the entire Consortium and each Member may be disqualified/rejected. If such disqualification / rejection occurs after the Bids have been opened and the Highest Bidder gets disqualified / rejected, then the Authority reserves the right to take any such measure as may be deemed fit in the sole discretion of the Authority, including annulment of the Bidding Process subject to provisions of Section 3 of this RFP. In case it is found during the evaluation or at any time before signing of the Concession Agreement or after its execution and during the period of subsistence thereof, including the Concession thereby granted by the Authority, that one or more of the pre-qualification conditions have not been met by the Bidder, or the Bidder has made material misrepresentation or has given any materially incorrect or false information, the Bidder shall be disqualified forthwith if not yet appointed as the Concessionaire either by issue of the LOA or entering into of the Concession Agreement, and if the Successful Bidder has already been issued the LOA or has entered into the Concession Agreement, as the case may be, the same shall, notwithstanding anything to the contrary contained therein or in this RFP, be liable to be terminated, by a communication in writing by the Authority to the Successful Bidder or the Concessionaire, as the case may be, without the Authority being liable in any manner whatsoever to the Successful Bidder or Concessionaire In such an event, the Authority shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages, without prejudice to any other right or remedy that may be available to the Authority under the Bidding Documents and/ or the Concession Agreement, or otherwise.

#### 2.6 Clarifications

2.6.1 Bidders requiring any clarification on the RFP may notify the Authority in writing or by fax and e-mail in accordance with Clause 1.3. They should send in their queries on or before the date mentioned in the Clause 1.3. The Authority shall endeavor to respond to the queries within the period specified therein, but no later than 15 (fifteen) days prior to the Bid Due Date. The responses will be uploaded on Authority's website and will not be mailed individually.

#### 2.7 Contents of RFP

This RFP comprises the Disclaimer set forth hereinabove, the contents as listed below, and will additionally include any Addenda issued in accordance with Clause 2.8.

Section1	Introduction
Section 2	Instructions to Bidders
Section 3	Evaluation of Bids
Section 4	Fraud and Corrupt Practices
Section 5	Pre-bid Conference
Section 6	Miscellaneous
Section 7	Pre-Qualification & Technical Evaluation
Section 8	Scope of Work for the Concessionaire
Section 9	Responsibility Matrix
Section 10	Revenue Generation Modes

Section 11	Common guidelines/comments equipment/systems	regarding	the	compliance	of
Section 12	Technical Solution				
Section 13	Payment Terms				
Section 14	Timelines, SLA and Penalties				
Section 15	Limitation of Liability				
Section 16	Liquidated Damages				
Section 17	Exit Management				
Annexures					

- 2.7.1 The Authority shall endeavor to respond to the questions raised or clarifications sought by the Bidders. However, the Authority reserves the right not to respond to any question or provide any clarification, in its sole discretion, and nothing in this Clause shall be taken or read as compelling or requiring the Authority to respond to any question or to provide any clarification.
- 2.7.2 The Authority may also on its own motion, if deemed necessary, issue interpretations and clarifications to all Bidders. All clarifications and interpretations issued by the Authority shall be deemed to be part of the Bidding Documents. Verbal clarifications and information given by Authority or its employees or representatives shall not in any way or manner be binding on the Authority.

### 2.8 Amendment of RFP

- 2.8.1 At any time prior to the Bid Due Date, the Authority may, for any reason, whether at its own initiative or in response to clarifications requested by a Bidder, modify the RFP by the issuance of Addenda.
- 2.8.2 Any Addendum issued hereunder will be uploaded on the https://eproc.karnataka.gov.in/eportal/index.seam
- 2.8.3 In order to afford the Bidders a reasonable time for taking an Addendum into account, or for any other reason, the Authority may, in its sole discretion, extend the Bid Due Date.

#### 2.9 Format and Signing of Bid

- 2.9.1 The Bidder would provide all the information as per this RFP. Authority reserves the right to evaluate only those Bids that are received in the required format, complete in all respects and in line with the instructions contained in this RFP.
- 2.9.2 The uploaded bid shall be digitally signed by the authorized person. All the alterations, omissions, additions or any other amendments made to the Bid shall be initialed by the person(s) signing the Bid.
- 2.9.3 The Bidders will submit their Bids online:
  - i. The online submission shall be according to e-procurement guidelines issued by Government of Karnataka as provided on e-procurement website.

- ii. Bidders can prepare and edit their offers number of times before final submission. Once finally submitted, Bidder cannot edit their offers submitted in any case, as e-portal will not facilitate this. No written or online request in this regard shall be granted/entertained.
- iii. Bidder shall submit their offer i.e. Technical bid as well as financial bid in electronic format on the website as mentioned in the RFP.
- iv. Bid should be digitally duly signed by the person who holds the power of attorney for this particular bid.
- v. Financial Bid shall be submitted in the same format as provided in sample format in Annexure II of the RFP.
- vi. The Bid Security (EMD) and Tender Fees shall be submitted as per the requirement of the e-portal.

- 2.9.4 Bidder has to submit the bid through e-portal only.
- 2.9.5 The Bid shall be digitally signed by a person or persons duly authorized to sign on behalf of the Bidder and holding the Power of Attorney.
- 2.9.6 Deleted.

#### 2.10 Bid Due Date and Time

- 2.10.1 Bids should be submitted on or before the Bid Due Date online in the manner and form as detailed in this RFP.
- 2.10.2 Authority may, at its sole discretion, extend the Bid Due Date by issuing an Addendum

### 2.11 Modifications / Substitution / Withdrawal of Bids

2.11.1 The Bidder may modify, substitute or withdraw its Bid multiple times before bid due date.

#### 2.12 Late Bids

- 2.12.1 Bids cannot be submitted online after the bid due date.
- 2.12.2 The eProcurement website will be closed for bid submission post the bid submission date and time.

#### 2.13 Rejection of Bids

- 2.13.1 Notwithstanding anything contained in this RFP, the Authority reserves the right to reject any Bid and to annul the Bidding Process and reject all Bids at any time without any liability or any obligation for such acceptance, rejection or annulment, and without assigning any reasons therefor. In the event that the Authority rejects or annuls all the Bids, it may, in its discretion, invite all eligible Bidders to submit fresh Bids hereunder.
- 2.13.2 The Authority reserves the right not to proceed with the Bidding Process at any time, without notice or liability, and to reject any Bid without assigning any reasons.

#### 2.14 Validity of Bids

2.14.1 The validity of the bids will be as per clause 1.3. In exceptional circumstances, prior to expiry of the original time limit, the Employer may request that the Tenderers may extend the period of validity for a specified additional period. The request and the Tenderers' responses shall be made in writing or by cable. A Tenderer may refuse the request without forfeiting his earnest money deposit. A Tenderer agreeing to the request will not be required or permitted to modify his tender, but will be required to extend the validity of his earnest money deposit for a period of the extension.

#### 2.15 Confidentiality

Information relating to the examination, clarification, evaluation and recommendation for the Bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising the Authority in relation to, or matters arising out of, or concerning the Bidding Process. The Authority will treat all information, submitted as part of the Bid, in confidence and will require all those who have access to such material to treat the same in confidence. The Authority may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or the Authority or as may be required by law or in connection with any legal process.

### 2.16 Correspondence with the Bidder

2.16.1 Unless and except as provided in this RFP, the Authority shall not entertain any correspondence with any Bidder in relation to acceptance or rejection of any Bid.

#### 2.17 Bid Security

The supplier/contractor can pay the Earnest Money Deposit (EMD) in the e-Procurement portal using any of the following payment modes: (For detailed procedures visit e-procurement portal)

- 1 Credit Card
- 2 Direct Debit/ Net Banking
- 3 National Electronic Fund Transfer (NEFT)
- 4 Over the Counter (OTC) payment

The contractor shall furnish the requisite EMD only through e-payment, in favour of Hubballi Dharwad Smart City Limited.

The supplier/contractor's bid will be evaluated only on confirmation of receipt of the payment (EMD) in the Government of Karnataka central pooling a/c held at designated Bank. EMD amount will have to be submitted by the supplier/contractor taking into account the following conditions:

- a. EMD will be accepted only in the form of electronic cash (and not through Demand Draft or Bank Guarantee) and will be maintained in the Govt.'s central pooling account at Designated Bank until the contract is closed.
- b. The entire EMD amount for a particular tender has to be paid in a single transaction For details on e-Payment services refer to e-procurement portal for more details on the process.

#### Refund of EMD

Based on the instructions of Tender Accepting Authority (TAA) the EMD amount of the unsuccessful bidders will be refunded to the respective Bank a/c's of the supplier/contractor registered in the e-Procurement system.

- 2.17.1 Instruments having fixed validity issued as earnest money deposit for the tender shall be valid for 45 days beyond the validity of the tender
- 2.17.2 Any tender not accompanied by an acceptable earnest money deposit and not secured as indicated in Sub-Clauses above shall be rejected by the Employer as non-responsive.
- 2.17.3 The earnest money deposit of unsuccessful Tenderers will be returned within 30 days of the end of the tender validity period specified in Sub-Clause 12.1.

- 2.17.4 The earnest money deposit of the successful Tenderer will be discharged when the Tenderer has signed the Agreement and furnished the required Performance Security.
- 2.17.5 The earnest money deposit may be forfeited:
  - (a) if the Tenderer withdraws the Tender after tender opening during the period of tender validity;
  - (b) if the Tenderer does not accept the correction of the Tender Price, pursuant to Clause 24; or
  - (c) in the case of a successful Tenderer, if the Tenderer fails within the specified time limit to
    - (i) Sign the Agreement; or
    - (ii) Furnish the required Security deposit

# 3 Evaluation of Bids

### 3.1 Opening and Evaluation of Bids

- 3.1.1 The Authority shall open the Bids on the Bid Due Date, at the place specified in Clause 1.3 and in the presence of the Bidders who choose to attend.
- 3.1.2 The Authority will subsequently examine and evaluate the Bids in accordance with the provisions set out in this Section 3.
- 3.1.3 To facilitate evaluation of Bids, the Authority may, at its sole discretion, seek clarifications in writing from any Bidder regarding its Bid.

#### 3.2 Tests of responsiveness

- 3.2.1 Prior to evaluation of Bids, the Authority shall determine whether each Bid is responsive to the requirements of this RFP. A Bid shall be considered responsive only if:
  - a) it is received as per the formats as mentioned in this RFP;
  - b) it is received by the Bid Due Date including any extension thereof pursuant to Clause 2.10.2;
  - c) it is accompanied by the Bid Security as specified in Clause 2.17;
  - d) The Bidder should submit a Power of Attorney as per the format enclosed as Form 2A, authorizing the signatory of the Bid to commit the Bid.
  - e) In case the Bidder is a Consortium, the members of the Consortium shall furnish a Power of Attorney in the format prescribed at Form 2B designating one of the Members, as per the Memorandum of Understanding (MoU), as their Lead Member.
  - f) Any entity, which has been barred, by Authority and the bar subsists as on the Bid Due Date would not be eligible to submit the Bid, either individually or as Member of a Consortium. An undertaking as per the format in Form 17 should be submitted along with the Bid.

- g) Members of the Consortium shall submit a Memorandum of Understanding (MoU), specific to this Project, for the purpose of submitting the Bid as per format provided in Form 18. The MoU shall be furnished on a non-judicial stamp paper of INR 100/-, duly attested by notary public.
- h) it contains all the information (complete in all respects) as requested in this RFP and/or Bidding Documents (in formats same as those specified);
- 3.2.2 The Authority reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained by the Authority in respect of such Bid.

## 3.3 Selection of Bidder

- 3.3.1 Subject to the provisions of Clause 2.13, the Bidder whose Bid is adjudged as responsive in terms of Clause 3.2.1, the Bidder who scores the highest Final Score shall be declared as the Successful Bidder subject to fulfilment of all other provisions of this RFP.
- 3.3.2 The technical and financial capability of the Bidders would be assessed based on the evaluation process and minimum requirements as set by Authority as per Section 7, to be submitted by the Bidders in formats in Annexure I.
- 3.3.3 A Bid that is substantially responsive is one that conforms to the preceding requirements without material deviation or reservation. A material deviation or reservation is one
  - i. Which affects in any substantial way the scope, quality, or performance of the Project, or
  - ii. Which limits in any substantial way or is, inconsistent with the RFP, rights of Authority or the obligations of the Bidder under the Concession Agreement, or
  - iii. Which would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
- 3.3.4 Authority reserves the right to reject any Bid which is non-responsive and no request for alteration, modification, substitution or withdrawal shall be entertained in respect of such Bids.
- 3.3.5 Following would be the Technical Evaluation Methodology:
  - i. Each Technical Bid will be assigned a technical score out of a maximum of 100 points.
  - ii. Only the bidders, who score minimum Technical score of 80 (eighty) or more, will qualify for evaluation of their commercial bids.
  - iii. The commercial bids of bidders who do not qualify technically shall not be opened

3.3.6 The Bids meeting minimum qualifying marks shall be opened and evaluated in Stage II of the Evaluation Process.

#### 3.4 Evaluation of Financial Bids

- 3.4.1 Authority will open 'FINANCIAL BID' of the Bidders, who qualifies in the Technical Evaluation as stated in clause 1.2.1 of the RFP, in the presence of the Bidder's authorized representatives who choose to attend.
- 3.4.2 Upon opening of the Financial Bid, the Bidders shall be given Financial Score based on the Revenue Share with the Authority by the Concessionaire. The Bidder is expected to quote Revenue Share in the format attached as Annexure II. The Bidder who shares the Highest Net Revenue with the Authority among all the Technically qualified Bidders would be awarded the contract.

#### 3.5 Successful Bidder

3.5.1 The Bidder who shares the Highest Net Revenue with the Authority among all the Technically qualified Bidders as per the criteria mentioned above, shall be successful bidder (L1 bidder). The L1 bidder may be called for negotiation, if Authority finds that the negotiation is necessary.

In the event that the Lowest Bidder withdraws or is not selected for any reason, the Authority may invite all the remaining Bidders to revalidate their quote as necessary, and match the Bid of the aforesaid Lowest Bidder (the "second round of bidding"). If in the second round of bidding, only one Bidder matches the Lowest Bidder, it shall be the Selected Bidder. If two or more Bidders match the said Lowest Bidder in the second round of bidding, then the Bidder whose Bid was lower as compared to other Bidder(s) in the first round of bidding shall be the Selected Bidder. For example, if the third and fifth lowest Bidders in the first round of bidding offer to match the said Lowest Bidder in the second round of bidding, the said third Lowest Bidder shall be the Selected Bidder.

- 3.5.2 In the event that none of the other Bidders match the Bid of the highest Bidder, Authority may, at its discretion, accept the quote of next Highest Bidder or invite fresh Bids or annul the Bidding Process, as the case may be".
- 3.5.3 The Successful Bidder shall be notified on its selection in writing or by fax or email. The Successful Bidder shall also be issued Letter of Intent confirming its selection.
- 3.5.4 After selection, a Letter of Award (the "LOA") shall be issued, in duplicate, by the Authority to the Successful Bidder and the Successful Bidder shall, within 7 (seven) days of the receipt of the LOA, sign and return the duplicate copy of the LOA in acknowledgement thereof. In the event the duplicate copy of the LOA duly signed by the Successful Bidder is not received by the stipulated date, the Authority may, unless it consents to extension of time for submission thereof, appropriate the Bid Security of such Bidder as Damages on account of failure of the Successful Bidder to acknowledge the LOA, and the next eligible Bidder may be considered.
- 3.5.5 After acknowledgement of the LOA as aforesaid by the Successful Bidder, it shall cause the Concessionaire to execute the Concession Agreement after submission of performance security, within thirty (30) days of the issue of LOA. The Successful Bidder shall not be entitled to seek any deviation, modification or amendment in the Concession Agreement.
- 3.5.6 In case, the Concession Agreement does not get executed within the period mentioned in Clause 3.5.5, Authority reserves the right to take any such measure as it may deem fit including to annul the bidding process and may invite fresh Bid for the Project. In such a case the entire Bid Security submitted by the Successful Bidder shall be forfeited. However,

- Authority on receiving request from the Successful Bidder may at its discretion, permit extension of time for execution of the Concession Agreement.
- 3.5.7 Authority will notify other Bidders that their Bids have been unsuccessful. Bid Security of other bidders will be returned within 15 days of signing of the agreement or expiry of validity period of Bids whichever is earlier.

#### 3.6 Contacts during Bid Evaluation

3.6.1 Bids shall be deemed to be under consideration immediately after they are opened and until such time the Authority makes official intimation of award/ rejection to the Bidders. While the Bids are under consideration, Bidders and/ or their representatives or other interested parties are advised to refrain, save and except as required under the Bidding Documents, from contacting by any means, the Authority and/ or their employees/representatives on matters related to the Bids under consideration.

# 4 Fraud and Corrupt Practices

- 4.1.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bidding Process and subsequent to the issue of the LOA and during the subsistence of the Concession Agreement. Notwithstanding anything to the contrary contained herein, or in the LOA or the Concession Agreement, the Authority may reject a Bid, withdraw the LOA, or terminate the Concession Agreement, as the case may be, without being liable in any manner whatsoever to the Bidder or Concessionaire, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bidding Process. In such an event, the Authority shall be entitled to forfeit and appropriate the Bid Security or Performance Security, as the case may be, as Damages, without prejudice to any other right or remedy that may be available to the Authority under the Bidding Documents and/ or the Concession Agreement, or otherwise.
- Without prejudice to the rights of the Authority under Clause 4.1.1 hereinabove and the rights and remedies which the Authority may have under the LOA or the Concession Agreement, or otherwise if a Bidder or Concessionaire, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bidding Process, or after the issue of the LOA or the execution of the Concession Agreement, such Bidder or Concessionaire shall not be eligible to participate in any tender or RFP issued by the Authority during a period of 2 (two) years from the date such Bidder or Concessionaire, as the case may be, is found by the Authority to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.
- 4.1.3 For the purposes of this Clause 4, the following terms shall have the meaning hereinafter respectively assigned to them:
  - a) "corrupt practice" means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bidding Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the Authority who is or has been associated in any manner, directly or indirectly, with the Bidding Process or the LOA or has dealt with matters concerning the Concession Agreement or arising therefrom, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the Authority, shall be deemed to constitute influencing the actions of a person connected with the Bidding Process), engaging in any manner whatsoever, whether during the Bidding Process or after the issue of the LOA or after the execution of the Concession Agreement, as the case may be, any person in respect of any matter relating to the Project or the LOA or the Concession Agreement, who at any time has been or is a legal, financial or technical adviser of the Authority in relation to any matter concerning the Project;
  - b) "fraudulent practice" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;

- c) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bidding Process;
- d) "undesirable practice" means (i) establishing contact with any person connected with or employed or engaged by the Authority with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bidding Process; or (ii) having a Conflict of Interest; and
- e) "restrictive practice" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

# 5 Pre-Bid Conference

- 5.1.1 Pre-Bid conferences of the Bidders shall be convened at the designated date, time and place. A maximum of five representatives of each Bidder shall be allowed to participate on production of authority letter from the Bidder.
- 5.1.2 During the course of Pre-Bid conference(s), the Bidders will be free to seek clarifications and make suggestions for consideration of the Authority. The Authority shall endeavor to provide clarifications and such further information as it may, in its sole discretion, consider appropriate for facilitating a fair, transparent and competitive Bidding Process.
- 5.1.3 The Bidders need to submit the pre-bid queries in the following format as per the deadline mentioned in Clause 1.3 of the RFP

#	RFP Document Reference (Section No., Clause No. Page No.)	Content of the RFP requiring clarification	Clarification Sought

## 6 Miscellaneous

- 6.1.1 The Bidding Process shall be governed by, and construed in accordance with, the laws of India and the Courts in Karnataka shall have exclusive jurisdiction over all disputes arising under, pursuant to and/or in connection with the Bidding Process.
- 6.1.2 The Authority, in its sole discretion and without incurring any obligation or liability, reserves the right, at any time, to;
  - suspend and/ or cancel the Bidding Process and/ or amend and/ or supplement the Bidding Process or modify the dates or other terms and conditions relating thereto;
  - b) consult with any Bidder in order to receive clarification or further information;
  - c) retain any information and/ or evidence submitted to the Authority by, on behalf of, and/ or in relation to any Bidder; and/ or
  - d) Independently verify, disqualify, reject and/ or accept any and all submissions or other information and/ or evidence submitted by or on behalf of any Bidder.
- 6.1.3 It shall be deemed that by submitting the Bid, the Bidder agrees and releases the Authority, its employees, agents and advisers, irrevocably, unconditionally, fully and finally from any and all liability for claims, losses, damages, costs, expenses or liabilities in any way related to or arising from the exercise of any rights and/ or performance of any obligations hereunder, pursuant hereto and/ or in connection with the Bidding Process and waives, to the fullest extent permitted by applicable laws, any and all rights and/or claims it may have in this respect, whether actual or contingent, whether present or in future.

#### 6.2 Performance Security

- 6.2.1 The Concessionaire shall for due and faithful performance of its obligations shall submit a Performance Security by way of an irrevocable Bank Guarantee before signing of the concession agreement, for a value equivalent to following:
  - a) One fourth of Annual Revenue Share for corresponding year of the Concession Period.
  - b) For the first year if no revenue is shared by the Concessionaire, then the PBG amount will be 10% of the Capex cost (including taxes) as quoted by the bidder

The Concessionaire shall be responsible for submission of the Performance Security fifteen (15) days prior to commencing of a particular year except the first year.

The Performance Security should be valid for a period of one year at a time and must be renewed every year as per provisions of the Concession Agreement. Such Performance Security shall be issued from any scheduled bank.

- 6.2.2 Till such time the Concessionaire provides the Performance Security, the Bid Security shall remain in full force and effect.
- 6.2.3 In case the Successful Bidder fails to submit Performance Security within the time stipulated, the Authority at its discretion may cancel the LOA placed on the Successful Bidder without giving any notice. Authority shall invoke Performance Security in case the Successful Bidder fails to discharge their contractual obligations during the period or Authority incurs any loss due to Bidder's negligence in carrying out the project implementation as per the agreed terms & conditions.
- 6.2.4 The performance security will be returned to the Concessionaire post 1 month of its expiry, provided the Concessionaire has renewed the BG and submitted a fresh performance security to the Authority, if required
- 6.2.5 The Performance Security should be issued by any scheduled bank as per the format provided in the Annexure III.

# 7 Pre-Qualification & Technical Evaluation

## 7.1 Pre-Qualification Criteria

#	Parameter	Prequalification Requirement	Supporting Documents to be attached
1.	Legal Entity	Lead Bidder and consortium members (in case of consortium) should be:  A company should be registered in India or abroad	<ul> <li>Copy of Certificate of Incorporation</li> <li>Copy of Registration Certificates</li> </ul>
2.	Financial: Turnover from IT/ ITeS/Telecom	Average Annual Turnover of the Sole/Lead Bidder from IT/ ITeS/Telecom hardware, software services during the last three financial years, i.e., 2014-2015,2015-2016 and 2016-2017 (as per the last published audited balance sheets), should be at least Rs.500 Crores.	Audited balance sheet for the last three years
3.	Blacklisting	Bidder and Consortium partner should not have been blacklisted by Govt. of India/ Govt. of Karnataka on the date of bid submission.	Self-certificate on company's letter head duly signed by company secretary.

#### 7.2 Technical Evaluation

#	Evaluation Criteria	Maximum Marks Allotted
1.	Turnover	5
2.	Profitability	5
3.	Relevant Experience	40
4.	Presentation along with Approach & Methodology	35
5.	Human Resource	15
Tot	al	100

Technical Bids receiving marks greater than or equal to cut-off marks in each competency group will be eligible for consideration in the subsequent round of evaluation. If required, HDSCL may seek specific clarifications from any or all Concessionaire(s) at this stage.

HDSCL will evaluate the technical proposal of the Concessionaire with regard to the solutions offered, technology proposed, technical professional(s) and time-frame etc. HDSCL will invite the Concessionaire for technical presentation and discussions on the project. Concessionaire is expected to depute only those officials for technical presentations who will be responsible for providing the leadership to the project. Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.

## 7.2.1 Technical Evaluation Criteria

#	Evaluation Criteria	Maximum Marks Allotted	Documents/Forms required	
1	Concessionaire's Turnover	5	• Audited balance sheet for the last three years	
1.1	Average Annual Turnover of the Sole/Lead Bidder from IT/ ITeS/Telecom hardware, software services during the last three financial years, i.e., 2014-2015,2015-2016 and 2016-2017 (as per the last published audited balance sheets), should be at least Rs.500 Crores.  • >= 1000 crores = 5  • >= 750&<1000 crores = 3  • >= 500 &<750 cores = 1	5		
2	Profitability	5	• Audited Profit & Loss statement for the last three	
2.1	The average annual profit of the Sole/Lead Bidder for the past three years 2014-2015, 2015-2016 and 2016-2017;  • >= 150 crores = 5  • >= 100 &<150crores = 3  • >= 50&< 100 crores = 1	5	years	
3	Bidder's Experience	40	• Work done certificate /Completion Certificate	
3.1	Any consortium partner or Single Bidder or Group Company of single Bidder / consortium partner should have completed projects of Intelligent Poles/Ground Based Monopoles/Telecom Towers/ Site integration in India. The number of installation should be as follows;  • >= 20 = 10  • >= 15 &<10 = 7  • >= 7 & <10 = 5	10	issued by the Employer.	
3.2	Any consortium partner or Single Bidder or Group Company of single Bidder / consortium partner should have completed projects of Public Wi-Fi and related network infrastructure projects in India. The number of Access Points installed and in working condition in India;  • >= 500 = 10	10		

#	Evaluation Criteria	Maximum Marks Allotted	Documents/Forms required
	• >= 250&<500 = 7		
	• >= 100&<250 = 5		
3.3	Any consortium partner or Single Bidder or Group Company of single Bidder / consortium partner should have completed projects for implementation of Smart LED for street light of 1000 Smart LED luminaires or higher in India.  • >= 2000 = 10  • >= 1500 &<2000 = 7	10	
	• >= 1000 &<1500 = 5		
	Smart LED: On/Off remotely (please refer scope for more understanding)		
	Or,		
	Any consortium partner or Single Bidder or Group Company of single Bidder / consortium partner should have completed projects for outdoor CCTV installation of 100 IP based digital cameras with Central monitoring system in India  • >= 200 = 10  • >= 150&<200 = 7  • >= 100 &<150 = 5		
3.4	Any consortium partner or Single Bidder or Group Company of single Bidder / consortium partner should have completed projects of executing centralized communication/ monitoring of ICT infra through Network Operation Center, including Collection of Data for MIS reporting	10	
	The number of nodes/sites;		
	• >= 40,000 = 10		
	• >= 20,000 &< 40,000 = 70		
	• >= 10000 &< 20,000 = 5  Procentation with Approach & Mathadalagy	0.5	- Taladal Da e e e
4	Presentation with Approach & Methodology	35	Technical Presentation with Approach & Methodology
4.1	Technical Presentation of the overall solution including the Approach & Methodology indicating the sources of revenue and implementation schedule and live site demonstration of overall solution and network operation center	35	

#	Evaluation Criteria	Maximum Marks Allotted	Documents/Forms required
6	Human Resources	15	• Detailed CV as per the format in the RFP
6.1	Bidder should deploy following resources on-site during the concessionaire period;  • Project Manager (Lead Bidder): 1  • Smart LED Expert: 1  • Command & Control Center Expert: 1  • Project Finance Expert: 1  • O&M Expert (Lead Member): 2  • Public Wi-Fi Expert: 1  • Surveillance & Security Expert: 1  The marks will be given on the basis of Education (relevant qualification in the domain), years of relevant experience and number of relevant projects undertaken.	15	

## Experience and qualification criteria for Human Resources (6.1)

ris lind below						
Key person	Qualification Required	Experience required in no of years	Experience details			
Project Manager (Lead Bidder): 1	B Tech, MBA, PMP Certified	15+	Should have executed atleast one smart pole project on PPP mode for one city			
Smart LED Expert: 1	B Tech	10+	Should have executed at least 5 smart LED project. Should have designed smart LED solution for 5 cities			
Command & Control Center Expert: 1	B Tech/M Tech	10+	Should have executed at least 3 smart city command control center setup  Should have designed smart city command control center for 5 cities			
Project Finance Expert: 1	M.Com/MBA (Finance)	10+	Should have executed at least 5 smart city projects worth 100 Cr + on PPP mode			
O&M Expert (Lead Member): 2	B Tech	7+	Should have managed atleast 7+ telecom tower management and optic fibre rollout/O&M across city as O&M lead			
Public Wi-Fi Expert: 1	B Tech	7+	Should have managed atleast 5+ public wifi project			
Surveillance & Security Expert: 1	B Tech	7+	Should have executed at least 3 city survelliance and security solution  Should have designed survelliance and security solution for atleast 5 smart cities			

# 7.3 Scope of Work for the Concessionaire

The Concessionaire shall be solely and exclusively responsible to design, implement and maintain on a BOOT (Build, Own, Operate, and Transfer) model the solution as mentioned in this RFP and to provide the services as specified.

The following Smart components needed to be implemented as part of the RFP;

- Intelligent Poles
- Smart LEDs

- Public Wi-Fi
- Digital Billboards
- Environmental Sensors
- Panic Button & Emergency Call Box
- Public Addressal System
- Integration with Command & Control Center

As the concessionaire period is for 15 years, hence for any technology advancement the project infra should support the latest technology

The Concessionaire has to deploy at least <200> intelligent poles in the project with a minimum height of 12 meters. In-line with the rise in telecom requirement within the city, the Concessionaire is allowed to install more poles during the first 5 years of concession period. The locations of such poles will be finalized by Concessionaire post survey in the project area and as approved by HDSCL

The detailed Scope of Work with respect to implementation of Smart Components is mentioned in the subsequent sections. However, following is an indicative scope of work for Bidder's reference;

- The number of equipment specified in the Bill of Material is minimum. It would be the responsibility of the Concessionaire to supply all the required products and equipment (active and passive) which are required to complete and deliver the services at the sites (e.g. there should be seamless roaming and no Wi-Fi dark spots in any site). It would be inclusive of but not exclusive to:
  - Additional items/equipment/ components required if any to complete solution and project operations
  - Timely delivery to various locations as per the agreed timelines
  - Transporting the items with no extra / additional charges (road tax, excise, toll tax, insurance, etc.) would be considered for payment
  - Safety The Concessionaire would be responsible for maintaining adequate safety measure at the storage points. The Concessionaire must not bid/supply any equipment that it likely to declared end of sale within three years from the date of supply. The Concessionaire would have to replace any such equipment with latest or at least the equivalent configuration product from same OEM with no additional cost to HDSCL
- Concessionaire must have highly qualified resources with experience in the field of ICT and Smart Components as envisaged in the RFP. Proposal must include copies of certifications and resumes for all resources who will be responsible for project execution throughout the concessionaire period.
- Resources for Operation & Maintenance must be positioned by concessionaire on permanent basis, at project site, throughout the concession period to address the arising problems and its rectification such that the SLA is not breached.

- The Concessionaire shall be responsible for preparation and submission of detailed UAT schedules/ procedures/ formats. After acceptance of UAT reports by HDSCL, the entire infrastructure (including network) would be deemed to have been commissioned.
- The Concessionaire shall develop a plan to procure, install, and configure all the necessary
  items for the implementation of smart components in a timely fashion in different phases.
  There should be a tracker created and shared with HDSCL that would track all the
  commissioning of the equipment, the timelines adhered to and the compliance to the
  requirements
- Helpdesk & FMS support
- Provision of 24/7 Help Desk System for technical / operational support
- Maintenance of IT/ Non-IT Infrastructure
- Providing Technical & Operational Manpower for seamless system operations
- The Concessionaire shall submit the Intelligent Pole design to HDSCL for approval prior to deployment.
- Concessionaire will obtain all necessary approvals, sanctions, licenses in the name of
  Concessionaire for installation of proposed equipment pertaining to the project from the
  concerned competent authorities and maintain validity of the same at all times during the
  project duration. Concessionaire will bear the charges or pay deposits or any other amount
  for such approvals/licenses/sanctions as may be necessary. HDSCL will facilitate the
  requirement/clearances as and when required.

#### 7.4 Intelligent Poles

The Concessionaire has to design, develop, manage and operate Intelligent Poles to provide telecom connectivity within the project area. HDSCL will provide RoW, free of cost, for installation of Intelligent Poles.

The Concessionaire need to install at least 200 such poles within the 12 months of implementation, however basis the telecom requirement of the project area Concessionaire may install additional intelligent poles during the Concessionaire period up to first 5 years of the concession period. The revenue share from these additional poles shall be as per the additional pole revenue quoted by the Concessionaire. Further, the concession period may be extended on mutually agreed terms and conditions.

The Intelligent Pole should be capable of housing following smart elements on the poles;

- Mobile Antennas for 2G/3G/4G/Small Cell etc.
- Surveillance Camera
- Access Points for Public Wi-Fi
- Smart Billboards

- LED based Smart Street Lights (Wattage and number of luminaires per pole will depend on the finalized location of Intelligent Poles)
- Public Addressal System
- Environmental Sensors
- Panic Button and Emergency Call Box

The Concessionaire has to replace the existing street poles with the Intelligent Poles wherever required. The dismantling of existing street poles will be done by the Concessionaire and handed over to HDSCL store in working condition without any damage to the light fixture. If Concessionaire comes across any deficiency/damage of the equipment during the site survey, the same needed to be brought to notice of HDSCL before dismantling. HDSCL will maintain the daily stock record of the old fittings, cables, brackets and feeder panels replaced and handed over by the contractor to HDSCL (store department). The store keeper will issue a challan or copy of receipt to Contractor listing the material handed over with quantities. The logistics cost of dismantling will initially be borne by the Concessionaire, however the same can be reimbursed by raising a valid invoice to HDSCL with all the details/justifications and original receipts

#### 7.5 LED based Smart Street Light

Electric street lights are essential elements of a municipal environment and services. They affect resident sense of safety while influencing a city's ability to create an inviting environment for business and tourism. Unfortunately, outdoor lights are also a major energy draw. Therefore following are desired in designing, implementation and O&M of LED based Smart Street Lighting:

- Reduce energy consumption, cost, and its maintenance
- Enhance situational awareness, real-time collaboration, and decision making across city
- Add intelligent IT innovations to civic utilities, public safety without adding significantly more physical infrastructure
- Real-time data communications with low latency (or minimal delay), to improve operational efficiency
- Creation of the foundation of Smart City Hubballi-Dharwad by implementing a smart city platform through 'networked' LED street light installation and an advanced Centralized LED Control & Monitoring application
- Ensure efficient operation and maintenance of street lighting services using the smart city platform

The Concessionaire need to install LED based Smart Lights on the Intelligent Poles as per recommended level of illumination as per bureau of Indian standards.

#### 7.5.1 Scope of Work

The Concessionaire need to install LED based Smart Lights on the Intelligent Poles. Each and every LED should be monitored and controlled from the Command and Control Center with the aid of a

centralized software. The luminaires shall have the facility of two or more steps dimming and luminaires. However, area-wise dimming feature will be approved by HDSCL basis the nature of road, pre-requisites of a locality or any directives issued by any government department etc.

The scope of work includes but is not limited to;

- Supply, installation, testing and commissioning, O&M of all supplied and installed equipment system to meet the requirement as defined in specifications
- All the machineries and equipment required for implementation of the project is to be arranged by the Concessionaire, HDSCL has to provide only authorization and necessary clearance and permission if required
- The quality of the luminaries/ Lux level will be maintained by Concessionaire during the project life. The Concessionaire has to follow all necessary safety guidelines/directions issued by Municipal Corporation from time to time
- The Concessionaire will have full responsibility of warranty of LED's/fixture for the entire concession period and warranty will start from the date of project go-live
- Design, Installation, testing and O&M of Central Management Software for remotely monitoring and Controlling of LED luminaires from the Command and Control Center
- Implementation of National Lighting Code illumination parameters towards safety of
  motorists & pedestrians. Concessionaire need to highlight the areas with suitable
  justification where the NLC parameters could not be followed due to deficiency in
  current infra.
- Any other permission apart from RoW will be taken by Concessionaire, however HDSCL will facilitate the requirement/clearances as and when required

#### 7.6 Public Wi-Fi

Hot Spot Wi-Fi serves as the foundation for creating a connected city to access the wireless internet service with ease and convenience. For this purpose HDSCL has identified locations within the Municipal limits of Hubballi-Dharwad where these services has to be provided to citizens. As a part of this initiative free Wi-Fi need to be provided; Wi-Fi shall be free for the first 30 Minutes per Mobile subscriber per day or 20MB per day and an aggregate limit of 600 MB per month whichever is achieved first. Beyond the specified limit the Wi-Fi will be chargeable and Concessionaire can earn revenue which will be shared on a revenue share model with HDSCL.

HDSCL has identified 42 locations to be hotspots for the public Wi-Fi. The Concessionaire will do a detailed survey at these 42 locations and will deploy the access points as required for providing the Wi-Fi services. As a part of Wi-Fi solution the Concessionaire needs to provide Wi-Fi controller, DNS, Internet bandwidth from Internet Service Provider (ISP). 1 Service Set Identifier (SSID) for E governance (for Client) shall be reserved.

For installation of Access Points, if there is any requirement of additional poles, the same will be provided by Concessionaire at its own cost with prior approval from HDSCL.

Concessionaire will adhere to the following QoS parameters;

- Bandwidth Commitment: Minimum 512 kbps per user (1:1) within the designated area
- 24X7X365 wireless network availability at 99% uptime
- Auto-connect facility across all Wi-Fi hotspots
- 100 concurrent users connected to an AP

#### 7.6.1 Scope of Work

The Concessionaire shall be responsible for establishment of Wi-Fi network at the selected location in the Hubballi-Dharwad, these locations are normally tourist spots, public places or any other identified place by HDSCL. Concessionaire shall provide Operation & Maintenance throughout the concession period from the date of project go-live. For phase wise commissioning, go-live will be in phases and hence O&M will be commenced for the go-live components accordingly.

The broad scope of work for the Concessionaire during the entire project period would be as under;

- The Concessionaire Shall undertake a Site-survey of all the specified sites and submit a site wise survey report to HDSCL mentioning the location & number of Access Points (APs) required to be installed at each site.
- Concessionaire proposal must provide all the necessary electronic components needed to
  provide wireless access to the public. This includes but is not limited to Wireless controllers,
  Access points, Power over Ethernet devices, L2 and L3 managed switches, Routers, UPS,
  passive components i.e. UTP, OFC, Electric wires, racks etc.
- The Concessionaire shall install the Access Points at approved locations (on directions by HDSCL after approval of Site-Survey report). The power points, connectivity and LAN points will be the responsibility of Concessionaire. HDSCL will facilitate the requirement/clearances as and when required
- Concessionaire shall properly mount the Access Points at approved locations with external mounting kit as per OEM standard practice.
- The Concessionaire shall install the AP Controller, NMS, NAS and required software at Command & Control Center
- The Patch Cords, Power adapter, Power cables, connectors, mounting kit and other required accessories for successful commissioning of the Wi-Fi network shall be provided by the Concessionaire and shall be properly cased and tied such that it doesn't get broken
- All intended coverage areas must be covered with wireless AP/array for high rate data applications.
- The controller should be configured with 1 + 1 in Active-Active Load Balancing mode.
- Each controller should be ready for supporting 1000 APs and each AP should support 75 concurrent users/devices from day one to run in Active Standby / Active Active Load Balancing Mode.
- Each wireless device (not system) must support per SSID traffic shaping and limiting at linerate at the Access Point (not controller). This is to prevent additional data on the network

- Concessionaire must include PoE-injectors in the pricing and clearly define where PoE injectors are needed
- System must include a centralized management system that provides a platform for central management of all devices across the network
- PVC case wiring should be done for the entire required passive cabling i.e. UTP and electrical wiring
- Concessionaire will ensure a secure Wi-Fi connectivity and internet access through user
   Login ID and password to all the subscribers with central authentication mechanism
- Concessionaire shall ensure that unique user ID and Password do not have provisions for simultaneous multiple logins
- Policy on validity of the user ID and Password for internet access should be configurable as per the requirement.
- Wi-Fi access points (APs) must be configured to use cryptographic keys or other methods to
  ensure that only authenticated users can use the Wi-Fi services
- Internal / External AAA server should be deployed ensuring DOT guidelines for providing public Wifi access. The log trails for any specific user shall be made available online for at least last 3 months and the backup shall be kept for one year.
- The system should be capable of managing automatically upgrade or degrade of end-user's account after threshold usage (download/time limit) is reached
- The Wi-Fi network should be secure and conform to the industry standard security requirement. Concessionaire shall suggest and help HDSCL team to deploy policies at various levels (i.e. on firewall, IDS, antivirus etc.) to prevent any attack/intrusion in the Wi-Fi network
- The Concessionaire shall be responsible for integrating the Wi-Fi Network with the existing LAN/SWAN network
- The Concessionaire shall be responsible for integrating the available payment gateway(s) at HDSCL for making online payments (if any) according to respective plans for internet usage

#### 7.7 Optical Fiber

HDSCL does not have any existing fiber network of their own, hence the Concessionaire may either utilize an existing fiber network of any private firm (including their own), however in this scenario Concessionaire will submit an agreement signed with the private firm to utilize their existing fiber in Hubballi-Dharwad or Concessionaire may lay their own fiber to connect the Intelligent Poles.

In the former scenario Concessionaire need to lay additional fiber from the nearest Point of Presence (PoP) to provide connectivity up to the poles. Pulling strings (cables) must be inserted and ducts properly closed at all-ends so as to protect it from dust, soil, water etc. The O&M of the additional fiber will be the responsibility of the Concessionaire throughout the Concessionaire period.

HDSCL will provide RoW, free of cost, for laying additional fiber. The Concessionaire can install maximum three empty ducts along with filled up duct, to monetize it. The Concessionaire can monetize the laid fiber by leasing it to the service providers, Broadband Services to Corporate / Business using the OFC network installed by Concessionaire in this project.

The Concessionaire will hand over 4 pair of OFC Cores from each OFC Cable, to HDSCL, from all such additional OFC Network laid as part of this project. This shall be used for other project(s) of HDSCL

The Concessionaire will re-instate/restore/repair the roads damaged due to laying of fiber. The Road Re-instatement (RI) charges will be reimbursed to Concessionaire by HDSCL as per HDSCL approved rates.

#### 7.8 Surveillance

City Safety and Security solution helps protect cities against crime, terrorism, and civil unrest, planning events, monitoring of infrastructure, encroachments etc. It helps law enforcement monitor public areas, analyze patterns, and track incidents and suspects enabling quicker response.

Keeping the above perspective, HDSCL for this purpose is intending to implement the high definition IP based surveillance cameras across various locations within Hubballi-Dharwad. The exact location will be finalized after detailed survey by the Concessionaire, post award of the contract. The cameras shall be housed on the intelligent/street poles. It shall also be possible to adjust the camera focus from a remote location.

For installation of CCTV(s), if there is any requirement of additional poles, the same will be provided by Concessionaire at its own cost with prior approval from HDSCL.

Following is an indicative scope of work;

- Installation and commissioning work includes installation of all required DVRs, cameras, monitors, cables laid in PVC conduit etc, commissioning all the systems at the pre-defined locations in the project area
- The Concessionaire shall prepare the final camera distribution plan at all the camera locations in discussion with HDSCL
- Actual location for placement of pole & number of cameras at each location, type of cameras, fixation of height & angle for the cameras would be done carefully to ensure optimum coverage
- Concessionaire should use the industry best practices while positioning and mounting the cameras. Some of the check-points which need to be adhered by the Concessionaire while installing / commissioning cameras are as follows:
  - Ensure Project objectives are met while positioning the cameras, creating the required field of view
  - Ensure appropriate housing is provided to protect camera from the on field challenges
  - Carry out proper adjustments to have the best possible image

- o Ensure that the pole /tower/ mast implementation is vibration resistant
- Ouring implementation period, in case any camera is damaged by a vehicular accident (or due to any other reason outside the control of Concessionaire) and needs repair, then the Concessionaire will need to repair / have the new camera within 15 days of the incidence. Damages are to be borne by Concessionaire in such cases through proper insurance.
- Concessionaire shall undertake detail assessment for integration of the Surveillance System with the Geographical Information System (GIS), developed by HDSCL, so that physical location of cameras are brought out on the GIS map. Concessionaire is required to carry out the seamless integration to ensure ease of use of GIS in the Surveillance System Applications/Dashboards in Command Control Centers. GIS Base Map shall be developed or procured, supplied and integrated by the Systems Integrator at 1:1000 scale or better with all surveillance cameras located on the map apart from the updated map of all buildings, utilities and roads. If this requires field survey, it needs to be done by the Concessionaire. If such a data is already available with HDSCL, if shall facilitate to provide the same. Concessionaire is to check the availability of such data and it's suitability for the project. Concessionaire is required to update GIS maps (of HDSCL) from time to time
- Concessionaire will have to identify and obtain necessary legal / statutory clearances for
  erecting the poles and installing cameras, for provisioning of the required power, etc.; the
  same will be facilitated by HDSCL. It is important to mention that a timely communication
  and required follow-up will be required by the Concessionaire for the clearances
- During concession period, in case the pole is damaged by a vehicular accident (or due to any
  other reason outside the control of Bidder) and needs repair, then the Bidder will need to
  repair / have the new pole within 15 days of the incident. Damages are to be borne by Bidder
  in such cases through proper insurance
- For the successful commissioning & operation of the edge devices and to provide the video feeds to Command Control Centers, the Concessionaire will be required to provide electricity to the edge devices through the aggregation points.

If at any stage the CCTV online data is required by Police Control Room/Command Center, the concessionaire shall support in providing the data in soft copy

#### 7.9 Digital Bill Board

As a part of the beautification of certain specific locations in the city of Hubballi-Dharwad, Concessionaires are required to implement digital billboards housed on intelligent poles. HDSCL shall provide exclusive advertisement rights to Concessionaire for the digital billboards on the Intelligent Poles.

HDSCL will have rights for usage of advertisement display boards for a minimum of 10 minutes per hour per day for displaying news/information for public convenience. These sites could provide information about various schemes, policies of Government being implemented for the welfare of citizens of Hubballi-Dharwad.

It shall be possible to change the advertisements /Messages on these billboards from a centralized location.

#### 7.10 Environmental Sensors

Bidders are required to provide the environmental sensor for providing air quality, temperature, and humidity. These Sensors shall be mounted on the smart poles. The management and control of this environment sensors will be done from the command and control center. Smart environment sensors will gather data about pollution, temperature, rains, levels of gases in the city (pollution) and any other events on a daily basis. It is for information of citizens and administration to further take appropriate actions during the daily course/ cause of any event. Smart environment sensors will enable citizen to keep a check on their endeavors which impact environment and enable the city to take remedial action if required. These environmental sensors can also be connected via 3G or 4G wireless network.

The locations to implement Environmental Sensors will be finalized by concessionaire in consultation with HDSCL at the time of implementation. Concessionaires are required to integrate environmental sensor for providing air quality, temperature, and humidity. These Sensors should be integrated into the intelligent poles seamlessly and they should blend with Smart pole aesthetically. It is expected that each lake and roads in the ABD area will have at least one environment sensor. Each environmental Sensor should be able to measure following parameters

- Temperature
- Humidity
- CO
- CO2
- NO2
- SO2
- PM2.5
- PM 10

The environmental data from these sensors shall be sent to Command & Control Center.

#### 7.11 Panic Button and Emergency Call Box

Concessionaires are required to provide the Emergency Panic Button and Emergency Call box (two way communication with designated Control Centre Helpdesk). The Panic Button and Emergency Call Box will be installed on intelligent poles. The emergency box (or panic button) will enable citizens to establish a two way audio (microphone and speaker) – video (video camera and a video screen) communication link with operation staff at HDSCL command & control center (or other locations where control solutions is deployed) through a press of a button.

- A high quality digital transceiver, to be placed at certain traffic junctions determined by the HDSCL. Key is to make it easily accessible by public
- The unit shall preferably have a Double button which when pressed, shall connect to the Command Centre/Police Command Centre/other locations over the existing network infrastructure setup for project.
- These are to be placed only at select locations such as Police/Traffic islands or pedestals or within the vicinity of constant Police supervision or CCTV field of view to avoid misuse and vandalism of the call box.

#### 7.12 Smart Bill Boards

Smart Billboard should be able to house small cell or limited macro main remote telecom sites and site build solution with space for all necessary equipment and functions that radio sites in mobile networks require. This should be self -contained, multi-application intelligent site that is aesthetically unique and functionally viable. Height of smart billboard should be of 9-10 mtr height. It should provide Space for telecom equipment, should be able to support 2G, 3G, LTE, WiFi, 5G etc. It should have ability to house power plant and battery. It should have provision for incoming power input cables and fiber connectivity. It can be Floor or Ground Mounted. It should be Vandal Proof. It should have display of minimum 60 inch. It should be Aesthetical & Camouflaged finish with respect to environment. Bidders are required to provide conventional advertisement panel. The Dimension of these panels shall be minimum of 4 feet Vertical x 3 feet Horizontal or vice versa and should be able to sustain high wind speed. The total media available on each pole shall not be less than 24 sq feet. The material used for these panels shall be galvanized iron and shall not be less than 1 Inch. These panels should improve the aesthetics of the city.

#### 7.13 Public Addressal System

The intelligent poles shall also house public Addressal system (PA system). PA system is an electronic sound amplification and distribution system with a microphone, amplifier and loudspeakers, used to allow a person to speak to a large public, for example for announcements of movements at large and noisy air and rail terminals or at a sports stadium or amplify other audio content, such as recorded music or the live sound of a band. These Public Addressal system shall be accessible from integrated command and control center and announcement can be controlled remotely for individual or multiple PAS system.

- The Public Address (PA) System should be capable of addressing citizen at specific locations from command and control center.
- The proposed system shall contain an IP based announcing control connected to the command and control center.
- The announcement which is made from the command and control center using the IP based announcing console shall be routed via the network designed as a part of this tender to the various PA system end devices deployed across the city.

- PA system's master controller should have function keys for selecting the single location, group of locations or all locations, simple operation on broadcasting to any terminal or separated zones.
- PA system's master controller should facilitate multiple MIC inputs and audio inputs.
- The proposed system would also function as a speaker system which would play music during mornings and evenings, especially at parks and other similar areas where people gather in groups.

#### 7.14 Integration with Command & Control Center

The Concessionaire will integrate the implemented solution with the Centralized Command & Control Center of Hubballi-Dharwad.

Following will be the integration requirement;

- Intelligent Poles
  - Location of all poles on GIS map
  - o Permitting the use of Intelligent Poles for smart elements as listed in the RFP
- Smart Street Lights
  - Location of the street lights on GIS maps
  - Integration of Street Lights with the proposed Centralized Control and Monitoring System (CCMS) that is being deployed for city-wide monitoring of LED street lights.
- Public Wi-Fi
  - Location of all the Wi-Fi Access Points to be mapped on GIS
  - o Wi-Fi dashboard and use cases for Wi-Fi user management
- Surveillance Camera
  - Feed of camera up to the Centralized Command and Control Center
  - Location of all the cameras to be mapped on GIS
  - VMS for Parking Violation and Crowd Monitoring
- Digital Billboards
  - Control the display of advertisements on billboards through Centralized Command and Control Center
- Environmental Sensors
  - Location of all the sensors to be mapped on GIS

- Environment data to be collected at Command & Control Center
- Panic Button and Emergency Call Box
  - o Location of all the devices to be mapped on GIS
  - Two way communication between the command & control center and Panic Button & Emergency Call Box
- Public Addressal System (PAS)
  - o Location of all PAS to be mapped on GIS
  - Communication between command & control center and PAS

#### 7.15 Partial Acceptance Testing & Final Acceptance Testing of Project

The acceptance test for the Project shall be carried as per the guidelines issued by the Authority or any duly appointed Independent Evaluation Agency (IEA) by the HDSCL. The Concessionaire should cooperate with the IEA to ensure successful completion of acceptance tests.

The acceptance test shall consist of a Partial Acceptance Test (PAT) and Final acceptance test (FAT) depending on the phase wise implementation. The Concessionaire shall submit a detailed acceptance testing document at the stage of planning and HDSCL& the Concessionaire shall mutually agree upon the same.

#### 7.15.1 Partial Acceptance Test

Partial Acceptance Test shall involve scrutiny of documents for various IT / Non-IT components to verify if the specifications conform to the technical and functional requirements mentioned in the Tender and subsequent corrigendum.

HDSCL reserves right to conduct physical inspection of the equipment delivered to ensure that they arrive at the sites in good condition and are free from physical damage and incomplete shipments and shall return the products to the supplier at the supplier's expenses if required quality is not maintained. Physical inspection of hardware will also include physical checking and counting of the delivered equipment in presence of the Concessionaire. This equipment will only be acceptable as correct when each received item corresponds with the checklist that will be prepared by the Concessionaire prior to shipment. Any shortfalls in terms of number of items received may render the delivered equipment incomplete. Concessionaire shall submit test reports on performance for the critical components like LED luminaires, cameras, active network equipment's, servers, video wall, etc.

HDSCL reserves the rights to partially accept the completion of a component by issuing a partial completion certificate to the Concessionaire. Basis the certificate Concessionaire can start generating the revenue. However, authority may devoid Concessionaire of generating revenue if there is a delay in final completion of the activities.

Before rendering the certificate HDSCL would do the testing in a real time condition for at least 15 days of trouble free operation.

#### 7.15.2 Final Acceptance Test

Post project implementation phase, the Concessionaire would need to carry out Final Acceptance Testing in 2 different phases - (a) Unit Testing and (b) Integration Testing. These tests would be carried out based on the test cases developed and validated by HDSCL. Apart from the functional testing of the entire system components, the testing would also verify following aspects:

- Configuration Testing (to ensure that all the components are configured properly)
- Security Testing (to review & evaluate security controls)

Final acceptance certificate shall be issued by HDSCL to the Concessionaire after successful testing in a real time condition for at least 15 days of trouble free operation. The date on which final acceptance certificate is issued for final phase shall be deemed date of the successful commissioning of the Project. Any delay by the Concessionaire in the performance of its contracted obligations shall render the Concessionaire liable to the imposition of appropriate liquidated damages or termination, unless agreed otherwise by HDSCL.

#### 7.16 System Documents, User Documents

The Concessionaire will provide documentation, which should follow the ITIL (Information Technology Infrastructure Library) standards. This documentation should be submitted as the Project undergoes various stages of implementation. Indicative list of documents include:

- Project Commencement Documentation: Project Plan in giving out micro level activities with milestones & deadlines.
- Cabling Layout: Systems Integrator shall submit the detailed cabling layout including cable
  routing, telecommunication closets and telecommunication outlet/ connector
  designations. The layout shall detail locations of all equipment and indicate all wiring
  pathways. The drawings will HLD, LLD, Circuit, SLD etc in line with the scope of work
- Equipment Manuals: Original Manuals from OEMs.
- Installation Manual: For all the application systems
- Training Material: Training Material will include the presentations used for trainings and also the required relevant documents for the topics being covered. Training registers should be submitted for same.
- User Manuals: For all the application software modules, required for operationalization of the system.
- System Manual: For all the application software modules, covering detail information required for its administration.
- Standard Operational Procedure (SOP) Manual: The Bidder shall be responsible for preparing SOP Manual relating to operation and maintenance of each and every service as mentioned in the RFP. The draft process (SOP) document shall be formally signed off by HDSCL before completion of Final Acceptance Test. This SOP manual will be finalized by

the Concessionaire within 2 months of operationalization of each phase, in consultation with the HDSCL and formally signed off by the HDSCL.

Note: The Concessionaire will ensure upkeep & update all documentation and manuals during the concession period. The ownership of all documents, supplied by the Concessionaire, will be with HDSCL. Documents shall be submitted in two copies each in printed (duly hard bound) & in softcopy formats.

#### 7.17 Helpdesk Setup

- Concessionaire will set up a 24X7 centralized helpdesk for the project for entire concession period
- The help desk will handle user queries and issues relating to implemented solution
- Helpdesk is required to ensure that users can log calls and complaints for any technical issues they face while accessing the system. The following is included in the scope of work of the Concessionaire;
  - Help Desk to have Interactive Voice Response (IVR) system for first level of call segregation
  - Accordingly, Standard Operating Procedures (SOPs) shall be created by Concessionaire
  - o In addition to the telephone call, the Concessionaire shall also provide other channels for call logging like email and web interface.
  - o ACDS for call distribution
  - o Following is also part of scope of work of Concessionaire: (a) Development of training material for HDSCL employees (b) training to be imparted to HDSCL (c) provision of Call centre application (d) Development of standard operating procedures with call prioritization guidelines, problem security codes and escalation procedures etc. in consultation with HDSCL (e) Helpdesk related infrastructure.
  - Language Capabilities: Hindi, English and Kannada
  - o The service window for Help Desk is 365X24X7 (Monday to Sunday).
  - The call statistics will be analyzed every quarter after Go-Live and the number of Customer Care Executives may be ramped up or down accordingly on a week's notice.
  - Concessionaire shall deploy helpdesk application accessible to all users through the Smart City portal for logging issues.
  - Concessionaire to provision for inbound calls.

#### 7.18 Planning, suggesting and submitting the System up-grade plan(s)

As we are aware, constant changes / updates happen in technology, and it is very important that the Smart Solution implemented by the Concessionaire keeps its pace with the technology. HDSCL would want the Concessionaire to submit a report, every 6 months, on the advancements available in technology to make the best use of the existing infrastructure. In this report, the Concessionaire can suggest certain improvements in the Software to make the operations more effective. Any upgradation / augmentation suggested by the Concessionaire would be analyzed by HDSCL and appropriate decision would be taken. The cost estimates should also be submitted by concessionaire to implement the technology upgrades/changes. HDSCL will review and take the final decision whether the technology changes should be done or not.

Over the period of the contract, even after the Go-Live of the system, authority may require certain modifications or additions in the application or the development of new modules. In such a situation, the Concessionaire shall be responsible for carrying out software enhancement/development activities, as requested by HDSCL. Any Software development / modification will need to pass through the following envisaged phase:

- Feasibility study / proposal for change
- Conceptualization of solution
- Requirement study
- Design
- Development
- Unit and Integration testing
- Regression Testing
- User acceptance testing
- Roll out

At each of the above phases, the Concessionaire would have the deliverables (including documentation) reviewed and approved by HDSCL or its nominated agencies/ representatives. HDSCL will approve all the deliverables; only then should the Concessionaire shall commence with the next course of action. Software modifications / development will be considered completed only after formal acceptance provided by HDSCL.

#### 7.19 Capacity Building

Concessionaire need to provide training and capacity building to HDSCL employees and other stakeholders like PWD, DISCOM etc. The following is a broad level scope;

 Concessionaire will develop a training and capacity building strategy that will also include a detailed plan of implementation

- Concessionaire will prepare the training and capacity building strategy including training material finalized with HDSCL before starting the training programs.
- Concessionaire will prepare all the requisite audio/visual training aids that are required for successful completion of the training for all stakeholders. These include the following for all the stakeholders:
- Training manuals for HDSCL employees / stakeholder departments
- Computer based training modules
- Video (recorded sessions) for portal functionality, back end modules, business intelligence, dynamic reporting Smart City System
- Presentations
- User manuals
- Operational and maintenance manuals for Smart Components implemented
- Regular updates to the training aids prepared under this project
- Concessionaire will maintain a copy of all the training material on the portal and access will be provided to relevant stakeholders depending on their need and role. The access to training on the portal would be finalized with HDSCL. Concessionaire has to ensure the following points:
  - For each training session, the Concessionaire has to provide the relevant training material copies to all the attendees.
  - The contents developed shall be the property of HDSCL with all rights.
  - Concessionaire has to ensure that the training sessions held are effective and that the attendees would be able to carry on with their work efficiently. For this purpose, it is necessary that the effectiveness of training sessions is measured. The Concessionaire will prepare a comprehensive feedback form that will capture necessary parameters on measuring effectiveness of the training sessions. This form will be discussed and finalized with HDSCL.
  - After each training session, feedback will be sought from each of the attendees on either printed feedback forms or through a link available on the web portal. One member of the stakeholder group would be involved in the feedback process and he/she has to vet the feedback process. The feedback received would be reported to HDSCL for each training session.
  - o For each training session, the Concessionaire will categorize the feedback on a scale of 1 to 10, where 10 will denote excellent and 1 will denote unsatisfactory.
  - o No. of batches and trainees will be finalized during the project execution stage.

## 7.20 Operation & Maintenance

The overall Operation & Maintenance period is for 14 years, however Concessionaire has to do O&M for Environmental sensors and Surveillance for only 7 years

The Concessionaire shall follow the following Operation and Maintenance guidelines:

- i. The Concessionaire will be responsible for Operating and Maintaining, during concession period, only those components which are commissioned by him (or through partners/sub-contractors etc.) during the project execution
- ii. The Concessionaire has to adhere to the operation and maintenance policies and procedures, as applicable from time to time, for managing and operating the entire project. This includes (but not limited to) approach related to manpower, resources, vendor management, security, customer service, repair and maintenance and other primary functions, training programs to staff, user manuals, technical manuals, financial management, risk management, life/safety management, employee management and administrative policies and procedures. It also includes the key elements of a management plan for this project to include considerations for cost containment/ expense reduction, revenue enhancement (including non-operating revenue sources), customer service improvement, enhanced economic impact generation to the key this project operational characteristics
- iii. Concessionaire will be responsible to deploy on-field and off-field (but on-site at HDSCL) resources for appropriate up-keeping, maintenance, and operation of all network, hardware, and software components, and ensure smooth functioning of the project throughout the entire O&M period.
- iv. Concessionaire will operate and maintain all equipment installed at Command & Control Center. Day to day operations at Command and Control Center will be monitored and operated by HDSCL. Timely rectification of all the hardware and software issues will be the responsibility of the Concessionaire
- v. After implementation period of 12 months, the Operations and Maintenance (O&M) period shall be up to a period of 14 years.
- vi. The Concessionaire shall provide comprehensive on-site warranty for all the hardware items and peripherals, both on field and inside the Command and Control Center
- vii. The Concessionaire shall provide comprehensive Facility Management Service (FMS) for all devices, equipment and its related hardware, software, electrical and network infrastructure components supplied for this project. This involves comprehensive maintenance of all component covered under the scope of project along with repair, replacement of parts, sensors, providing spare parts, updating, security alerts and patch updating, regular backup of the data etc.
- viii. The Concessionaire shall depute adequate manpower as full time dedicated onsite FMS team. The FMS team shall be deputed to identify, acknowledge, troubleshoot, manage, replace and repair the hardware/ system software. The FMS team shall undertake day-to-day troubleshooting and maintenance requirements for this project.

- ix. The FMS team shall be also be responsible for regular monitoring of all the equipment, proactively perform warranty checks, and generate SLA reports from the SLA monitoring tool.
- x. The Concessionaire shall setup a 24X7 central helpdesk dedicated (i.e. on premise) for the Project, which shall be supported by their field units, proposed to be setup at Command Control Centers. The helpdesk will be operational for the entire Concession period
- xi. The FMS team shall be required to take regular backup of the application data as per the frequency defined by HDSCL. Security and safety arrangements for safe custody of the backup data shall also be the responsibility of Concessionaire throughout the O&M period.
- xii. Time frame for regular data backup will be provided by the Concessionaire in its proposed architecture of the system. HDSCL reserves its right to ask the Concessionaire to do modification in such time-frame, if required, at any time throughout the O&M period.
- xiii. The Concessionaire shall ensure that the FMS team has appropriate skill-sets for managing data center, networking, hardware and application software tools.
- xiv. The Concessionaire shall ensure that the instruction manuals, technical manuals and user manuals supplied by the manufacturer/ OEMs/ Concessionaire are referred, referenced, reviewed and maintained up-to-date at all times.
- xv. All patches and updates to any software and hardware devices shall be provided by the Concessionaire without any additional costs.
- xvi. HDSCL reserves the right to ask for replacement of any hardware, software and network components if it does not conform to the specification/requirements specified in the RFP document.
- xvii. After completing life of equipment, the Concessionaire has to replace them with new hardware / software of same or better specifications free of cost throughout the concession period.
- xviii. During the O&M period, if any hardware or software needs to be replaced, the same will be replaced with same or better OEM and with same or higher configuration free of cost.
- xix. The O&M also covers the specific O&M activities mentioned under scope of work.
- xx. Concessionaire to ensure on site OEM support during the entire concession period
- xxi. The SLAs calculation will not include preventive and scheduled maintenance
- xxii. The due clearances, if required, will be facilitated/provided to the Concessionaire, by HDSCL during O&M.
- xxiii. Necessary refresh of the components in scope of the work during the concession period

#### 7.21 Hand-over of the system at the end of contractual period

Concessionaire will supply to the HDSCL the following before the expiry of the contract:

- Information relating to the current services rendered and data relating to the performance of the services; Entire documentation relating to various components of the Project, any other data and confidential information related to the Project;
- All other information (including but not limited to documents, records and agreements)
  relating to the products & services related to the project to enable HDSCL and its nominated
  agencies, or its replacing Concessionaire to carry out due diligence in order to transition
  the provision of the Project Services to HDSCL or its nominated agencies, or its replacing
  Concessionaire (as the case may be).

# 8 Responsibility Matrix

The roles of the stakeholders shall change over a period of time as the Project will evolve from design to implementation and enter the operations phase. Stakeholders' responsibilities, illustrative organizational structure for the design & implementation phase, operational phase is given below:

Following are the various stakeholders identified for the project;

• HDSCL : Hubballi-Dharwad Smart City Ltd

• OS : Other Stakeholders (JMC, Power Department, Water Department, PWD etc.)

• PMC : Project Management Consultant

• IEA : Independent Evaluation Agency

• IA : Implementation Agency/Concessionaire (Bidder to be selected for the Project's Implementation)

Responsibilities are shown using RACI Matrix which splits Project tasks down to four participatory responsibility types that are then assigned to different stakeholders in the Project.

• R (Responsible) : Those who do work to achieve the task

• A (Approve) : The Stakeholder that ultimately approves the task

• C (Consulted) : Those whose opinions are sought (2 way communications)

• I (Informed) : Those who are kept up-to-date on progress (1 way communication)

#	Activity	HDSCL	OS	PMC	IEA	IA
1.	Issuance of LoA/LoI	A	I	R		Ι
2.	Signing of the Contract	R	I	C		R
3.	Preparation of the Inception Report	I	I	C		R
4.	Preparation of Detailed Project Plan for the implementation	A	I	С		R
5.	Preparation and finalize various reporting formats	A		C		R
6.	Validate the Technical Design and sample review of the specifications	A		R		C
7.	Supply, Installation, Configuration and Commissioning of various equipment, components, systems	I	I	С		R
8.	Integration with Command & Control Center	I	Ι	Ι		R
9.	Provisioning of Connectivity between the field equipment and Command & Control Center	Ι	I	Ι		R
10.	Preparation of the Policy Documents for Use & Operations of Smart City implementation	A	С	С		R
11.	Training and Capacity Building of HDSCL	R	I	C		R
12.	Submission of the Partial Acceptance Testing & Final Acceptance Testing Formats	I		С	R	R
13.	Partial Acceptance Testing & Final Acceptance Testing of IT & Non-IT Equipment	A	Ι		R	С

#	Activity	HDSCL	OS	PMC	IEA	IA
14.	System Documents, User Documents as per ITIL	Ι	Ι	C		R
	(Information Technology Infrastructure Library)					
	standards					
15.	Review and Validation of the Documentation	A	I	R		C
	submitted by Concessionaire					
16.	On-Site Facilities Management service	A	I	I		R
17.	Comprehensive warranty maintenance of the	I	I	Ι		R
	supplied equipment/Services					
18.	Provision of on-site spares/Services	I	Ι	Ι		R
19.	Weekly Progress Reports	I	Ι	C		R
20.	Monthly Progress Reports	I	Ι	C		R
21.	Penalty for breach of SLA	A	Ι	C		R
22.	Completion certificate after each phase	A	I	R		R
23.	Hand-over of the system at the end of contractual	A	C	C		R
	period along with all documentation required to					
	operate and maintain the system					

#### 8.1 Other Support from HDSCL

- Concessionaire will factor in/bear the electricity cost for LED lights, Surveillance Camera, Environmental Sensors, Panic Button & Emergency Call Box and Public Addressal System, in addition for other components like Telecom Equipment's, Digital Billboards, Access Points etc. The Concessionaire will install a UPS with a backup capacity of min 2 hrs.
- There will be main meter and sub-meters, both will be installed by Concessionaire. Telecom Equipment's, Digital Billboards, Access Points etc. will be connected with main meter, however other components will be connected with the sub meter.
- Concessionaire will liaison with HESCOM (HDSCL will facilitate the meeting) to get the
  meter installed, however the cost of installation and recurring cost will be borne by the
  Concessionaire. HDSCL will send a monthly bill to the Concessionaire basis the
  consumption against which the Concessionaire will make the required payment.

# 9 Revenue Generation Modes

#### 9.1 Intelligent Poles

 Exclusive Right of Way (RoW) throughout the Concession period, free of cost, for telecom site deployment on the Intelligent Poles installed by concessionaire and generate revenue out of tenancy

#### 9.2 Public Wi-Fi

Non-exclusive and free RoW across street poles & other municipal street furniture and exclusive rights on Intelligent Poles to house access points for Public Wi-Fi. Following are the indicative modes of generating revenue;

- Earn revenue on account of usage of Wi-Fi beyond the free period
- Advertisement on the login page of Wi-Fi
- Concessionaire can utilize multiple SSIDs for providing paid services

#### 9.3 Advertisement

Following are the modes of revenue from advertisement;

• Exclusive RoW for installing Smart Billboards on the Intelligent Poles

#### 9.4 Optical Fiber

HDSCL will provide RoW, free of cost, for laying incremental fiber. The Road Re-instatement charges will be borne by the Concessionaire, however HDSCL will reimburse the same on quarterly basis post receiving of invoice and bills in original from the Concessionaire.

The Concessionaire can install maximum three (3) empty ducts along with filled up duct, to monetize it. The Concessionaire may be allowed to generate revenue from the fiber laid by them, however they will have to strictly follow the route to connect poles without any deviation.

The Concessionaire can monetize the laid fiber by leasing it to the service providers, Broadband Services to Corporate / Business using the OFC network installed by Concessionaire in this project.

#### 9.5 Others

• During the implementation phase Concessionaire can suggest any additional revenue generating modes from the implemented smart components and can submit a proposal in this regard. HDSCL will review the proposal and decide go/no-go. If approved, the Concessionaire will share additional revenue with HDSCL on mutually agreed terms.

 HDSCL shall coordinate with other governmental departments, if any, for facilitating the RoW. The delay in obtaining clearances from such department will not attract any penalty towards the Concessionaire

# 10 Common guidelines/comments regarding the compliance of equipment/systems

- The specifications mentioned for various IT / Non-IT components are indicative requirements and should be treated for benchmarking purpose only. Bidders are required to undertake their own requirement analysis and may propose higher specifications that are better suited to the requirements.
- None of the IT / Non-IT equipment's proposed by the Bidder should be End of Life product. It is essential that the technical proposal is accompanied by the OEM certificate and Manufacture Authorization Form, where-in the OEM will certify that the product is not end of life product & shall support for the entire concessionaire period.
- All IT Components should support IPv4 and IPv6
- Technical Bid should be accompanied by OEM's product brochure / datasheet. Bidders should provide complete make, model, part numbers and sub-part numbers for all equipment/software quoted, in the Technical Bid.
- Bidder should ensure that only one make and model is proposed for one component in Technical Bid for example all PTZ cameras must belong to a single OEM and must be of the same model etc.
- Bidders should ensure complete warranty and support for all equipment from OEMs. All the back-to-back service agreements should be submitted along with the Technical Bid.
- All equipment, parts should be original and new.
- The user interface of the system should be a user friendly Graphical User Interface (GUI).
- Critical core components of the system should not have any requirements to have proprietary platforms and should conform to open standards.
- For custom made modules, industry standards and norms should be adhered to for coding during application development to make debugging and maintenance easier. Object oriented programming methodology must be followed to facilitate sharing, componentizing and multiple-use of standard code. Before hosting the application, it shall be subjected to application security audit (by any of the CERT-In empaneled vendors) to ensure that the application is free from any vulnerability; and approved by the Authority.
- All the Clients Machines / Servers shall support static assigned IP addresses or shall obtain IP addresses from a DNS/DHCP server.
- The Concessionaire should also propose the specifications of any additional servers / other hardware, if required for the system.

- The Concessionaire must provide the architecture of the solution it is proposing.
- The Concessionaire can host the servers in their own Data Centre, or any other Data Centre, whichever is preferred. However, the Concessionaire should ensure that the service availability and other requirements of the Data centre are as per the SLA's specified in this RFP. The Concessionaire can also host servers in KMDS data center. In case concessionaire wants to host in KMDS data center, concessionaire has to share server configuration details (vCPU, vRAM, storage) details. Concessionaire has to bring in OS and software licenses.
- The Servers provided should meet industry standard performance parameters (such as CPU utilization of 60 percent or less, disk utilization of 75 percent or less). In case any non-standard computing environment is proposed (such as cloud), detail clarification needs to be provided in form of supporting documents, to confirm (a) how the sizing has been arrived at and (b) how SLAs would be met.
- Concessionaire is required to ensure that there is no choking point / bottleneck anywhere in the system (end-to-end) and enforce performance and adherence to SLAs.
- For implemented components registered service/support center should be existing or established in India within 30 days of award of contract. The Concessionaire should submit an undertaking from the OEM to that effect.

# 11 Technical Solution

# 11.1 Intelligent Pole

## 11.1.1 Specifications

#.	Specifications
1.	Intelligent pole should able to meet city aesthetic requirement and it should visual appealing. It should easily blend-in into city street pole master plan.
2.	Pole Height requirement is min 12 meters. TRAI and DOT guidelines to be followed as the pole could be used as a telecom site. Any local regulations will be taken care by the Concessionaire
3.	It should be able to support telecom technologies like GSM, WCDMA, LTE, Small Cells and Wi-Fi depending on solution and the size of the pole deployed by the Concessionaire. It should also be possible to support future technologies such as 5G
4.	It should be possible to support LED luminaries from reputed OEMs
5.	Intelligent pole should able to support city as well telecom standards for India such as wind speed, climate, aesthetic etc.
6.	It should be possible to support connectivity for Intelligent pole
7.	The size of the pole should meet Indian regulations for Wind Speed & Earthquake load.
8.	All cabling, cooling/heating etc. should either be via/inside the pole or should be camouflaged (aesthetically concealed) so that it is not visible from outside
9.	The camouflaging material (to cover RF equipment's) should have RF transparency with attenuation within the permissible limits
10.	It should meet EMC requirement of telecom sites as per Indian regulations
11.	The minimum power backup requirement is minimum 1 hour for telecom equipment
12.	It should be possible to provide multiple color options as asked by Authority as per city light pole colors
13.	It should be possible to house radio units with integrated antenna, MW /optical transmission unit, SMPS (AC to DC convertor), batteries, controllers, power distribution etc. either inside the smart pole or should be camouflaged (aesthetically concealed) so that it is not visible from outside
14.	It should be possible to house telecom equipment's from all reputed OEMs.

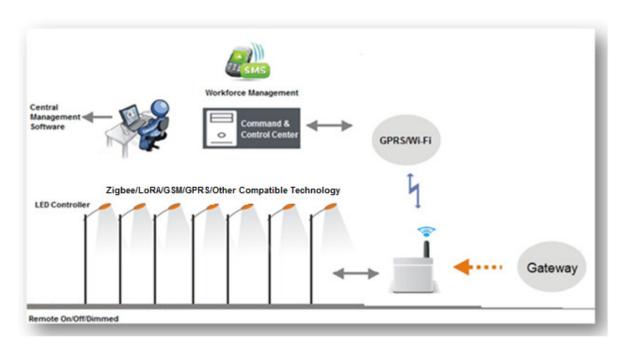
#.	Specifications
15.	There should be provision to have separate connection for light as well for telecom equipment for maintenance purpose.
16.	The paint material (to cover the RF section ) should complied to RF/Telecom requirements
17.	It should be possible to color the complete body (including RF equipment camouflaging) by any paint color
18.	The cooling/heating equipment's to cool /heat telecom equipment is integral part of intelligent pole and should be in permissible limits, efforts should be made to reduce the power consumption as much as possible
19.	The cabinet where telecom equipment is store should be at least IP55 compliance
20.	There should be suitable mounting options for Radio /Antenna unit mounting depending on the telecom technology used on Pole (12 meter or above) by the Concessionaire(Macro/Small cells)
21.	The ambient temperature requirement is 0-50 deg
22.	It should support number of light arms as per the requirement
23.	The minimum life requirement of above intelligent pole structure is 15 years
24.	The Concessionaire should not use any banned /restricted material as per Indian regulations

## 11.2 LED based Smart Street light

National Lighting Code by Bureau of Indian Standards (IS)- SP 72, 2010, IS 1944, IS 1977 and IEC Standards shall be complied for design and development of street lighting calculations, selection of lighting fixtures, lighting technologies, pole structure & erection, cable selection and sizing, insulation requirements, conductor specifications etc.

#### 11.2.1 Technical Architecture of the Smart Street Light

Following is an indicative technical architecture of the Smart Street Light for Concessionaire's reference;



The luminaire node can communicate via a Low Power Radio Frequency (LPRF) through a gateway or directly through GPRS/GSM etc. with Centralized Command and Control software.

#### 11.2.2 Recommended Levels of Illumination (as per BEE guidelines)

#	Type of Road	Road Characteristics	Average Level of Illumination on Road Surface in Lux	Ratio of Minimum/ Average Illumination
1	A-1	Important traffic routes carrying fast traffic	30	0.4
2	A-2	Main roads carrying mixed traffic like city main roads/streets, arterial roads, throughways	15	0.4
3	B-1	Secondary roads with considerable traffic like local traffic routes, shopping streets	8	0.3
4	B-2	Secondary roads with light traffic	4	0.3

#### 11.2.3 Specifications

The scope includes design, development, manufacturing, testing and supply of energy efficient luminaire complete with all accessories, LED lamps with suitable current control driver circuit including mounting bracket for street light and High mast light. The luminaire shall be suitable for rugged service under the operational and environmental conditions encountered during service.

# 11.2.3.1Smart Street Light Solution

#	Specifications
1.	The smart street lighting solution should be able to operate in any weather conditions
2.	The smart street lighting solution should be able to communicate to the centralized software
	installed at Command and Control Center
3.	The solution should be able to operate the luminaires on/off, increase/decrease luminosity
	(Dimming) as per the command received from the centralized software. This control of smart
	street lights should also be available through a mobile App ( compatible with iOS, Android)
4.	The software should have the capability to apply policies to the smart lighting system.
5.	The city administration should be able to see the real time status of the LED luminaires (like
	state, power consumption etc) on a city map view of the centralized software
6.	The city administration should be able to operate the Smart Lighting System manually too.
7.	The smart lighting solution should be able to communicate the system issue or failure to the
	centralized software.
8.	Should enable Over the Air (OTA) firmware update

# 11.2.3.2 LED Luminaire

S. No.	Typical specification	s of LED street lights	Supporting document
1.	and the wattage of these		LED Technical Data sheet
2.	Life span of LEDs used i 50,000 hours at 70% lig	LM-80/IS16105,L70 & TM 21	
3.	Colour rendering index shall be greater than 70	(CRI) of the LEDs used in the luminaire	Test Report test report including technical data
4.	LED chip make – Nichia	a, Philip lumiled, Osram, CREE	sheet of LED Chip
5.	LED chip efficacy shall b	oe more than 135 Lumens/watt at Tj 25°	LED Technical Data Sheet
6.	Junction Temperature (	Tj) should be <105°C	Manufacturer self-certify
7.	Photo Biological Safety and assessment of blue	Photo Biological Safety Report	
8.			LM-79 report for both type of LED's to be submitted by the bidder
9.	Power factor	> 0.95	LM-79 report
10.	System Efficacy (lumen/watt)	Shall be >100 lumen/watt	LM-79 report
11.	CRI of Luminaries	> 70	LM-79 report
12.	Lumen depreciation for rated life <10%		LM 80 Report to be submitted and Manufacturer has to self-
13.	The luminaire light outp variations / fluctuations impinge upon the lumen throughout in the input	LM-79 report	

14		Operating voltage: 140 V to 270V universal electronic driver with internal surge protection of 4 KV (Applicability IS 15885, Driver Safety 16104-1/2)		
15	Overvoltage cutoff limit	> 295 V	NABL accredited lab report	
16	Total Harmonic Distorti < 10% THD - Test Meth		NABL accredited lab report	
17	LED Drive current	>=350 mA<1200 mA	LM-79 report	
18	LED driver efficiency	> 85%	LM-79 report	
19	Heat dissipation / heat s Well-designed thermal r sink	NABL accredited lab report		
20	Pressure Aluminum die minimum IP-66 for all v	The luminaire housing shall be made up of corrosion free High Pressure Aluminum die cast thus conforming the luminaire to minimum IP-66 for all wattages and safety as per IEC 60598/IS		

#### 11.2.3.3 LED Luminaire Controller

#	Specifications
1.	Advance 32 bit Microcontroller based design.
2.	Very easy key board operation
3.	Data Measurement for Monitoring and controlling Data monitoring through Class 1 type Multi – Function Panel mounted Energy meter: By using this to measure the individual phase voltage, individual phase load amps, PF, KW, KVA, KVAR, Phase to Phase voltage, Average PF, KWH etc. (Local display of 36 and 28 for remote display in software)
4.	Auto / Manual facility by way of contactor / relay operation for faster service mode. From local panel in manual mode it shows individual line / channel current and show no of lamp which is not working which helps to judging the problem in line (by difference of calibration current and existing line current. Judgment is possible for approximately find out no of lamps are not working
5.	Double Inrush current capability of electrical switch gears to support LED luminaires
6.	Real time clock with battery with life of more than 7 years (Manufacturer provided 10 years life for the battery with the accuracy of $+/-$ 60 second per month. Power reserve of more than 60000 hours)
7.	System parameter data protection with special RAM, which hold the parameter for more than 10 years without any power
8.	Master and user Password Protection

- 11.2.3.4 Centralized Management Software The Concessionaire shall integrate the LED system with the Centralized Management Software implemented by HDSCL.
- 11.2.4 Recommended Levels of Illumination (as per BEE guidelines)

#	Type of Road	Road	Average Level	Ratio of
		Characteristics	of	Minimum/
			Illumination	

			on Road Surface in Lux	Average Illumination
1	A-1	Important traffic routes carrying fast traffic	30	0.4
2	A-2	Main roads carrying mixed traffic like city main roads/streets, arterial roads, throughways	15	0.4
3	B-1	Secondary roads with considerable traffic like local traffic routes, shopping streets	8	0.3
4	B-2	Secondary roads with light traffic	4	0.3

#### 11.2.5 Minimum desired illumination levels during peak hours

- Variation in illumination level shall be  $\pm$  2% is allowed in input voltage range from 180VAC to 250VAC.
- The illumination shall not have infra-red and ultra-violet emission. The test certificate from the NABL approved laboratory shall be submitted.
- Electronic efficiency shall be more than 85%

#### 11.2.6 Conformance Standards

Product Certification should be obtained from UL or CPRI or any other NABL certified lab. The following test reports should be provided:

LM-79	Luminaire efficacy (Photometry data)
LM-80	LED chip data
IP 66 Luminaire Ingress Protection	
Luminaire Endurance Test	Practical testing of luminaire through 20,000 cycles
EN 60929	Performance
IEC 60598-1	General requirement and tests
IEC 61000-3-2	Limits for Harmonic current emission - THD < 10%
IEC61000-4-5	Lightning and industrial surges

# 11.3 Surveillance

#### 11.3.1 Specifications

#### 11.3.1.1 PTZ - High Definition Camera

#	Parameters	Minimum Specifications or better
1.	Video Compression	H.264 / H.265
2.	Video Resolution	1920 X 1080, 2 MP
3.	Frame rate	Min. 25 fps
4.	Image Sensor	1/3" OR 1/4" Progressive Scan CCD / CMOS
5.	Lens	Auto-focus, 4.7 - 94 mm (corresponding to 20x)
6.	Minimum Illumination	Colour: 0.5 lux, B/W: 0.1 lux (at 30 IRE)
7.	Day/Night Mode	Colour, Mono, Auto
8.	S/N Ratio	≥ 50Db
9.	PTZ	Pan: 360° endless/continuous, 0.2 to 300°/s (auto), 0.2 to 100°/s (Manual)
		Tilt: 90°, 0.2 to 100°/s (Auto), 0.2 to 40°/s (Manual)
		20x optical zoom and 10x digital zoom
		64 preset positions
		Auto-Tracking
		Pre-set tour
10.	Auto adjustment + Remote Control of Image settings	Colour, brightness, sharpness, contrast, white balance, exposure control, backlight compensation, Gain Control, Wide Dynamic Range
11.	Protocol	HTTP, HTTPS, FTP, RTSP, RTP, TCP, UDP, RTCP, DHCP, UPnP, QoS, IPV4, IPV6
12.	Security	Password Protection, IP Address filtering, User Access Log, HTTPS encryption
13.	Operating conditions	o to 50°C (temperature), 50-90% humidity
14.	Casing	NEMA 4X / IP-66 rated
15.	Certification	UL/EN,CE,FCC
16.	Local storage	Minimum 64 GB Memory card in a Memory card slot

# 11.3.1.2Infrared Illuminators

The infrared illuminators are to be used in conjunction with the cameras specified above to enhance the night vision.

#	Parameters	Minimum Specifications or better
1.	Range	Min. 100 meters, with adjustable angle to cover the complete field of view at specified locations
2.	Minimum Illumination	High sensitivity at Zero Lux

3.	Power	Automatic on/off operation
4.	Casing	NEMA 4X / IP-66 rated
5.	Operating conditions	-5° to 50°C
6.	Certification	UL/EN/CE/FCC

#### 11.3.1.3 Field Junction Box

#	Parameters	Minimum Specifications or better
1.	Size	Suitable size as per site requirements to house the field equipment
2.	Cabinet Material	Powder coated CRCA sheet/ Stainless steel
3.	Material Thickness	Min 1.2mm
4.	Number of Locks	Two
5.	Protection	IP66 / NEMA 4X
6.	Mounting	On Camera Pole / Ground mounted on concrete base
7.	Form Factor	Rack Mount/DIN Rail
8.	Other Features	Rain Canopy, Cable entry with glands and Fans/any other accessories as required for operation of equipment's within junction box.

#### 11.3.1.4 Sign Specifications

It is necessary that the CCTV Camera locations put some standardized signs informing the public of the existence of CCTV cameras. This will bring about the transparency on installation of CCTV cameras and no one would be able to later complaint for breach of privacy. The international standards with respect to sign types need to be adhere to for all camera locations.

#	Parameters	Minimum Specifications or better
1.	Size	Board Width = 8" / 12" (For type A and B)
		Board Width = $12$ " / $18$ " / $24$ " (For type C and D)
2.	Plate Material	Corrosion resistant Aluminium Alloy as per IRC 67:2001 (Code of Practice for Road signs)
3.	Plate Thickness	Minimum 1.5 mm
4.	Retro-Reflective sheeting for sign-plate	Weather-resistant, having colour fastness
5.	Other Specifications	As per IRC 67:2001 (Code of Practice for Road signs)
6.	Mounting	Can be mounted on wall or pole (appropriate mounting brackets to be provided)
7.	Design	As per following signage diagrams

# 11.3.2 Video Management System (VMS)

#	Functional Requirement
1.	VMS shall be used for centralized management of all field camera devices, video servers and client users
2.	VMS server shall be deployed in a clustered server environment for high availability and failover
3.	VMS shall support a flexible rule-based system driven by schedules and events.  VMS shall be enabled for integration with any external Video Analytics Systems  The analytics will be used to detect  Parking Violation Crowd Detection
4.	VMS shall be supported for fully distributed solution for monitoring and control function, designed for limitless multi-site and multiple server installations requiring 24/7 surveillance with support for devices from different vendors
5.	VMS shall support ONVIF compliant internet protocol (IP) cameras
6.	The Concessionaire shall clearly list in their proposal the make and models that can be integrated with the VMS, additionally all the offered VMS and cameras must have Open Network Video Interface Forum (ONVIF) compliance
7.	VMS shall be enabled for any standard storage technologies and video wall system integration
8.	VMS shall be enabled for integration with any external Video Analytics Systems  The analytics will be used to detect  • Parking Violation • Crowd Detection
9.	VMS shall be capable of being deployed in a virtualized server environment without loss of any functionality.
10.	All CCTV cameras locations shall be overlaid in graphical map in the VMS Graphical User Interface (GUI). The cameras selection for viewing shall be possible via clicking on the camera location on the graphical map. The graphical map shall be of high resolution enabling operator to zoom-in for specific location while selecting a camera for viewing
11.	VMS shall have an administrator interface to set system parameters, manage codecs, manage permissions and manage storage
12.	VMS day to day control of cameras and monitoring on client workstations shall be controlled through the administrator interface
13.	Whilst live control and monitoring is the primary activity of the monitoring workstations, video replay shall also be accommodated on the GUI for general review and also for preand post-alarm recording display
14.	The solution design for the VMS shall provide flexible video signal compression, display, storage and retrieval
15.	All CCTV camera video signal inputs to the system shall be provided to various command control center(s), viewing center etc., and the transmission medium used shall best suit the relative camera deployments and access to the CCTV Network
16.	VMS client shall have the capability to work with touch enabled multi-monitor workstations. It shall be capable of displaying videos in up to three (3) monitors simultaneously

17.	VMS shall be capable of transferring recorded images to recordable media (such as CD/DVD and/or tapes) in tamper evident and auditable form. All standard formats shall be supported including, but not limited to:  • AVI files • Motion- Joint Photographic Experts Group (M-JPEG) • Moving Picture Expert Group-4 (MPEG-4)
18.	The bidder shall provide capability to transfer recorded images only at the Storage Area Network (SAN) administration terminal.
19.	All streams to the above locations shall be available in real-time and at full resolution. Resolution and other related parameters shall be configurable by the administrator in order to provide for network constraints
20.	The VMS shall support field sensor settings. Each channel configured in the VMS shall have an individual setup for the following settings, the specific settings shall be determined according to the encoding device:  • Brightness • Contrast • Color • Sharpness • Saturation • Hue • White balance
21.	The VMS shall support the following operations:  Adding an IP device Updating an IP device Updating basic device parameters Adding/removing channels Adding/removing output signals Updating an IP channel Removing an IP device Enabling/disabling an IP channel Refreshing an IP device (in case of firmware upgrade) Multicast at multiple aggregation points
22.	The VMS shall support retrieving data from edge storage. Thus when a lost or broken connection is restored, it shall be possible to retrieve the video from SD card and store it on central storage.
23.	The VMS shall support bookmarking the videos. Thus, allowing the users to mark incidents on live and/or playback video streams
24.	The VMS shall allow the administrator to distribute camera load across multiple recorders and be able shift the cameras from one recorder to another by simple drag and drop facility
25.	VMS shall support automatic failover for recording.
26.	VMS shall support manual failover for maintenance purpose
27.	VMS shall support access and view of cameras and views on a smartphone or a tablet (a mobile device).
28.	VMS shall support integration with other online and offline video analytic applications
29.	VMS shall be able to accept alerts from video analytics built into the cameras, other third party systems, sensors etc

# 11.4 Public Wi-Fi

# 11.4.1 Specifications

#### 11.4.1.1 WLAN Controller

Parameter	Specifications
	Redundancy Features: Controller Must support Active: Active
	and Active: Standby. Same license should be shared by both the
	controller.
General Feature	Ability to map SSID to VLAN.
	Should support automatic channel selection – interference
	avoidance (Co-channel management, Adjacent Channel
	Management, Channel reuse management).
	Internal / External Captive Portal.
Auto Deployment of APs at	Access points can discover controllers on the same L2 domain
different locations	without requiring any configuration on the access point.
	Access points can discover controllers across Layer-3 network
	through DHCP or DNS option
System Architecture	Centralized MAC addresses filtering
,	Should support onboard/ external DHCP server
,	Controller should support Onboard / External AAA server
,	The proposed architecture should be based on controller based
	Architecture with thick AP deployment. While Encryption /
	decryption of 802.11 packets should be performed at the AP.
	Support roaming between access points deployed on same
	subnet and different subnets
QoS features	Per user bandwidth Rate Limiting
	Self-healing (on detection of RF interference or loss of RF
	coverage)
	Should support per user, per device, and per application/TCP-
	port prioritization
	Dynamic load balancing to automatically distribute clients to the
	least loaded 802.11 channel and AP; load balancing must not
	require any client specific configurations or software
	Adaptive RF management that provides the capability to pause
	channel scanning / adjust RF scanning intervals based on
,	application and load presence.
,	Capability to provide preferred access for -fast clients over -
,	slow clients (11n vs. 11g) in order to improve overall network performance.
,	Support advanced multicast features with multicast rate
,	optimization, multi-channel use and IGMP snooping
RF Management	Should be able to load balance clients across channels and access
10 Management	points
,	Should be able to load balance clients based on client count
,	Should be able to load balance clients based on effective
,	throughput on AP
,	Should be able to use client and throughput as a measure to load
,	balance between bands
Inline Security Features	Should allow authenticated client devices to roam securely from
<i>y</i>	one access point to another, within or across subnets, without
	System Architecture

Controller should support AES-128 and AES-256 encryption, with site-to-site and client-to-site VPN capabilities; should have provision to supports IPSEC/GRE tunnels

## 11.4.1.2 Access Point

#	Parameter	Specifications
1.	Features	The wireless solution should be based on dual radio.
2.		802.11 a/b/g/n/ac / 2x2:3 MIMO Wave1/Wave2, dual radio,
		access point
3.		The Access Point should have single 10/100/1000 Ethernet
		interfaces
4.		The AP should be able to handle security, mesh, , RF
		Management, QOS, roaming, local forwarding without the need
		for a controller so as to increase performance of the WLAN
		network
5.		802.11 a/b/g/n/ac Access Point should be able to power up using
		standards 802.3 af/at POE input.
6.		All 2.4 GHz (2.4000GHz to 2.4835GHz) bands authorized in
		G.S.R. (45E)
7.		Radio 2: 2.4GHz: Chan 1-13 (2412-2472 MHz) 5GHz: All
		channels from 5200 MHz to 5825 MHz Actual operating
		frequencies depend on national regulatory limits
8.		Maximum available transmit power: 2.4GHz: 21dBm per chain,
		5.0GHz: 20dBm per chain
9.		Antenna configuration: 1x1, 1x2, 2x2, 3x3
10.	Antenna Characteristics	InternalAntenna Gain or equivalent or better RF coverage as per
		planning
11.		2.4 GHz-2.5 GHz : 4 dBi
12.		5.150 GHz- 5.875 GHz : 5dBi
13.	Operating temperature	-10 to +60°C or better
14.	Storage Temperature	-20 to 70°C or better
15.	Regulatory	FCC certified
16.		CE Mark / WPC Compliance
17.	Enclosure	Should be IP67 rated or higher for outdoor application
18.	AP Characteristics	Able to be powered over 802.3af/at standard Power-over-
		Ethernet (PoE). Auto sensing, 10/100/1000 on the network port
19.		16 BSSIDs per AP
20.		On Demand Channel Scan, Auto Channel Select
21.		Capable of multi-function services including: data access,
		intrusion detection, intrusion prevention, location tracking,
		real-time non-disruptive packet capture, RF monitoring with no
		physical touch and no additional cost
22.		The AP should proactively probe other rates to determine if
		greater throughput is available, intelligently adjusting its
		selection tables to favor higher performance. The AP should
		support mesh backhaul feature in which the root AP will
		determine if its wired connection is down and take action
		correspondingly. AP should support Self-Healing, Self-forming,
		dynamic path selection Wireless MESH function
23.		Automatic neighbor detection and route determination
24.		AP will provide make before break handovers

25.	The wireless meshing AP shall support low hop latency (< 1 ms
	per hop) under clear channel conditions and high SNR
26.	MESH link should support AES encryption on the MESH link
27.	MESH link should support extending corporate network with
	VLAN Tags and VLAN priority tags to the remote site
28.	A wireless meshing AP with redundant links shall select an
	alternative route within 100 ms
29.	AP shall provide external antenna options
30.	Wi-Fi alliance 802.11ac certified APs

# 11.5 Optical Fiber

# 11.5.1 Optical Fiber (24/48 Core)

#	Cable Type	Armored Optical Fiber Single Mode 24/48 Core
1.	Core	24/48/ 96 core
2.	Mode	Single Mode
3.	Cladding diameter	125.0 μm ± 1.0
4.	Coated fibre	245 μm ±10
	diameter	
5.	Core/cladding	≤ 0.8μm
	concentricity Error	
6.	Coating/cladding	≤ 12µm
0.	concentricity	≤ 12μm
	Error	
7.	Cladding non-	≤ 1.0 %
,	circularity	
8.	Mode Field	$9.3\mu \text{m} \pm 0.5 \text{ at } 1310 \text{nm}$
	Diameter	
9.	Attenuation	0.36dB/Km at 1310nm, 0.25dB/Km at 1550nm
	(cable)	
10.	Zero-Dispersion	1300 to 1322 nm
	Wavelength	/O . N. 1
11.	Zero-Dispersion	≤0.092 ps/Sq. Nm .km
12.	Slope Cut-off	≤1260 nm
12.	Wavelength	\$1200 HHI
13.	Polarization Mode	≤0.2 at 1310nm
13.	Dispersion	20.2 ut 1910mm
	Coefficient	
14.	Fibre macro bend	≤0.05dB at 1550 nm with 75 mm dia, 100 turns
	loss	
15.	Fibre macro bend	≤0.5dB at 1550 nm with 32 mm dia, 1 turn
	loss	
16.	Cut off Wavelength	1260-1270 nm

## 11.5.2 Patch Cord

#	Make and Type	Simplex Patch cord	
1.	Cable Diameter	3mm Simplex	
2.	Ferrule	Ceramic	
3.	Buffer	.9 mm easy strip	
4.	Insertion Loss	MAX .3 db Typical .15 db	
5.	Return Loss	> 6odB APC	
6.	Temperature	-25 Deg. C +70 Deg. C	
	Range		

## 11.5.3 HDPE for laying OFC

Permanently lubricated HDPE telecom Ducts for use as underground optical fibre cable conduits conforming to TEC/GR/TX/CDS-008/03/MAR-11 issued by Telecom Engg. Centre, New Delhi.

#	Parameter
1.	HDPE Pipe Silicon Coated 40/33 mm i.e. outer/inner dia
2.	Permanent lubricated HDPE Pipe / Duct shall confirm to IS 7328 or to its equivalent
3.	Impact strength No crack or split in compliance to IS 12235
4.	Environmental Stress cracking resistance (ESCR) conforming to American Society for
	Testing & Materials (ASTM) D 1693
5.	Environment Condition with ambient temperature : o deg C to +55 degree C
6.	Appearance: Smooth inside & outside surface, free of blisters, shrink, hole, flaking,
	scratches & roughness. Duct shall be smooth, clean and round
7.	Lubricated layer: Must have inner lubricant layer clearly visible & white in color, uniform in
	thickness
8.	HDPE Jointing Coupler:
	a) As per standards, Compatible with the FDMS
	b) Should be able to house Single mode fibre connectors
	c) Should have option of 3 Duplex SC adaptor
	d) Should have rugged ceramic (Ziconia) sleeve for fibre ferrule alignment
	e) Insertion loss (Max) = 0.5 db
	f) Insertion loss(Typical) = 0.2 db
	g) Service life (Cycles) = 1000 cycles
	h) Storage temperature- o deg C to 85 deg C

## 11.5.4 Junction Box

#	Parameter	Minimum Specifications
1.	General	All the junction boxes shall be out door type with IP65 protection from
	Requirement	rain, water.
		Provision for theft prevention. (Expected outdoor temperature 500C).
2.		1.5 mm steel sheet, profiled frame construction consisting of 9 folded
		rolled hollow sections punched on a 25mm DIN Pitch pattern with
		load carrying capacity of 1000 Kgs.
		Front and rear 2 mm thick sheet steel door with PU Foamed Seal
		(Gasketing) with removable galvanized rectangular frame with holes
		on a 25 mm DIN pitch pattern with 3 point locking system. The hinges
		and retainers should be made of die cast, copper nickel chrome plated
		with SS hinge pins. The doors should be swapped to LH if required
		with door opening angle 130 deg to VDI. Top panel made of 1.5 mm
		thick sheet steel with PU foamed (Gasketing) bolt able from inside.
		Bottom panel made of 1.5 mm thick sheet steel with PU foamed
		(Gasketing) with provision for fixing 4 nos of PG 29 glands.
		Side panels in double walled construction with air gap of minimum 20
		mm between two walls with PU foamed (Gasketing) for IP 55
		protection.
		Painting: Electro-phoretic dip coat priming to 20 Microns and then
		powder coated to RAL 7035 textured Pure Polyester (PP) to 80 to 120
		Microns. Powder coated with surface finishing With nano-coating, for
		the best possible surface protection and corrosion resistance. Side and
		Wall Panels shall be double wall constructed, with fixing bolts internal
		to the cabinet.

3.		Should be outdoor type, Floor mounting with 3 point locking option, suitable to mount the switches and required UPS. The opening lever/handles shall be made of metal. Each Cabinet will be mounted on a raised height concrete Plinth, 600 - 1000 mm high, as per site requirements
4.		The cabinet will be provided with a dimension of 800mmW x 1200mmH (24UH) x 800mmD with 19" mounting arrangement suitable for the mounting of the associated network, power, UPS and Split Battery components securely and safely within the cabinet.
5.		The junction box shall have floor mount type with required mounting accessories to provide a flexible solution for space constrained traffic applications.
6.		2 x 5 way/15 Amp PDU's will be provided to support the site equipment. 2 x thermostat controlled 230V AC Fans with 100% Duty Cycle with Filter and 2X Filter units with IP55 Rating with rain Canopy shall be fitted to the front door of the cabinet to provide ventilation to cool the equipment. Fan and Cabinet should be from same OEM for better SLA and provision to drive power for the camera is required.
7.		75mm Rain canopy on Top with all around projection of the enclosure such that rain water, water logging shall not penetrate in the junction box and hamper working of the system, cable entry with glands
8.		Small Junction box for mounting the electric meter with viewing window should be provided for mounting Electrical Meter and Fuse and MCB with separate lock for utility power connection, as per electricity board, rules.
9.		Protection from ants, bugs and other small insects entering into the enclosure
10.	Standard an Support	Regulatory Standard Compliance: IP55 to EN60529/09.2000, ISO 9001, 14001, 18001 comply with EIA 310, DIN 41494 and IEC 297 standards. The system should not be an end of life / end of service product.

# 11.5.5 Field UPS

#	Parameter	Minimum Specifications
1.	Capacity	1 KVA
2.	Input Range	Voltage Range 155-280 V on Full Load Voltage Range 110-280 V on Less than 70% Load Frequency 50 HZ ±3 HZ
3.	Output Voltage & Waveform	220V AC/ 230V AC/ 240V AC (Selectable)
4.	I/P & O/P Power Factor	0.9 or higher power factor
5.	Mains & Battery	Sealed Lead Maintenance Free VRLA type (Lead Calcium SMF batteries NOT acceptable), Mains & Battery with necessary indicators, alarms and protection with proper battery storage stand
6.	Frequency	50 Hz +/- 0.5% (free running), Pure Sine wave
7.	Crest Factor	min. 3:1
8.	Third Harmonic Distribution	< 3%

9.	Input Harmonic	< 10%
	Level	
10.	Overall Efficiency	Min. 90% on Full Load;
11.	Noise Level	< 55 dB @ 1 Meter
12.	Backup	at least 240 minutes (4 hours / VAH)
13.	Warranty	3 years with UPS & battery
14.	Certification	ISO 9001:2008 & ISO 14001 certified
15.	Protection	To be provided for overload/ short circuit; overheating; input
		over/under voltage; output over/ under voltage.
16.	Alarms &	All necessary alarms & indications essential for performance
	Indications	monitoring of UPS like mains fail, low battery & fault detection
17.	Interface	SNMP interface support (for remote monitoring)
18.	Galvanic Isolation	To be provided through Inbuilt transformer
19.	Compatibility	UPS to be compatible with DG Set supply and mains supply
20.	Bypass	Automatic Bypass Switch
21.	Technology	True ON-LINE (Double Conversion) with IGBT based inverter and
		PWM Technology
22.	Support	The system should not be an end of life / end of service product
23.	Operating	o to 55 Degrees Centigrade
	Temperature	

# 11.5.6 Patch Panel/Fiber Interface Unit

#	Parame	ter	Minimum Specifications
1.	48 Port Panel	Patch	Straight or Angled, 110 IDC type at rear end & RJ 45 jack on front Panel individually replaceable, with individually replaceable jacks 19" rack mountable, should confirm or exceed the EIA/TIA 568C standards for CAT 6,Metallic high strength & 1U height to save rack space, confirm EIA/TIA 568B wiring pattern, Panel Black powder coat steel with markings, UL listed & Verified.
2.	24 port Panel	Patch	24-port, Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 Angled or Straight Port arrangement: PCB based 110 connect modular type Ports must be individually replaceable, 24 Port, Circuit Identification Scheme: Icons on each of 24-ports Port Identification: 9mm or 12mm Labels on each of 24-ports (to be included in supply) Height: 1 U (1.75 inches) Modular Jack: 750 mating cycles Wire terminal (110 block): 20otermination cycles Accessories: Jack with Strain relief and bend limiting boot on jack for cable Materials: ROHS compliant Housing: Polyphenyleneoxide, 94V-0 rated, Wiring blocks: Polycarbonate, 94V-0 rated, IDC Jack contacts: Beryllium copper with thick gold and minimum thick nickel under plate Panel: Black, powder coated steel Approvals: UL, ETL and 3P Termination Pattern: TIA / EIA 568 A and B, Performance Characteristics: Attenuation, NEXT, PS NEXT, FEXT and Return Loss.

# 11.5.7 EMS Software for Transport Layer

#	Specifications
1	The system shall support capability for central monitoring through NOCs. The system
2	should also support remote monitoring and configuration.  EMS shall provide the FCAPS management functionality to the network elements. All proprietary implementations shall end at EMS itself. EMS shall provide all information/functions required by NMS.
3	EMS for Network Elements shall support northbound open interfaces like SNMP/JAVA/CORBA/XML for integration with the NMS. Open interfaces supported by EMS should, inter-alia, provide fault, topology and performance statistics. The Concessionaire shall be required to provide API/MIBs to facilitate integration of EMS with NMS. It should be possible to provide FCAPS for all NEs in the network from NMS.
4	The EMS system shall support SNMPv1, v2 & v3.
5	The EMS architecture shall be client—server based. The server will be Windows/Linux/Solaris based server with client being GUI/web browser based access with secure interface to the server.
6	EMS should facilitate simplified configuration, fault and performance management by allowing the user to zoom down to the port level of any given card /equipment.
7	EMS should support the following regarding NE software management:-
8	<ul> <li>Loading of new NE software images.,</li> <li>Management of multiple versions of NE software on the same network.</li> <li>Installation of software updates.</li> <li>Software download status reporting.</li> <li>Administrator authorization for the loading of NE software from local or remote operator terminals.</li> <li>The Management System shall be able to coordinate the software download to multiple NEs based on a single software source.</li> <li>The Management System shall manage version control for all NE software and be able to ascertain if a specific software version need to be downloaded to a target NE.</li> </ul>
9	Administrator authorization for the loading of NE software from local or remote operator terminals.
10	Common Configuration Management Requirements
11	The EMS should be able to provision, configure and manage portfolios of the corresponding sub system.
12	EMS should allow service and equipment provisioning.
13	The Management System shall be able to auto-discover the NEs and the corresponding connections between the NEs.
14	The Management System shall support the provisioning of :-
15	All equipment parameters. Threshold Crossing Alert(TCA) Alarm Severity

#	Specifications
16	It should be able to classify the alarms into different categories e.g. emergency/Critical, Flash/Major, Immediate/Minor, Priority/Warning, Deferred/Informative depending upon the severity of the alarm.
17	It should be able to display a dashboard indicating the number of active alarms with filtering options based on the period, duration, severity, event type and location.
18	The NMS system should be able to email or SMS to the users belonging to the roles assigned for the corresponding event type.
19	All failure and restore events should be time-stamped.
22	The GUI shall provide the ability to create, delete and modify topology views of the network that will be displayed graphically.
23	EMS should be open, secure, and scalable software for optimizing network infrastructure and operations management through dynamic policy.
24	Should support automated discovery of network topology (devices and interconnections).
25	Should have tools for visualizing the discovered topology.
26	Should support zooming for fine-grained device view.
27	Should support configuration editor that provides the ability to view, edit, and delete all aspects of a device's configuration.
28	Should support audit log that captures all template deployment operations.
29	Should have ability to view a given device's configuration and edit add, or delete portions of that configuration.
30	Should support rapid deployment of switching, routing, and security infrastructure.
31	Should support fast problem identification and resolution.
32	Should support APIs for customization and integration.

# 11.6 Digital Bill Board

#.	Specifications
1.	The digital billboards should be able to display color pictures
2.	The Billboards should be hanged at the height of at least 5 meters or above, however the uniformity should be maintained on all the poles
3.	The Digital Billboard will be operated from Command & Control Center
4.	It should have ability to house power plant and battery
5.	It should have provision for incoming power input cables and fiber connectivity
6.	It should be Vandal Proof
7.	It should have display of minimum 55 inch.
8.	It should be Aesthetical & Camouflaged finish with respect to environment

### 11.7 Command and Control Centre

The Concessionaire is required to integrate the solution with the proposed Command & Control Center of HDSCL. The Helpdesk for the Command and Control Centre should be leveraged from the City Command Centre.

The Concessionaire can leverage his own Data Centre or any other Data Centre, whichever is preferred for hosting the Smart Pole application. However, the Concessionaire should ensure that the service availability and other requirements of the Data centre are as per the SLA's specified in this RFP.

#### 11.8 Environmental Sensors

#.	Minimum Specifications / Functionalities / Capabilities					
	General Hardware and Interface requirements					
1	Environmental sensor should be able to measure Air pressure					
2	Environmental sensor should be able to measure Humidity					
3	Environmental sensor should be able to measure temperature					
4	Environmental sensor should be able to measure Gas (CO, CO2, NO2, SO2)					
5	Environment sensor should be able to measure Air Pollution (PM 2.5, PM 10)					
6	The sensor should be able to transfer the environmental data to Command & Control Center					

## 11.9 Panic Button & Emergency Call Box

- A high quality digital transceiver, to be placed at certain traffic junctions determined by the Police Department and HDSCL (Integrated with Intelligent Pole)
- Key is to make it easily accessible by public
- The unit shall preferably have a Double button which when pressed, shall connect to the Command Centre/Police Command Centre/other locations over the existing network infrastructure setup for project.
- These are to be placed only a select locations such as Police/Traffic islands or pedestals or within the vicinity of constant Police supervision or CCTV field of view to avoid misuse and vandalism of the phone box.

#	Parameter	Specification		
1	Construction	Cast Iron/Steel Foundation, Sturdy Body for equipment		
2	Phone Button	Watertight Push Button		
3	Speaker	To be used for Public Address System		
4	Connectivity	GSM/PSTN/Ethernet as per solution offered		
5	Sensors	For tempering/Vandalism		
6	Battery	Internal Battery with different charging options (Solar/Mains)		
7	Power	Automatic on/off operation		
8	Casing	IP-55 rated for housing		
9	Operating conditions	o° to 50°C		

# 11.10 Public Addressal System

#	Parameter	Minimum Specifications or better
1	PAS system	Should have the capability to control individual PAS i.e. to make an announcement at select location (1:1) and all locations (1: many) simultaneously. The PAS should also support both, Live and Recorded inputs
2	Speaker	Minimum 2 speakers, To be used for Public Address System
3	Connectivity	IP Based
4	Access Control	Access control mechanism would be also required to establish so that the usage is regulated.
5	Integration	With VMS and Command and Control Center
6	Construction	Cast Iron Foundation and M.S. Pole, Sturdy Body for equipment
7	Battery	Internal Battery with different charging options (Solar/Mains)
8	Power	Automatic on/off operation
9	Casing	IP-55 rated for housing
10	Operating conditions	o° to 50°C

# 11.11 Bill of Quantity (BOQ)

Following is an indicative Bill of Quantity to deploy overall solution. Concessionaire to note that the following is only indicative and bare minimum requirement. Concessionaire can enhance the BoQ basis his solution requirement;

#	Component	Unit	Quantity	Remarks			
	elligent Poles		<u> </u>				
1.	Intelligent Poles (12 meter)	No.	200				
Sm	art Street Light		1				
1.	LED Control Nodes	No.	8				
2.	LED Luminaires	No.	400				
3.	Necessary brackets for pole,	No.	400				
	cabling and other accessories		•				
	required to install and make						
	functional complete Smart LED						
	solution						
Pul	olic Wi-Fi						
1.	Access Point for 42 hotspots	No.	100				
Opt	tical Fiber						
1.	Optical Fiber	Kms	As required				
2.	Patch Cord	No.	As required				
3.	HDPE for laying OFC	No.	As required				
4.	Network Switch (Junctions)	No.	As required				
	Ruggedized						
5.	Junction Box	No.	As required				
6.	Field UPS	No.	As required				
7.	Patch Panel/Fiber Interface	No.	As required				
	Unit						
	ital Billboards	1	T				
1.	Digital Billboards	No.	200				
	veillance	T	I				
1.	PTZ High Definition Camera	No.	300				
2.	Infrared Illuminators	No.	400				
3⋅	Field Junction Box	No.	400				
4.	Edge Level Switch (at Camera	No.	400				
	locations)	3.7					
5.	Supply & Laying of Cable and	No.	As required				
	other passive components						
	including fibre, PVC, HDPE						
	Pipe, Outdoor Enclosure,						
	Network Rack with accessories						
Cor	etc. ntral command and control Cen	ntre (fa	n Reference	)			
1.	WLAN Controller	No.	2	<i>)</i>			
2.	Network Management System	No.	2				
۷.	and WLAN Management System	110.	_				
Env	Environmental Sensors						
1.	Environmental Sensors	No.	50				
	nic Button and Emergency Call		, J.	1			
1.	Panic Button and Emergency	No.	75				
	Call Box		, 0				
	I	1	I	L			

#	Component	Unit	Quantity	Remarks		
Pul	Public Addressal System					
1.	Public Addressal System	No.	75			

## 12 Payment Terms

### 12.1 Revenue Sharing

- Concessionaire will generate revenue as per the various modes mentioned in the RFP and share the revenue with the HDSCL on quarterly basis.
- In case any penalty is imposed on the Concessionaire, the same will be paid by the Concessionaire with the next quarterly installment of revenue
- During the implementation phase Concessionaire can suggest any additional revenue generating modes from the implemented smart components and can submit a proposal in this regard. HDSCL will review the proposal and decide go/no-go. If approved, the Concessionaire will share additional revenue with HDSCL on mutually agreed terms.

Concessionaire to pay the relevant taxes to the Government which would occur while generating the revenue

## 13 Timelines, SLA and Penalties

This section is to be agreed by the selected Concessionaire as the Service Levels and key performance indicator for this engagement. The following section reflects the measurements to be used for tracking, monitoring and reporting of performance on a regular basis and imposition of penalties for non-performance as per the terms of this RFP.

The purpose of this section is to define the levels of service which shall be provided by the Concessionaire to for the duration of the contract. Service Level Agreement (SLA) shall become the part of contract between Client and the Concessionaire. The Concessionaire has to comply with Service Levels requirements to ensure adherence to project timelines, quality and availability of services, throughout the period of this contract i.e. during implementation phase of 12 months and for a period of fourteen (14) years, post Go-Live.

For purposes of the SLA, the definitions and terms as specified in the document along with the following terms shall have the meanings set forth below:

- a) "Total Time" Total number of hours in the quarter being considered for evaluation of SLA performance.
- b) "Uptime" Time period for which the specified services/ outcomes are available in the quarter being considered for evaluation of SLA
- c) "Downtime"- Time period for which the specified services/ components/outcomes are not available in the quarter being considered for evaluation of SLA
- d) "Scheduled Maintenance Time": Time period for which the specified services/ components with specified technical and service standards are not available due to scheduled maintenance activity. The Concessionaire is required to take at least 10 days prior approval from Client for any such activity. This would be allowed in off peak hours- generally from midnight for a maximum of 4 hours and would be granted once in a quarter and exclude festive timings etc.
- e) "Incident": Any event / abnormalities in the service being rendered, that may lead to disruption in normal operations and services to the end user.
- f) "Response Time": Time elapsed from the moment an incident is reported in the Helpdesk over phone or by any applicable mode of communication, to the time when a resource is assigned for the resolution of the same.
- g) "Resolution Time": Time elapsed from the moment incident is reported to Helpdesk either in person or automatically through system, to the time by which the incident is resolved completely and services as promised are restored.

# 13.1 Timeline for Delivery

# T=Date of Signing of Contract

#	Project Activity	Deliverables	Responsibility	Timelines In weeks
1	Supply of Hardware / Software/equipment etc from the date of signing the Contract	<ul> <li>Delivery Challan</li> <li>Invoice Copy</li> <li>Standard product inspection reports from a third party</li> <li>Warranty certificate issued by respective OEMs for each hardware / software (back to back, in the name of Client also)</li> <li>License in case of software</li> <li>MAF</li> </ul>	Concessionaire	T+20
2	Installation, Configuration Integration of Hardware/ Software/ systems	<ul> <li>Device wise Configuration report stating IP Schema</li> <li>Routing details</li> <li>In case of Software, the report should consist of</li> <li>Software Installation Guide and checklist.</li> <li>Complete set of Technical/Operation and Maintenance Manual.</li> <li>Report formats for approval of Client UAT/testing report</li> <li>Helpdesk and SLA compliance report</li> <li>Configuration change report</li> <li>Inventory Reports</li> </ul>	Concessionaire	T+28
3	UAT and Commissioning of entire system as per scope of work	• UAT Report and Successful Commissioning	Concessionaire	T+36

		Certificate/     Rectification     activities	
4	Rectifications based on UAT	• Test reports and Concessionaire configurations	T+39
5	Go-Live	• All project locations working successfully	T+42
6	Operations Phase Satisfactory Working Inspection	Inspection to be done by HDSCL followed by submission and approval of Satisfactory Working Inspection Report	T+54
7	Comprehensive Annual operation & maintenance post golive	<ul> <li>All project locations in working condition (after satisfactory inspection)</li> <li>Quarterly SLA compliance reports</li> <li>Quarterly Preventive Maintenance reports</li> <li>Quarterly Configuration change reports</li> <li>Quarterly location wise Inventory reports</li> <li>Other reports as desired</li> <li>Quarterly user report- Location wise</li> <li>Quarterly pandwidth utilization report- Location wise</li> <li>Quarterly report indicating daily uptime-Location wise</li> <li>Quarterly user feedback reports- Location wise</li> <li>Quarterly report user feedback reports- Location wise</li> <li>Quarterly report user complaint- Location wise showing</li> </ul>	Quarterly after Golive period

complaint, complaint time & date, solution given, complaint clear time & date	

The aforementioned schedule is indicative, however Concessionaires need to provide an exhaustive work plan in their proposal which would be evaluated during technical evaluation.

#### 13.2 Service Level Conditions

#### 13.2.1 Implementation SLAs:

These SLAs shall be used to evaluate the timelines for completion of deliverables that are listed in the deliverable. These SLAs for completion of the entire system commissioning till GO LIVE.

For delay of every week incompletion & submission of the deliverable mentioned in the section of Deliverables & Timeline, the Concessionaire would be charged with a penalty as follows:

Delay (Weeks)		Pen	alty% o	n the	Capex	value
1 week	1%	per	week	for	the	undelivered
	supp	oly/serv	vices			
For every week thereafter	1%	per	week	for	the	undelivered
	supp	oly/serv	vices			
Maximum for 10 weeks	10% for the undelivered supply/services. Post					
	10 W	veek H	DSCL m	ay inv	oke th	e termination
	clau	se.				

#### 13.2.2 Post-Implementation SLAs (During O&M Period):

- The SLA parameters shall be measured for each of the sub systems' SLA parameter requirements and measurement methods, through appropriate SLA Measurement tools. All such required tools should be provided by the successful Concessionaire. HDSCL will have the authority to audit these tools for accuracy and reliability.
- Notwithstanding anything contained elsewhere in this RFP, if penalty calculations exceed 10% of the Opex after aggregation for four consecutive quarters, HDSCL can take appropriate action including termination of the contract after providing written notice and cure period of one quarter from the date of receipt of such written notice of termination to the Concessionaire.
- Monthly and Quarterly cost will be evaluated as per the yearly cost provided by the Concessionaire for the O&M.

The SLAs to be adhered during O&M phase are as follows;

#	Component	<b>SLA Parameter</b>	Penalty Fee
		(Quarterly)	

1.	Uptime of Smart LED	99%	0.05% percentage of quarterly O&M charges of the year
2.	Uptime of Public Wi-Fi	99%	o.o5% percentage of quarterly O&M charges of the year
3.	Uptime of Digital Billboards	99%	0.05% percentage of quarterly O&M charges of the year
4.	Uptime of Environmental Sensors	99%	0.05% percentage of quarterly O&M charges of the year
5.	Uptime of Surveillance Camera	99%	0.05% percentage of quarterly O&M charges of the year
6.	Uptime of Panic Button and Emergency Call Box	99%	0.05% percentage of quarterly O&M charges of the year
7.	Uptime of Public Addressal System	99%	o.o5% percentage of quarterly O&M charges of the year

- Penalty levied for non- performance as per SLA requirements will have to be paid by the successful Concessionaire to HDSCL.
- The penalties would be levied for every AP down time be it for non-availability of network, theft, damage or non- availability of power etc. because the successful Concessionaire is responsible for supply of all enabling components on end to end basis.

Uptime definition: All devices have to be working and deliver the desired results. The no. of hours that the particular device/ equipment does not work will be treated as down time. Uptime shall be calculated as Uptime (%) =  $\{1-[(Downtime)/(Total\ time-\ scheduled\ maintenance\ time)]\}$ \*100. For ex, if 10 nos. of Environmental Sensors are deployed at various locations, and 2 device/ units does not work for 5 Hrs, the total non-working device hours will be 10 unit hours and the uptime would be  $\{1-(10/(10^*90^*24)-\ schedule\ maintenance\ time\}\}$ , 10 being the number of units, for 90 days on 24 hours basis. However, in case of Smart LED it is not envisaged to keep the Smart LED ON for 24 hours. For SLA calculation purpose the SLAS will be calculated for 90 days on 12 hours basis.

- Penalty levied for non- performance as per SLA requirements will have to be paid by the successful Concessionaire to HDSCL.
- The penalties would be levied for every unit down time hour— be it for non-availability of network or non- availability of power etc. because the successful Concessionaire is responsible for supply of all enabling components on end to end basis.

13.2.2.1 SLA and Penalty for Helpdesk Response and Resolution time

#	Particulars	Penalty Amount
1.	For less than 1% of the calls not getting	No Penalty. Post that 0.01% of Opex for all
	responded in less than or equal to 60 seconds	call not responded.
	per quarter	_
2.	For Grievances and complaints from users,	No Penalty. Post that 0.01% of Opex for
	resolutions provided within 4 hours	every 2 hours beyond 4 hours.

#### 13.2.2.2 SLAs for Resource Replacement

#	Service Metric Parameter	Metric	Frequency	Penalty
1.	Resource Replacement	Within 7 days of exit of resource (in case of HDSCL or successful Concessionaire initiated)	Per Occurrence	O.01% of monthly Opex value per day of unavailability of resource.

#### 13.2.3 Other Penalties

- It is expected that the successful Concessionaire should comply with all the Policy / Procedural / Regulatory Guidelines enforced by Government of India, Government of Karnataka, MeitY, Concern Agency, TRAI and other related bodies and as amended from time to time.
- The Concessionaire should also safeguard the Application Security and Application Integrity.
   Penalty would be applicable for non-compliance of relevant security certifications. There would be Zero Tolerance policy against such breaches.
- The penalties across various breaches could be categorized as follows; (this includes but not limited to the following)
  - o Information Security Breach: Any data leakage, information sharing, reports sharing without the consent of Concern Agency.
  - Network & System Security Breach: Any instance of hacking, information/data compromise, unauthorized access to public Wi-Fi.
  - o Guidelines Breach: Non-compliance to guidelines shared by various government agencies such as complying with standards for website/mobile app development etc.
- For any of the breach for above mentioned category, a penalty would be levied on the successful Concessionaire for every instance of occurrence if not responded as per the timelines mentioned in the table below. The response of the same is desired to be provided in the timelines as specified in the table below. The details of the same are given below:

Туре	SLA Parameter (Quarterly)	Penalty on resolution with respect to delay/Unit
Information Security Breach	Zero Non-Compliance	o.01% percentage of quarterly O&M charges of the year. In case event of severe issues, this may be termination of contract.
Network & System Security Breach	Zero Non-Compliance	o.o1% percentage of quarterly O&M charges of the year. In case event of severe issues, this may be termination of contract.
Guidelines Breach	Zero Non-Compliance	o.o1% percentage of quarterly O&M charges of the year. In case event of severe issues, this may be termination of contract.

- The response time refers to immediate remedial action taken and preventive measures updated by the successful Concessionaire on occurrence of the event.
- In case the breaches are not responded to in the time frame as specified, penalties would be levied as per the table above and failing to address the breach in desired timeline, recurring penalties would be levied w.r.t. to delay in units as mentioned.
- In case of more than 3 instances of breach within the project year, HDSCL reserves the right to invoke the termination clause along with legal action would be initiated for serious offence as decided by HDSCL.
- Guidelines Breach includes non-compliance to certain guidelines as set by various agencies
  like DoIT, DST etc. In such cases, resolution of the issue is also mandatory. The successful
  Concessionaire would be required to respond with the action plan / change request, as
  applicable, in order to resolve the guidelines breach with the specified response time.

#### 13.2.4 Conditions for No Penalties

- There is a force majeure event effecting the SLA which is beyond the control of the Concessionaire. Force Majeure events shall be considered in line with the clause 17 of the RFP.
- The non-compliance to the SLA has been due to reasons beyond the control of the successful Concessionaire.
- Theft cases would not be considered as "beyond the control of Concessionaire". Hence, the
  Concessionaire should be taking adequate anti-theft measures, spares strategy, Insurance as
  required to maintain the desired Required SLA.

#### 13.2.5 SLA Reporting System

- The Concessionaire shall design, implement/customize, deploy the Enterprise Management System (EMS) and shall develop any additional tools required to monitor the performance indicators listed as per the SLAs mentioned in the RFP.
- The EMS deployed for the project, based on SLAs, shall be configured by the Concessionaire to calculate the payment to be paid to HDSCL. EMS should be integrated with the toll free call center (established by the Concessionaire) for site fault reporting.

# 14 Limitation of Liability

The liability of Concessionaire (whether in contract, tort, negligence, strict liability in tort, by statute or otherwise) for any claim in any manner related to the work, deliverables or services covered under this RFP, shall be the payment of direct damages only which shall in no event in the aggregate exceed 100% of the Capex value of the project.

In no event Concessionaire shall be liable for any consequential, incidental, indirect, special or punitive damage, loss or expenses (including but not limited to business interruption, lost business, lost profits, or lost savings) nor for any third party claims even if it has been advised of their possible existence.

# 15 Liquidated Damages

In the event of delay or any gross negligence, for causes attributable to the Concessionaire, in meeting the deliverables, the HDSCL shall be entitled at its option to recover from the Concessionaire as agreed, liquidated damages, as per the criteria mentioned in Service Level Conditions as mentioned in this RFP document. LDs (if any) shall be applicable only for delays solely attributable to the Concessionaire.

# 16 Force Majeure

### 16.1 Definition of Force Majeure

The Bidder or the HDSCL, as the case may be, shall be entitled to suspend or excuse performance of its respective obligations under this RFP document to the extent that such performance is impeded by an event of force majeure ("Force Majeure").

### 16.2 Force Majeure events

A Force Majeure event means any event or circumstance or a combination of events and circumstances referred to in this Clause, which may be classified as all or any of the following events:

- i. act of God, including earthquake, flood, inundation, landslide, exceptionally adverse weather conditions, storm, tempest, hurricane, cyclone, lightning, thunder, volcanic eruption, fire or other extreme atmospheric conditions;
- ii. radioactive contamination or ionizing radiation or biological contamination;
- iii. a strike or strikes or other industrial action or blockade or embargo or any other form of civil disturbance (whether lawful or not), in each case affecting on a general basis the industry related to the affected Services and which is not attributable to any unreasonable action or inaction on the part of the Concessionaire or any of its Subcontractors or suppliers and the settlement of which is beyond the reasonable control of all such persons;
- iv. general strikes, lockouts, boycotts, labor disruptions or any other industrial disturbances as the case may be not arising on account of the acts or omissions of the Concessionaire and which affect the timely implementation and continued operation of the Project;
- v. An act of war (whether declared or undeclared), hostilities, invasion, armed conflict or act of foreign enemy, blockade, embargo, prolonged riot, insurrection, terrorist or military action, civil commotion or politically motivated sabotage, for a continuous period exceeding seven (7) days.

For the avoidance of doubt, it is clarified that any negligence in performance of services which directly causes any breach of security like hacking aren't the forces of nature and hence wouldn't be qualified under the definition of "Force Majeure". In so far as applicable to the performance of Services, Service Provider will be solely responsible to complete the risk assessment and ensure implementation of adequate security hygiene, best practices, processes and technology to prevent any breach of security and any resulting liability there from (wherever applicable).

## 16.3 Notification procedure for Force Majeure

- The affected Party shall notify the other Party of a Force Majeure event within seven (7) days of occurrence of such event. If the other Party disputes the claim for relief under Force Majeure it shall give the claiming Party written notice of such dispute within thirty (30) days of such notice. Such dispute shall be dealt with in accordance with the dispute resolution mechanism in accordance with Clause.
- Upon cessation of the situation which led the Party claiming Force Majeure, the claiming Party shall within seven (7) days hereof notify the other Party in writing of the cessation and the Parties shall as soon as practicable thereafter continue performance of all obligations under this RFP document

### 16.4 Allocation of costs arising out of Force Majeure

- 16.4.1 Upon the occurrence of any Force Majeure Event, the Parties shall bear their respective costs and no Party shall be required to pay to the other Party any costs thereof.
- 16.4.2 For the avoidance of doubt, Force Majeure Costs may include interest payments on debt, operation and maintenance expenses, any increase in the cost of the Services on account of inflation and all other costs directly attributable to the Force Majeure Event.
- Save and except as expressly provided in this Clause, neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, costs, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereof.

#### 16.5 Consultation and duty to mitigate

Except as otherwise provided in this Clause, the affected Party shall, at its own cost, take all steps reasonably required to remedy and mitigate the effects of the Force Majeure event and restore its ability to perform its obligations under this RFP document as soon as reasonably practicable. The Parties shall consult with each other to determine the reasonable measures to be implemented to minimize the losses of each Party resulting from the Force Majeure event. The affected Party shall keep the other Parties informed of its efforts to remedy the effect of the Force Majeure event and shall make reasonable efforts to mitigate such event on a continuous basis and shall provide written notice of the resumption of performance hereunder.

## 17 Exit Management

### 17.1 Purpose

- i. This clause sets out the provisions which shall apply on expiry or termination of the "Contract Agreement" on account of material breach by Concessionaire. In the case of termination of the Contract Agreement due to any illegal activity performed by the selected Concessionaire during/ as part of the activities related to the project, or due to material breach by the Concessionaire of Contract, Client shall have the right to, at its sole discretion, apply this clause.
- ii. The Parties shall ensure that their respective associated entities, in case of the Client or its nominated agencies and any nominated agencies in case of the selected Concessionaire, carry out their respective obligations set out in this Exit Management Clause.

### 17.2 Transfer of Assets

This clause is valid till the date of expiry or notice of termination of the agreement after which the asset shall have to be transferred to Client.

- During this period, the Successful Concessionaire will transfer all the assets in good working
  condition and as per the specifications of the bidding document including the ones being
  upgraded to the Client.
- The Concessionaire, if not already done, shall transfer all the right to use software licenses
  under the name of Client during the Exit Management Period. The Concessionaire shall also
  transfer all the relevant Software Passwords, User Names and Keys. If such a transfer of
  Assets happens before the expiry of Work Contract Period, Parties shall mutually discuss and
  agree on the transfer value of the Assets together with the termination and transfer assistance
  fee.
- The Successful Concessionaire shall be entitled to use the Assets for the duration of the exit
  management period which shall be three months from the date of expiry or notice of
  termination of the Agreement.
- For any material breach on the part of Concessionaire during the Project Implementation Phase and Operation & Management Phase, Client is entitled to provide notice in writing on the selected Concessionaire at any time during the exit management period as detailed here in above requiring the selected Concessionaire to provide the department or its nominated agencies with a complete and up to date list of the Assets within 30 days of such notice.

Upon service of a notice as mentioned in point above, the following provisions shall apply:

All risk in and title to the Assets to be transferred to Client on the last day of the exit
management period. All expenses incurred during transfer of assets shall be borne by the
Successful Concessionaire.

- That on the expiry of this clause, the Successful Concessionaire and any individual assigned for the performance of the services under this clause must hand overall Confidential Information and all other related materials in its possession, including all the software and hardware supplied by selected Concessionaire under this clause to the department.
- As Concessionaire is supposed to provide 15 years of comprehensive maintenance of all the hardware/Software as detailed in RFP, Concessionaire must ensure that all the items are in working condition with support of OEM related to repair/replacement/availability of spare parts for at least 05 years at the time of exit.

### 17.3 Cooperation and Provision of Information

During the exit management period:

- a) The Concessionaire shall permit Client or its nominated agencies access to information reasonably required to classify the current mode of operation related with the provision of the services to enable it to Client assess the existing services being delivered.
- b) In the event of there being a termination owing to material breach by Concessionaire, on quick request by Client or its nominated agencies, the selected Concessionaire shall provide access to and copies of all information held or controlled by it which it has prepared or maintained in accordance with the MSA (Master Service Agreement), the Project Implementation, the Operation and Management SLA and SoW (Scope of Work) relating to any material aspect of the services (whether provided by the selected Concessionaire). Client or its nominated agencies shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The selected Concessionaire shall permit Client or its nominated agencies and/or any entity nominated by Client to have reasonable access to it employees and facilities as reasonably required to understand the methods of delivery of the services employed by the selected Concessionaire and to support appropriate knowledge transfer.

#### 17.4 Confidential Information, Security and Data

- The selected Concessionaire shall be quick on the commencement of the exit management period and supply to Client the following:
  - Information relating to the present services provided and customer satisfaction surveys.
  - Documentation pertaining to Project related data and confidential information.
  - All current and updated data as is needed for purposes of the Client or its nominated agencies for transitioning the services either to Client or the entity nominated by Client.
  - All other information (including but not limited to documents, records and agreements) relating to the services reasonably compulsory to enable Client or its nominated agencies, or to the entity nominated by Client to carry out due diligence in

order to transition the provision of the Services to the Client or its nominated agencies, or to any entity nominated by Client (as the case may be).

- Before the exit management period expire, the selected Concessionaire shall deliver to Client or its nominated agencies all new or up-dated materials from the categories set out in point (i) above and shall not keep any copies thereof, except that the selected Concessionaire shall be permitted to keep one copy of such materials for archival purposes only.
- Before the exit management period expire, unless otherwise provided under the MSA, Client or its nominated agencies shall deliver to the selected Concessionaire all forms of selected Concessionaire confidential Data which is in the possession or control of Client or its nominated agencies or during the exit management period In any time, the selected Concessionaire shall, subject to applicable laws, restraints and regulations(including in particular those relating to privacy) provide to Client or its nominated agencies a list of all employees (with job titles) of the selected Concessionaire dedicated to providing the services at the beginning of the exit management period; its users.

#### 17.5 Employees

- Where any national, regional law or regulation relating to the mandatory or automatic
  transfer of the contracts of employment from the selected Concessionaire to the department
  or its nominees, or an entity nominated by Client applies to any or all of the employees of the
  selected Concessionaire, then the Parties shall comply with their respective obligations under
  such Transfer Regulations.
- To the extent that any Transfer Regulation does not apply to any employee of the selected Concessionaire or its nominated agencies or its entity nominated by Client may make an offer of employment or contract for services to such employee of the selected Concessionaire and the selected Concessionaire shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the Client or its nominated agencies or any Replacement Concessionaire.

## 17.6 Transfer of Certain Agreements

On request by the Client or its nominated agencies, the selected Concessionaire shall effect such assignments, transfers, novation, licenses and sub-licenses in favor of Client or its nominated agencies, or its entity nominated by Client in relation to any equipment lease, maintenance or service provision agreement between selected Concessionaire and third party lessors, Concessionaires or Concessionaire, and which are related to the services and reasonably necessary for the carrying out of replacement Concessionaire.

#### 17.7 Right of Access to Premises

 At any time during the exit management period, where Assets are located at the selected Concessionaire's premises, the selected Concessionaire shall be obliged to give full rights of access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to Client or its nominated agencies, and/or any entity nominated by Client in order to inventory the assets or Assets.

• The selected Concessionaire shall also give the Client or its nominated agencies, or any entity nominated by Client right of reasonable access to the selected Concessionaire's premises and shall procure the department or its nominated agencies and any entity nominated by Client rights of access to relevant third party premises during the exit management period and for such period of time following termination or expiry of the MSA as is reasonably necessary to migrate the services to Client or its nominated agencies, or a Replacement Concessionaire.

## 17.8 General Obligations of the Selected Concessionaire

- The selected Concessionaire shall provide all such information as may reasonably be
  necessary to effect as seamless a handover as practicable in the circumstances to Client or its
  nominated agencies or any entity nominated by the Client and which the selected
  Concessionaire has in its possession or control at any time during the exit management
  period.
- For the purposes of this Clause, anything in the possession or control of any selected Concessionaire or associated entity is deemed to be in the possession or control of the selected Concessionaire.
- The selected Concessionaire shall commit adequate resources to comply with its obligations under this Exit Management Clause.

#### 17.9 Exit Management Plan

The Successful Concessionaire shall provide the Client or its nominated agencies with recommended exit management plan ("Exit Management Plan") which shall deal with MSA as a whole and in relation to the Project Implementation, the Operation and Management, SLA and SOWs.

HDSCL have the rights to audit the equipment before the exit process to check the conditions of all the components, hardware, software and other devices. Concessionaire will rectify/ replace the non-working components.

#### 17.10 End of Support

While handling over the completely working and functional network and systems, Concessionaire must ensure that OEM of all hardware/software/ equipment are contractually bound to provide support for repair/replacement/availability of its spare parts for further five years (post concession period). It shall be part of exit plan to submit letter from OEMs in this regard.

## 18 Annexures

### 18.1 Annexure I: Technical Bid Templates

- a) The Concessionaire is expected to respond to the RFP using the forms given in this section and all documents supporting Technical Evaluation Criteria.
- b) Technical Proposal shall comprise following forms:
  - i. Form 1: Technical Proposal Covering Letter
  - ii. Form 2: Power of Attorney
- iii. Form 3: Undertaking on Total Responsibility
- iv. Form 4: Particulars of the Concessionaire
- v. Form 5: Project Citation Format
- vi. Form 6: Proposed Solution
- vii. Form 7: Technical Compliance FRS
- viii. Form 8: Proposed Implementation Work plan
- ix. Form 9: Team Composition
- x. Form 10: Curriculum Vitae (CV) of Project Manager (dedicated on-site)
- xi. Form 11: Deployment of Personnel
- xii. Form 12: Manufacturers/Producers' Authorisation Form
- xiii. Form 13: Undertaking on Service Level Compliance
- xiv. Form 14: Undertaking on Exit Management and Transition
- xv. Form 15: Declaration for opening of office in Hubballi-Dharwad
- xvi. Form 16: Declaration that the Concessionaire has not been blacklisted
- xvii. Form 17: Consortium MoU

# Form 1: Technical Proposal Covering Letter

•
Place:
Date:
To, Hubballi-Dharwad Smart City Ltd (HDSCL) <insert address=""></insert>
Ref: "Proposal for Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model".
Bid Reference No:.
Sub: Technical Proposal covering Letter
Dear Sir,
We, the undersigned, offer to provide the services for [Insert Title of the Assignment] in accordance with your Request for Proposal dated [Insert Date]. Our attached Technical Proposal is based on our full understanding of scope of work, requirements, terms & Conditions and we unequivocally accept the same and shall be binding as mentioned in the RFP.
To undertake the project on BOOT basis for a period including implementation phase of 12 months and 14 years of O&M post go-live.
Yours sincerely,
Signature:
Name:
Designation:
Address:
Date:
Company Seal:

### Form 2: Power of Attorney

Form 2A: Power of Attorney for signing of bid

(On Non – judicial stamp paper of Rs 100 duly attested by notary public)

#### POWER OF ATTORNEY

Know all men by these presents, we (name and address of the registered office of the Single Entity / Lead Member) do hereby constitute, appoint and authorize Mr. / Ms. S/o, D/o, W/o, R/o\_\_\_\_\_(name and address of residence) who is presently employed with us and holding the position of as our attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to the bid of the consortium consisting of , and (please state the name and address of the Members of the Consortium) for submitting bid for Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model (the "Project"), including signing and submission of all documents and providing information / responses to Authority, representing us in all matters in connection with our bid for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

For

(Signature)

(Name, Title and Address)

Accept

(Signature)

(Name, Title and Address of the Attorney)

#### Notes:

- To be executed by the Single Entity or the Lead Member in case of a Consortium.
- The mode of execution of Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law.
- Also, wherever required, the executant(s) should submit for verification the certified documents such as a resolution / Power of attorney in favour of the Person executing this Power of Attorney for the delegation of power hereunder on behalf of the executant(s).

### Form 2B: Power of Attorney for Lead Member of the Consortium

(On Non – judicial stamp paper of Rs 100 duly attested by notary public)

POWER OF ATTORNEY		
Whereas the Authority has invited applications from interested parties for Bid for Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model called the "Project" for a specified Concession period (the "Concession Period").		
Whereas, M/sM/s, and M/s (the respective names of the Members along with address of their registered offices) have formed a Consortium and are interested in bidding for the Project and implementing the Project in accordance with the terms and conditions of the Request for Proposal (RFP), Concession Agreement and other connected documents in respect of the Project, and		
Whereas, it is necessary under the RFP for the members of the Consortium to designate one of them as the Lead Member and its said employees, as with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium's bid for the Project and to appoint one of them as the Lead Member who, acting jointly, would have all necessary power and authority to do all acts, deeds and things on behalf of the Consortium, as may be necessary in connection with the Consortium's bid for the Project. The Lead Member is hereby authorized to delegate the said powers to any of its employees duly approved by the Board of Directors of the Lead Member.		
NOW THIS POWER OF ATTORNEY WITNESSETH THAT:		
We, M/s, and M/s (the respective names of the Members along with address of their registered offices) do hereby designate M/s (name along with address of the registered office) being one of the members of the Consortium, as the Lead Member of the Consortium, to do on behalf of the Consortium, all or any of the acts, deed or things necessary or incidental to the Consortium's bid for the Project, including submission of Bid, participating in conference, responding to queries, submission of information / documents and generally to represent the Consortium in all its dealings with , any other Government Agency or any person, in connection with Project until culmination of the process of bidding and thereafter till the Concession Agreement is entered into with		
We hereby agree to ratify all acts, deeds and things lawfully done by Lead Member our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney, shall be deemed to have been done by us		
Dated this day of 200		
[Executant(s)]		
(To be executed by all the members in the Consortium)		

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law.
- Also wherever required, the executant(s) should submit for verification the certified documents such as resolution/ Power of attorney in favour of the person executing this Power of attorney for the designation of power hereunder on behalf of the Bidder.

# Form 3: Undertaking on Total Responsibility

No.	
Date	
To:	
Dear Sir,	
<b>Sub:</b> Self certificate	e regarding Total Responsibility
	t we undertake total responsibility for the successful and defect free operation of t solution, as per the requirements of the RFP for Hubballi-Dharwad Smart City
Thanking you,	
Yours faithfully	
(Signature of the Au	thorized signatory of the Bidding Organisation)
Name	:
Designation	:
Date	:
Time	:
Seal	:
Business Address	;

# Form 4: Particulars of the Concessionaire

[In case of Consortium, all members of the Consortium need to fill this form]

#	Information Sought	Details to be Furnished
1.	Name and address of the bidding Company	
2.	Incorporation status of the firm (public limited/private limited, etc.)	
3.	Year of Establishment	
4.	Date of registration	
5.	ROC Reference No.	
6.	Details of company registration	
7.	Details of registration with appropriate authorities for service tax	
8.	Turnover in the last 3 years	• 2015-16
		• 2014-15 • 2013-14
		<u> </u>
9.	Name, Address, email, Phone nos. and Mobile Number of Contact Person	

# Form 5: Project Citation Format

General Information	
Name of the project	
Client for which the project was executed	
Name and contact details of the client	
Project Details	
Description of the project	
Scope of services	
Technologies used	
Outcomes of the project	
Other Details	
Total cost of the project	
Total cost of the services provided by the Concessionaire	
Duration of the project (no. of months, start	
date, completion date, current status)	
Other Relevant Information	
Work Order/Completion Certificate/ Self certificate (duly signed by the Power of Attorney holder for signing the bid)	

## Form 6: Proposed Solution

Technical approach, methodology and work plan are key components of the Technical Proposal. This needs to be provided for implementation of;

- i. Intelligent Poles
- ii. LED street light
- iii. Public Wi-Fi
- iv. Optical Fiber
- v. Digital Bill Board
- vi. Central command and control Centre
- vii. Environmental Sensors

You are suggested to present Approach and Methodology divided into the following sections foreach of the above areas:

- a) Solution Proposed
- b) Understanding of the project (how the solution proposed is relevant to the understanding)
- c) Technical Approach and Methodology

## Form 7: Technical Compliance - FRS

The Client will randomly check the compliance provided by the Concessionaire against the functionality during PoC and in case of any discrepancy the marks will be reduced to zero for this section.

Note: Please refer to Section 11 of the RFP for detailed Specifications.

Please mention the compliance (Yes/No) against each specification (as mentioned in Section 8) of the following Components:

- i. Intelligent Poles
- ii. LED Street light
- iii. Smart Surveillance
- iv. Wi-Fi Services in 42 hotspots
- v. Optical Fiber
- vi. Digital Bill Board
- vii. Central command and control Centre
- viii. Environmental Sensors

Further Concessionaire need to share the complete Bill of Quantity (indicative mentioned section 11.11) with make and model of the equipment.

Form 8: Proposed Implementation Work plan

#	Activity	Months <sup>2</sup>												
	·	1	2	3	4	5	6	7	8	9	10	11	12	
1														
2														
3														
4														
5														
6														
7														
8														
9														
•														
•														
•														
•														
•														
•														
•														
•														

- 1. Indicate all main activities and drill down to sub-activities of the assignment, including delivery of reports and other benchmarks.
- 2. Duration of activities shall be indicated in the form of a bar chart.

# Form 9: Team Composition

Name of Staff with Qualification and Experience	Area of Expertise	Position Assigned	Task Assigned	Time committed for the engagement

# Form 10: Curriculum Vitae (CV) of the Project Staff

General Information	
Name of the person	
Current Designation/Job Title	
Current job responsibilities	
Proposed Role in the Project	
Proposed Responsibilities in the Project	
<ul> <li>Academic Qualifications:</li> <li>Degree</li> <li>Academic institution graduated from</li> <li>Year of graduation</li> <li>Specialization (if any)</li> <li>Key achievements and other relevant information (if any)</li> </ul>	
Professional Certifications (if any)	
Total number of years of experience	
Number of years with the current company	
Summary of the Professional/Domain Experience	
Number of complete life cycle implementations carried out	
The names of customers (Please provide the relevant names)	
Past assignment details (For each assignment provide details regarding name of organizations worked for, designation, responsibilities, tenure)	
Prior Professional Experience covering:	
<ul> <li>Organizations worked for in the past</li> <li>Duration and dates of entry and exit</li> <li>Designation Location(s)</li> <li>Key responsibilities</li> </ul>	

# Prior project experience Project name Client Key project features in brief Location of the project Designation Role Responsibilities and activities Duration of the project Please provide only relevant projects. Proficient in languages (Against each language listed indicate speak/read/write)

Form 11: Deployment of Personnel

#			nff ir art)²		in N	Mon	ths (	(in t	the f	orm	ı of	a l	oar		Part Time	Total staff man- months proposed
		1	2	3	4	5	6	7	8	9	10	11	12	n		Total
1																
2																
3																
N																
	ı		1	1	1	ı	ı	1	ı	ı	Tot	al		1		

For professional staff the input should be indicated individually; for support staff it should be indicated by category

Months are counted from the date of signing of contract.

## Form 12: Manufacturers/Producers' Authorization Form

(This form has to be provided by the OEMs of the products proposed)
No.:
Date:
To:
OEM Authorization Letter
Dear Sir:
Ref: Your RFP Ref: dated
We who are established and reputable manufacturers/producers of having factories/development facilities at (address of factory/facility) do hereby authorize M/s (Name and address of Agent) to submit a Bid, and sign the contract with you against the above Bid Invitation.
We hereby extend our full guarantee and warranty for the Solution, Products and services offered by the above firm against this Bid Invitation.
We hereby declare that we are not insolvent, in receivership, bankrupt or being wound up, our affairs are not being administered by a court or a judicial officer, our business activities have not been suspended and we are not the subject of legal proceedings for any of the foregoing.
We also undertake to provide any or all of the following materials, notifications, and information pertaining to the Products manufactured or distributed by the Supplier:
a) Such Products as the Concessionaire may opt to purchase from the Supplier, provided, that this option shall not relieve the Supplier of any warranty obligations under the Contract; and in the event of termination of production of such Products:
<ul> <li>advance notification to the Bank of the pending termination, in sufficient time to permit the Bank to procure needed requirements; and</li> </ul>
ii. Following such termination, furnishing at no cost to the Bank, the blueprints, design documents, operations manuals, standards, specifications of the Products, if requested.
We duly authorize the said firm to act on our behalf in fulfilling all installations, Technical support and maintenance obligations required by the contract.
Yours faithfully,
(Name)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to bind the manufacturer. The Concessionaire in its Bid should include it.

(Name of Producers)

# Form 13: Undertaking on Service Level Compliance

No	).	
Da	ite:	
То	,	
<ii< td=""><td>nsert name and add</td><td>dress&gt;</td></ii<>	nsert name and add	dress>
De	ear Sir,	
Su	ı <b>bject:</b> Undertakir	ng on Service Level Compliance
1.	•	onaire do hereby undertake that we shall monitor, maintain, and comply with stated in the RFP to provide quality service to HDSCL
Yo	urs faithfully,	
(Si	gnature of the Aut	horized signatory of the Bidding Organisation)
Na	ame	:
De	esignation	:
Da	ite	:
Tiı	me	:
Se	al	:
Bu	siness Address	:

## Form 14: Undertaking on Exit Management and Transition

No	).		
Da	te:		
То	,		
<iı< td=""><td>nser</td><td>t name and add</td><td>ress&gt;</td></iı<>	nser	t name and add	ress>
De	ar S	ir,	
Su	ıbje	<b>ct:</b> Undertaking	g on Exit Management and Transition
1.	eitl rea HI	her at the End o son, we shall su OSCL or to an ag	ertake that at the time of completion of our engagement with the Department, of Contract or termination of Contract before planned Contract Period for any accessfully carry out the exit management and transition of this Project to the gency identified by HDSCL to the satisfaction of the Department. I/We further plete the following as part of the Exit management and transition:
	a)		to complete the updation of all Project documents and other artefacts and same to HDSCL before transition.
	b)		e to design standard operating procedures to manage system (including d IT systems), document the same and train HDSCL personnel on the same.
	c)	or identifies of this Project, the include but no IT Infrastruc queries/clarifie	decides to take over the operations and maintenance of the Project on its own selects any other agency for providing operations & maintenance services on en we shall provide necessary handholding and transition support, which shall be limited to, conducting detailed walkthrough and demonstrations for the cture, handing over all relevant documentation, addressing the cations of the new agency with respect to the working/performance levels of ure, conducting Training sessions etc.
2.	-		and that the Exit management and transition will be considered complete on val from HDSCL.
Yo	urs 1	faithfully,	
(Si	gna	ture of the Auth	norized signatory of the Bidding Organisation)
Na	me		:
De	sign	ation	:
Da	te		:
Tiı	ne		:
Sea	al		:

**Business Address** 

## Form 15: Declaration for opening of Project office in Hubballi-Dharwad

Place:
Date:
To,
<insert address="" and="" name=""></insert>
<b>Ref:</b> "Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model".
Bid Reference No:
Sub: Undertaking to Open an Project Office in Hubballi-Dharwad
Dear Sir,
We hereby undertake that:
We are willing to open an Project office in Hubballi-Dharwad within 1 month in case we are declared successful in the bidding Process.
We have carefully read and understood the entire tender document. We do agree to all the terms and conditions mentioned in the RFP.
Yours faithfully,
Signature:
Name:
Designation:
Address:
Date:
Company Seal

# Form 16: Declaration that the Concessionaire has not been blacklisted

(To be submitted on the Letterhead of th	e responding Concessionaire)
Place:	
Date:	
To,	
<name address="" and=""></name>	
Ref: RFP Notification no dated	
Subject: Declaration of Concessionaire	being not blacklisted
Dear Sir,	
and/or central government in India on ar	acklisted in any manner whatsoever by any of the State/UT ny ground including but not limited to indulgence in corrupt actice, undesirable practice or restrictive practice.
Place	:
Date	:
Concessionaire's Company Seal	:
Authorized Signatory's Signature	:
Authorized Signatory's Name and Design	nation:

# Form 17: Consortium MoU/Joint Bidding Agreement

<to a="" and="" authoriz="" be="" by="" consortium="" members="" on="" paper="" printed="" signed="" stamp=""></to>	ed signatories of the Le	ad Concession	aire
This Memorandum of Understanding is made in	on the	_ Day of,	, 20
By and Between			
M/s having its registered office at acting as the Lead Partner of the first part,	(hereinafter refer	rred to as	)
And			
M/s having its registered office at in the capacity of a Joint Partner of the other part	(hereinafter refe	rred to as	)
And			
M/s having its registered office at in the capacity of a Joint Partner of the other part	(hereinafter refer	red to as	)
And			
M/s having its registered office at in the capacity of a Joint Partner of the other part	(hereinafter refer	red to as	)
The expressions of and shall wher their respective legal representatives, successors-in-interreferred to as "the Parties" and individually as "the Party"	rest and assigns and sh		
WHEREAS:			
Hubballi-Dharwad Smart City Ltd(HDSCL) [hereinafter r for Selection of Concessionaire for Implementing Inte Hubballi-Dharwad on BOOT model'.		_	
NOW, THEREFORE, THE PARTIES AGREE AS FOLLOV	VS:		
The following documents shall be deemed to form and be this MOU.	read and construed as a	ın integral part	of
i. RFP comprising			
ii. Any corrigendum/addendum issued by Purchaser			
iii. The bid submitted on our behalf jointly by the Lea	d Partner		
The 'Parties' have studied the documents and have agreed	to participate in submit	tting a 'bid' joir	ıtly.
M/s shall be the lead partner of the Consort represent the Consortium in its dealing with the Purchas			

proposals, the parties agree to nominate as the Leader duly authorized to sign and submit all documents and subsequent clarifications, if any, to the Purchaser. However M/s shall not submit any such proposals, clarifications or commitments before securing the written clearance of the other partner which shall be expeditiously given by M/s, M/s and M/s to M/s
The lead partner shall be authorized to incur the liabilities and receive instructions for and on behalf of any and all partners of consortium. The lead partner will be solely responsible for the entire project implementation.
The 'Parties' have resolved that the following distribution of responsibilities will be followed in the event that the Consortium Bid is accepted by HDSCL.
a) Lead Partner share %;
Responsibilities
i
ii
iii
b) Consortium Partner 1 share %;
Responsibilities
i
ii
iii. –
c) Consortium Partner 2 share %;
Responsibilities
i
ii
iii. –
d) Consortium Partner 3 share %;
Responsibilities
i
ii
iii. –

**Assignment and Third Parties** 

The parties shall co-operate throughout the entire period of this MOU on the basis of exclusivity and neither of the Parties shall make arrangement or enter into agreement either directly or indirectly with any other party or group of parties on matters relating to the Project except with prior written consent of the other party and Purchaser.

#### Responsibilities

Lead Concessionaire will be responsible for the overall execution of the project, while the consortium partners will be responsible only for their part of execution during the concession period.

#### **Executive Authority**

The said Consortium through its authorized representative shall receive instructions, payments from the Purchaser. The management structure for the project shall be prepared by mutual consultations to enable completion of project to quality requirements within permitted cost and time.

#### **Guarantees and Bonds**

Till the award of the work, the lead partner shall furnish bid bond and all other bonds/guarantees to the Purchaser on behalf of the Consortium which shall be legally binding on all the partners of the Consortium.

#### **Bid Submission**

Each Party shall bear its own cost and expenses for preparation and submission of the bid and all costs until conclusion of a contract with the Purchaser for the Project. Common expenses shall be shared by both the parties in the ratio of their actual participation.

#### **Indemnity**

Each party hereto agrees to indemnify the other party against its respective parts in case of breach/default of the respective party of the contract works of any liabilities sustained by the Consortium.

For the execution of the respective portions of works, the parties shall make their own arrangements to bring the required finance, plants and equipment, materials, manpower and other resources. All the payments from HDSCL will be received by the Lead partner.

#### **Documents and Confidentiality**

Each Party shall maintain in confidence and not use for any purpose related to the Project all commercial and technical information received or generated in the course of preparation and submission of the bid.

#### Arbitration

Any dispute, controversy or claim arising out of or relating to this agreement shall be settled in the first instance amicably between the parties. If an amicable settlement cannot be reached as above, it will be settled by arbitration in accordance with the Indian Arbitration and Conciliation Act 1996 or any amendments thereof. The venue of the arbitration shall be Hubballi-Dharwad.

#### Validity

& Address)

& Address)

\_(Name

_											
	is Agreement shall remain less by mutual consent, the										
a)	The bid submitted by the	Consortium is declared u	ınsuccessful, or								
b)	Cancellation/shelving of the Project by the Purchaser for any reasons prior to award of work										
c)	Execution of detailed Consortium agreement by the parties, setting out detailed terms after award of work by the Purchaser.										
Th	is MoU is drawn in n	umber of copies with equ	al legal strength and st	atus.							
Th	is MoU shall be construed	under the laws of India.									
No	otices										
	otices shall be given in wri lowing fax numbers and ac		registered mail or con	nmercial courier to the							
L	ead Partner	Consortium Partner 1	Consortium Partner 2	Consortium Partner 3							
(1	Name & Address)	(Name & Address)									
			(Name & Address)	(Name & Address)							
	N WITNESS WHEREOF, T nonth and year first before	written.	•								
N	I/s	M/s	M/s	M/s							
(8	Seal)	(Seal)	(Seal)	(Seal)							
TA	Tito o a a										
۷\ 1	Vitness (Name										

#### 18.2 Annexure II: Financial Proposal Template

#### Form 1: Covering Letter

To:

<name and address>

#### **Subject:**

Dear Sir,

We, the undersigned, offer to provide the Implementation services for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model 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 inclusive of the local taxes.

#### 1. Price & Validity

- All the prices mentioned in our Tender are in accordance with the terms as specified in the RFP documents. All the prices and other terms and conditions of this Bid are valid for a period of 180 days from the date of submission of Bid.
- We hereby confirm that our prices include all taxes. However, all the taxes are quoted separately under relevant sections.
- We understand that the actual payment would be made as per the existing indirect tax rates at the time of payment.

#### 2. Unit Rates

We have indicated in the relevant forms enclosed, the unit rates for the purpose of on account of payment as well as for price adjustment in case of any increase to/decrease from the scope of work under the contract.

#### 3. Deviations

We declare that all the services shall be performed strictly in accordance with the Tender documents except for the variations and deviations, all of which have been detailed out exhaustively in the following statement, irrespective of whatever has been stated to the contrary anywhere else in our bid.

Further we agree that additional conditions, if any, found in the Tender documents, other than those stated in deviation schedule, shall not be given effect to.

#### 4. Tender Pricing

We further confirm that the prices stated in our bid are in accordance with your Instruction to Concessionaire included in Tender documents.

#### 5. Qualifying Data

We confirm having submitted the information as required by you in your Instruction to Concessionaire. In case you require any other further information/documentary proof in this regard before evaluation of our Tender, we agree to furnish the same in time to your satisfaction.

#### 6. Bid Price

We declare that our Bid Price is for the entire scope of the work as specified in the RFP. These prices are indicated Commercial Bid attached with our Tender as part of the Tender.

#### 7. Bank Guarantee

We hereby declare that in case the contract is awarded .to us, we shall submit the Bank Guarantee as per Annexure III of the RFP document.

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

We hereby declare that our Tender is made in good faith, without collusion or fraud and the information contained in the Tender is true and correct to the best of our knowledge and belief.

We understand that our Tender is binding on us and that you are not bound to accept a Tender you receive.

Thanking you,	
We remain,	
Yours sincerely,	
Authorized Signature	:
Name and Title of Signatory	:
Name of Firm	:
Address	:

## Form 2 Financial Bid Format

Concessionaire need to fill the price in the following format;

## A. Capital Investment

#	Brief Item Description	Unit	Quantity	Unit Price	Applicable Tax	Amount
1.	Smart LED					
	Sub Total					
2.	Intelligent Poles					
	Sub Total					
3.	Wi-Fi Services					
	Sub Total					
4.	Optical Fiber					
	Sub Total					
5.	Surveillance					
	Sub Total					
6.	Smart Bill Board					
	Sub Total					
7.	Centralized Command and Control Centre					
	Sub Total					
8.	Environmental Sensors					
	Sub Total					
9	Panic Button & Emergency Call Box					
10	Sub Total					
10	Public Addressal System					
Α	Sub Total Total Cost (Sum Amount of					
A	`					
11	1+2+3+4+5+6+7+8+9+10) Contingencies					
11 12	Supervision and implementation Costs					
12	Total CAPEX (A+11+12)					
	10(a) CAFEA (A+11+12)					

Note:

• The Concessionaire is required to break up the aforementioned smart components and provide the cost of each of the unit component separately

## B. Operation and Maintenance Cost post go-live

		Year													
Brief Item Description	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15
Smart LED															
Intelligent Poles															
Wi-Fi Services															
Optical Fiber															
Surveillance															
Smart Bill Board															
Environmental Sensors															
Panic Button & Emergency Call Box															
Public Addressal System															
Any other Cost															
Total OPEX			1	1	ı	II.					•			•	

#### C. Revenue from the project

Revenue				Year														
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	
Revenue (INR)	shared with	HDSCL																
NPV																		

#### D. Revenue sharing from additional Intelligent Pole

					Year													
Revenue		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	
Revenue (INR)	shared with	HDSCL																

#### Note:

- The amount should be INR and should be non-zero a positive number
- The NPV will be calculated as;

  - o  $NPV = \sum_{i=1}^{n} revenue i/(1 + rate)^{i}$ o Where n is number total concession period, i is the revenue for the ith year.
- The discounting factor is 10%
- The revenue quoted shall be exclusive of any taxes. Concessionaire shall bear the tax, if any, generated out the revenue.

### 18.3 Annexure III: Template for Bank Guarantee

Form 1: Bank Guarantee

To,

<insert name address>

Whereas, <name of the supplier and address> (hereinafter called "the Concessionaire") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for 'Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model' to Hubballi-Dharwad Smart City Ltd (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the Concessionaire shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of INR <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of INR<Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Concessionaire 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 <Insert Date>)

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed INR. <Insert Value> (Rupees <Insert Value in Words> only).
- II. This bank guarantee shall be valid up to <Insert Expiry Date>)
- III. It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Selection of Concessionaire for Implementing Intelligent Poles for Smart City Projects in Hubballi-Dharwad on BOOT model										
Date:										

## 18.4 Annexure IV: Checklist

Following is the check list for Concessionaire's reference;

#	Particulars	Included								
		in the								
		Proposal								
		Yes/No								
An	Annexure 1									
1.	Form 1: Technical Proposal Covering Letter									
2.	Form 2: Power of Attorney									
3.	Form 3: Undertaking on Total Responsibility									
4.	Form 4: Particulars of the Concessionaire									
5.	Form 5: Bank Guarantee for Earnest Money Deposit									
6.	Form 6: Project Citation Format									
7.	Form 7: Proposed Solution									
8.	Form 8: Technical Compliance: FRS									
9.	Form 9: Proposed Implementation Work Plan									
	Form 10: Team Composition									
	Form 11: Curriculum Vitae (CV) of Key Personnel									
	For 12: Deployment of Personnel									
	Form 13: Manufacturers Authorisation Form									
14.	Form 14: Undertaking on Service Level Compliance									
	Form 15: Undertaking on Exit Management & Transition									
16.	Form 16: Office Undertaking									
17.	Form 17: Declaration of non-blacklist									
	Form 18: Consortium MoU									
	nexure II									
	Form 1: Covering Letter									
	Form 2: Financial Proposal									
	nexure III									
21.	Form 1: Bank Guarantee									

# 18.5 Annexure V: Concession Agreement

The draft concession agreement is a separate document that will be separately uploaded.

## 18.6 Annexure VI

Below table provides tentative list of locations where smart poles needs to be deployed.

Sr. No	Location	Rationale
1	Glass House HDMC Hubballi	Tourist Place Public Building
2		Tourist Place
3	Unkel Lake Tolankere lake	Tourist Place Tourist Place
4		
5	court complex Hubballi	Public Building
6	Court Complex Dharwad DC Office	Public Building
7		Public Building
8	Railway Station, Hubbali	Vibrant Corridor from Airport to Railway Station
9	Railway Station, Dharwad	Anticipated High Foot fall area
10	Ambedkar Circle	Vibrant Corridor from Airport to Railway Station
11	City Bus Stop Near Railway Station	Vibrant Corridor from Airport to Railway Station
12	In front of Lamington School	Vibrant Corridor from Airport to Railway Station
13	In front of HDMC	Vibrant Corridor from Airport to Railway Station
14	Mini Vidhana Soudha/Police Head Quarters	Vibrant Corridor from Airport to Railway Station
15	Chenamma Circle - Near Bus Stand	Vibrant Corridor from Airport to Railway Station
16	Chenamma Circle - opposite to Sai Mandir	Vibrant Corridor from Airport to Railway Station
17	Opposite old bus stand	Vibrant Corridor from Airport to Railway Station
18	Basava Vana	Vibrant Corridor from Airport to Railway Station
19	Swimming pool Complex- East	Vibrant Corridor from Airport to Railway Station
20	Traffic Light near IT Park	Vibrant Corridor from Airport to Railway Station
21	IT park	Vibrant Corridor from Airport to Railway Station
22	Hosur Junction	Vibrant Corridor from Airport to Railway Station
23	Near Bannimara stop, Gokul Road	Vibrant Corridor from Airport to Railway Station
24	Near KSRTC Depot	Vibrant Corridor from Airport to Railway Station

Sr. No	Location	Rationale									
25	KSRTC Depot	Vibrant Corridor from Airport to Railway Station									
26	KSRTC Bus stand (New)	Vibrant Corridor from Airport to Railway Station									
27	Ravinagar Gokul Road	Vibrant Corridor from Airport to Railway Station									
28	Ravinagar Gokul Road	Vibrant Corridor from Airport to Railway Station									
29	Basaveshwarnagar	Vibrant Corridor from Airport to Railway Station									
30	Manjunath Nagar Cross	Vibrant Corridor from Airport to Railway Station									
31	Water Tank Nehru Nagar	Vibrant Corridor from Airport to Railway Station									
32	Near Airport	Vibrant Corridor from Airport to Railway Station									
33	Near Airport	Vibrant Corridor from Airport to Railway Station									
34	Near Airport	Vibrant Corridor from Airport to Railway Station									
35	Nehru Ground	Anticipated High Footfall area									
36	Janta Market	Anticipated High Footfall area									
37	MG Market	Anticipated High Footfall area									
38	Supermarket at Dharwad	Anticipated High Footfall area									
39	HDMC Office in Dharwad	Public Building									
40	Ward No. 34, 35, 46, 36, 38, 39, 40, 56, 44, 41, 42, 43, 59	ABD Wards, hotspot to be installed outside ABD area									
41	Ward No.: 1, 3, 17, 20, 22, 23, 24, 25, 28, 30, 31, 37, 48, 50, 63, 65, 66	Improvement and Development of the lives of all.									
42	Rest of the 37 wards.	Improvement and Development of the lives of all.									
43	BRTS Stations	headed by BRTS, anticipated high foot-fall area									

## 18.7 Annexure VII

All Tests have to be confirmed and appropriate TEST REPORT has to be submitted at the time of bid submission.

LED Street Lights need to comply with the following Specifications and standards

Sl. No.		arameters	Requirements	Referred Standard IS/IEC
1	Lumen pe	r Watt	Low Output (<9000 lm) 65 lm/W	IS 16103 (Part 2)
			Mid Output (9000 to 23000 lm) 80 lm/W	
			High output (≥23000 lm) 100 lm/W	
2	Colour	Rendering	≥ 60	IS 16103 (Part 2)
	Index (CI	RI)		
3	Minimum	Rated Life	50,000 hours	IS 16103 (Part 2)
	(L70/B5			
4	o) Rated volt	1000	Up to and including apoly apprecting	IC 16100 (Dort 0)
4	Kateu von	lage	Up to and including 250V, operating range 140 V to 270V AC, 50 Hz	IS 16103 (Part 2)
5	Power Fac		> 0.9	IS 16103 (Part 2)
6	Total	Harmonic	Not more than 20%	IS 14700 (Part 3 /
	Distortion	is (THD)		Sec 2)
7	Driver		Accessible for easy replacement	-
8	Correlat ed	Colour	3000K (3045±175)	IS 16103 (Part 2)
	Temperat	ure (CCT)	3500K (3465±245)	IS 16105 and IS
			4000K (3985±275)	16106
			5000K (5028±283)	
			5700K (5665±355)	
			6500K (6530±510)	
9	Junctio n		< 90° C @ ambient 25° C. To be	-
	Temperat	ure	calculated by measuring at solder point	
			and adding thermal resistance	
10	Capacity t	o withstand	Up to 4 kV	IEC 61000-4-5
	surges			
11	LED Lam	p Efficacy	Not < 110 lumens per Watt	
12	Driver	Circuit	> 85%	IEC 61347-2-13
	Efficien cy			
13		conditions	Temperature: 0 to 50 °C	
			Humidity: 10% to 90% RH	
14	Warrant ee		10 years	

- 1. The Bidder shall use LED Street Lights from notable manufacturers in India or abroad which are approved by Hubballi Dharwad Municipal Corporation. The Bidder shall submit necessary test certifications from the manufacturers.
- 2. The manufacturer / supplier must be able to provide the test data to establish the authenticity and geniuses of the LEDs. The tests conducted on LED luminaires are classified as Type Test, Acceptance test and Routine Test
- 3. Sample size and criteria for conformity.
  - a. The luminaries shall be selected from the lot at random. In order to ensure randomness of selection, procedures given in IS 4905-1968 (Reaffirmed 2001) may be followed.

#### b. Test Scheme:

Sl.		Type	Acceptance	Routine
No.	Description of Test	Test	Tests	Tests
1	Visual and Dimensional check	Y	Y	Y
	Checking of documents of			
2	purchase of LED	Y	Y	Y
3	Résistance to humidity	Y	-	-
4	Insulation résistance test	Y	Y	Y
5	HV test	Y	Y	Y
6	Over voltage protection	Y	-	-
7	Surge protection	Y	-	-
8	Reverse polarity	Y	Y	-
9	Temperature rise	Y	Y	-
10	Lux measurement	Y	Y	-
11	Fire retardant	Y	-	-
12	Test for IP65 protection	Y	-	-

#### 4. Inspection:

a. The bidder will keep the Authority informed in advance of the time of the starting and the progress of manufacture of equipment in its various stages so that arrangement could be made for inspection if necessary. The representative of the Authority will have access to

- the supplier's or his sub bidder's work at any time during working hours for the purpose of inspection.
- b. Inspecting the materials during manufacturing of the materials / equipment and testing and may select test samples from the materials going into plant and equipment. The supplier will provide the facilities for testing such samples at any time including access to drawings and production data at no charge to Authority.
- c. Intimation to Authority by email and carry out the tests in the presence of representative of the Authority if felt necessary by the Authority. If Authority feels necessary, it may select one sample from the lot at factory to send for testing at CPRI/ERTL/MNRE or any other standard NABL accredited laboratory.
- d. The Authority may at its option get the materials inspected by the third party if it feels necessary.
- e. The dispatches will be affected only if the test results comply with the specification. The dispatches will be made only after the satisfaction by the Authority's Engineer in charge of the project.
- f. The acceptance of any quantity of materials will in no way relieve the supplier of its responsibility for meeting all the requirements of this specification and will not prevent subsequent rejection if such materials are later found to be defective or deviation from specification/IS.
- g. The supplier will give 7 days advance intimation to enable the Authority to depute its representative for witnessing the acceptance tests, if necessary.
- h. Should any inspected or tested materials / equipment fail to conform to the specification, the Authority may reject the materials and supplier will either replace the rejected materials or make alterations necessary to meet specifications requirements free of costs to the Authority.
- i. After delivery of materials at may be Verified/ retested in full or taking one random sample before acceptance. In case of any deviation to the specification, found during the tests, the lot will be rejected or will be replaced by bidder without any additional cost to Authority.
- j. During the tests, the lot will be rejected or will be replaced by bidder without any additional cost to Authority.

## 18.8 Annexure VIII

Below table provides split of activity between MSI (Master System Integrator), LSI (Local city Integrator) and Smart Pole concessionaire.

S No.	Activity	MSI*	LSI^	Smart Pole
5110.	110clivity	1,101		Concessionaire
1.	Procurement, deployment and	$\sqrt{}$		
	commissioning of IT Infrastructure (			
	ex: Servers) at KMDS & DR			
2.	Procurement and installation of the OS & licensing for Smart Poles			2/
	application at KMDS & DR			V
3.	Estimating the requirement for			√
	storage and compute required at			
	KMDS & the DR for Smart Poles			
	application	,		
4.	Provisioning of rack space at KMDS	$\sqrt{}$		
_	& DR for the requirement of the city			
5.	Hosting the Smart Poles application at the servers in KMDS (production)			ν
	& DR			
6.	Back-up to secondary storage devices			
	at DC & DR	,		
7.	DR setup for ICCC	$\sqrt{}$		
8.	DR setup for Smart Poles application			
9.	Integration (development, testing	$\sqrt{}$	$\sqrt{}$	,
	and staging) between Smart Poles			V
	application and the ICCC application at KMDS			
10.	Information/Data flow between DC			
10.	& DR	<b>'</b>	v	
11.	Integration (development, testing	√	$\checkmark$	
	and staging) between Smart Poles			$\checkmark$
	application and the ICCC application			
	at DR in case of DC failure	/		
12.	Ensuring the availability of IT Infrastructure at DC (KMDS)	$\sqrt{}$		
13.	Ensuring the availability of ICCC			
13.	Application	<b>'</b>		
14.	Ensuring the availability of Smart			√
	Poles Application			
15.	Ensuring the availability of GIS	$\sqrt{}$		
	platform		,	
16.	Updating the data layers (relevant to			
177	LED Street lighting project) at GIS  Network connectivity between field			7/
17.	devices and KMDS			V
18.	Network connectivity between	√		
	KMDS and ICCC	,		
19.	Network connectivity between	$\sqrt{}$		
	KMDS and DR			
20.	Scheduling & communicating the	$\checkmark$		
	planned down time at Data Centre			

21.	Coordination & assistance for planned down time for the respective applications at Data Centre	$\checkmark$	V	<b>√</b>
22.	Provision of DNS			
23.	Integration between external applications and Smart Poles application			V

# **Draft Concession Agreement**

# Selection of Concessionaire for Implementing Intelligent Poles in Hubballi-Dharwad under PPP on BOOT model



Reference No: HDSCL/Intelligaent Pole/2018-19
Date: 14.03.2018

Hubballi Dharwad Smart City Limited, Hubballi Karnataka

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# Selection of Concessionaire for Implementing Intelligent Poles in Hubballi-Dharwad under PPP on BOOT model

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THIS CONCESSION AGREEMENT is entered into aton this the
, 2018
BETWEEN
HUBBALI DHARWAD SMART CITY LIMTIED (HDSCL), represented by its Managing Director and having its principal office at I T Park,4 <sup>th</sup> Floor, B Block, Opposite Indira Glass House, Hubballi– 580 020 (hereinafter referred to as the " <b>Authority - 1</b> " which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One Part;
AND
HUBBALI DHARWAD MUNICIAPAL CORPORATION (HDMC), represented by its Commissioner and having its principal office at Sir Siddappa Kambali Road, Hubballi–580 020 (hereinafter referred to as the " <b>Authority - 2</b> " which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One Part; (herein after Authority -1 and Authority -2 referred to as "Authority" or "Authorities")
AND
M/sa company incorporated under the Companies Act, 1956, having its registered office at (hereinafter referred to as the "Concessionaire", which expression shall, unless repugnant to the context or meaning thereof, include its permitted successors and assigns) of the second part
AND
M/s a Company incorporated under, having its registered Office at (hereinafter referred to as
which expression shall, unless repugnant to the context or meaning thereof, include its permitted successors and assigns) of the third part.
AND
M/s a company incorporated under
registered Office at (hereinafter referred to as which expression shall, unless repugnant to the context or

meaning thereof, include its permitted successors and assigns) of the fourth part.

	AND
M/s	a company incorporated under
	red Office at (hereinafter
referre	d to as which expression shall, unless repugnant to the context or ng thereof, include its permitted successors and assigns) of the fifth part.
	PREAMBLE
WHEF	REAS
A.	HDSCL has conceived and is keen to implement a project envisaging Implementing Smart City Pan City Projects in Hubballi Dharwad under PPP on BOOT model.
В.	HDSCL has invited tenders from eligible persons/ firms/ companies/ consortiums for implementing the Project;
C.	In response to the aforesaid invitation for tenders, HDSCL has received bids from Concessionaires including the Concessionaire for implementing the Project;
D.	HDSCL, after evaluating the aforesaid bids, accepted the bid submitted by the Concessionaire and issued the Letter of Award (LOA) No: dated to the Concessionaire;
E.	In accordance with the requirements of the said tender/bid submitted by the Concessionaire, HDSCL has agreed to grant to the Concessionaire the Concession (as hereinafter defined) for the Concession Period, to finance, construct, operate maintain the Project, pay an agreed Revenue Share to HDSCL during the Concession Period, and at the end of the Concession Period transfer the implemented infrastructure to HDSCL, on the terms, conditions and covenants hereinafter set forth in this Agreement.
F.	The Concessionaire hereby accepts the Concession granted and undertakes to implement the Project in terms of this Agreement.
G.	M/S are the promoters / shareholders of the Concessionaire company and have joined as parties to this Agreement as

confirming parties for the due performance by the Concessionaire of its obligations under this Agreement.

NOW THEREFORE in lieu of the mutual promises and considerations set out herein, HDSCL and the Concessionaire (each individually a "Party" and collectively "Parties" hereto) hereby agree to be bound by the provisions of this Agreement.

#### ARTICLE – 1: DEFINITIONS AND INTERPRETATION

#### 1.1. Definitions:-

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meanings hereinafter respectively assigned to them:

- "Accounting Year" means the financial year commencing from 1st April of any calendar year and ending on 31st March of the next calendar year.
- "Agreement" means this Agreement including Schedules 'A' through 'J' hereto, and any amendments thereto made in accordance with the provisions of this Agreement.
- "Applicable Laws" means all laws in force and effect as of the date hereof and which may be promulgated or brought into force and effect, including statutes, rules, regulations, directions, by-laws, notifications, guidelines, ordinances issued there under by the Government of India, Government of Karnataka and HDSCL, including all judgments, decrees, injunctions, writs and orders or any final interpretation of any court of record, as may be in force and effect during the subsistence of this Agreement.
- "Applicable Permits" means all clearances, permits, licenses, authorizations, consents, noobjections, approvals and exemptions under or pursuant to any of the Applicable Laws or from any Government Authority, required to be obtained and maintained by the Concessionaire, in order to implement the Project and to provide the Project Facility in accordance with this Agreement, and for undertaking, performing or discharging the obligations contemplated by this Agreement or any other Transaction Document.
- "Arbitration Act" means the Arbitration and Conciliation Act, 1996 and shall include any modifications to or any re-enactment thereof as in force from time to time.
- **"Bank Rate"** means the rate of interest specified by the Reserve Bank of India from time to time in pursuance of section 49 of the Reserve Bank of India Act, 1934 or any replacement of such Bank Rate for the time being in effect;
- **"Bid Variable"** means the Revenue Share payable by the Concessionaire to HDSCL as provided in Article 9.
- "Change in Law" means the occurrence of any of the following after the date of this Agreement:
  - a. the enactment of any new Indian law;
  - b. the repeal, modification or re-enactment of any existing Indian law:
  - c. the commencement of any Indian law which has not entered into effect until the date of this Agreement;

- d. a change in the interpretation or application of any Indian law by a court of record as compared to such interpretation or application by a court of record prior to the date of this Agreement; or
- e. Any change in the rates of any of the taxes.
- "HDSCL" Hubballi Dharwad Smart City Ltd and their Representatives.
- "COD" means the commercial operations date of the Project which shall be the date on which the Officer-in-Charge has issued the Completion Certificate or the Provisional Certificate upon implementation of all the activities as mentioned in the Scope of Work, fully completed in all respects, as envisaged under the Project and which shall, subject to the provisions of this Agreement, be not later than **One year** from Commencement Date.
- "Commencement Date" means the date on which the physical possession of the Project Site is delivered by HDSCL to the Concessionaire, which shall not be later than 21 days from the date of issue of the Letter of Award
- "Completion Certificate" means the certificate issued by the Officer-in-Charge pursuant to Clause 7.3 (d).
- "Concession" shall have the meaning ascribed thereto in Clause 2.1.
- "Concession Period" means the period as applicable specified in Clause 2.2.
- "Concessioning Authority" means M/s. Hubballi Dharwad Smart City Ltd (HDSCL) and shall include its successors and assigns
- "Concessionaire" means M/s.\_\_\_\_ and shall include its successors and permitted assigns expressly approved by HDSCL.
- "Construction Works" means all works and things necessary to achieve commercial operation of the Project in accordance with this Agreement.
- "Contractor" means any person with whom the Concessionaire has entered into/ may enter into all or any of the Project Agreements related to the execution of any works and/or operation and maintenance thereof.
- "Cure Period" means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default.
- **'Debt Due'** means the aggregate of the following sums expressed in rupees, as may be outstanding and payable to the Lenders under the Financing Documents on the Termination Date:
  - (i) the principal amount of the debt including any subordinated debt provided by the Lenders under the Financing Documents for financing the Project (the "principal") which is outstanding as on the Termination Date but excluding any part of the principal that had fallen

- due for repayment one year prior to the Termination Date unless such repayment had been rescheduled with the prior consent of HDSCL; and
- (ii) all accrued interest, financing fees and charges payable on or in respect of the debt referred to in sub-clause (i) above up to the date preceding the Termination Date but excluding (a) any interest, fees or charges that had fallen due one year prior to the Termination Date, and (b) penal interest or charges payable under the Financing Documents to the Lenders.
- "Dispute" shall have the meaning ascribed thereto in Clause 16.1.
- "Dispute Resolution Procedure" means the procedure for resolution of Disputes set forth in Article 16.
- "**Drawings**" means all of the drawings, designs, calculations and documents pertaining to the Project as set forth in Schedule 'F' and shall include "as built" drawings of the Project.
- "Emergency" means a condition or situation that is likely to endanger the security of the individuals on or about the Project including users thereof or which poses an immediate threat of material damage to any of the Project Assets.
- "Officer-in-charge" means the Nodal Officer of HDSCL of the respective area or any other Person Authorized by HDSCL.
- "Encumbrance" means any encumbrance such as mortgage, charge, pledge, lien, hypothecation security interest, assignment, privilege or priority of any kind having the effect on the security or other such obligations and shall include without limitation any designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Project, and physical encumbrances and encroachments on the Project Site.
- "Equity" means the sum expressed in Rupees representing the equity share capital of the Concessionaire for meeting equity component of the Total Project Cost.
- "Financing Documents" means the documents executed by the Concessionaire in respect of financial assistance (including refinancing) for the Project to be provided by the Lenders by way of loans, advances, subscription to debentures and other debt instruments and guarantees, risk participation, take-out financing or any other form of credit enhancement and shall include loan agreements, guarantee agreements, subscription agreements, notes and any documents providing security for such financial assistance, and includes amendments or modifications made thereto.
- "Financial Close" means the date on which the Financing Documents providing for funding by the Lenders have become effective and the Concessionaire has immediate access to such funding under the Financing Documents.
- "Force Majeure Event" shall have meaning ascribed thereto in Clause 12.1.
- "Good Industry Practice" means those practices, methods, techniques, standards, skills, diligence

and prudence which are generally and reasonably expected of and accepted internationally from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Agreement and acting generally in accordance with the provisions of the HDSCL Act, and rules made there under and would mean good engineering practices in the design, engineering, construction and project management and which would be expected to result in the performance by the Concessionaire of its obligations and in the operation and maintenance of the Project in accordance with this Agreement, Applicable Laws, Applicable Permits, reliability, safety, environment protection, economy and efficiency.

"Government Agency" means the Government of India, the Government of Karnataka, HDSCL, or any State government or governmental department, commission, board, body, bureau, agency, authority, instrumentality, court or other judicial or administrative body, at central, state, or local level, having jurisdiction over the Concessionaire, the Project Assets or any portion thereof, or the performance of all or any of the services or obligations of the Concessionaire under or pursuant to this Agreement.

"Implementation Period" means the period beginning from the Commencement Date and ending on the COD. The Implementation Period shall be the estimated implementation period plus a reasonable time (up to 2 months) required by the Concessionaire for all pre-implementation activities such as investigation/study, designing, obtaining necessary approvals and arrangement of finance.

"Indirect Political Event" shall have the meaning ascribed thereto in Clause 12.3.

"Lenders" means the financial institutions, banks, funds, trusts or trustees of the holders of debentures or other securities, and their successors and assigns, who provide financial assistance to the Concessionaire under any of the Financing Documents.

"Maintenance Manual" shall have the meaning ascribed to it in Clause 7.5.

"Maintenance Programme" shall have the meaning ascribed to it in Clause 7.6.

"Material Adverse Effect" means material adverse effect on (a) the ability of either party to observe and perform any of their duties and obligations under and in accordance with the provisions of this Agreement and/or (b) the legality, validity, binding nature or enforceability of this Agreement.

"Material Breach" means a breach by either Party of any of its obligations under this Agreement which has/ is likely to have a Material Adverse Effect on the Project and which such Party shall have failed to cure within the Cure Period.

**"Minimum Maintenance Requirements"** means minimum maintenance requirements for the maintenance of the Project as set forth in Schedule 'H'. .

"Non Political Event" shall have the meaning ascribed thereto in Clause 12.2.

- "O&M" means the operation and maintenance of the Project during Operations Period including butnot limited to functions of maintenance, collection and retention of Fees and charges and performance of other services incidental thereto.
- "O&M Contract" means the contract, if any, entered into between the Concessionaire and the O&M Contractor for the Operation and Maintenance of the Project/Project Facility in accordance with the provisions of this Agreement.
- "O&M Contractor" means the person or entity with whom the Concessionaire has entered into an O&M Contract for discharging O&M functions for and on behalf of the Concessionaire.
- "O&M Expenses" mean the expenses incurred by or on behalf of the Concessionaire, duly certified by its Statutory Auditors for all regularly scheduled and reasonably anticipated O&M functions during Operations Period, including, without limitation (a) all cost of salaries and other employee compensation and contract fee payable to the O&M Contractor, if any, (b) cost of materials, supplies, utilities and other services, (c) premium for insurance, (d) all franchise, excise, property and other similar taxes and all costs and fees incurred in order to obtain and maintain all Applicable Permits necessary for the O&M of the Project/Project Facility at its full design capacity, (e) all repair, replacement and maintenance costs of the Project/Project Facility, and (f) all other expenditures required to be incurred under Applicable Law or under Applicable Permits necessary for the operation and maintenance of the Project according to the Specifications and Standards at its full design capacity.
- "Operations Period" means the period commencing from COD and ending at the expiry/termination of the Concession Period.
- "Parties" means the parties to this Agreement collectively and "Party" shall mean either of the Parties to this Agreement individually as the context may require or admit.
- "**Performance Security**" means the Performance Security for construction or Performance Security for operation and maintenance as applicable in terms of Article 3.
- **"Person"** means any individual, company, corporation, partnership, joint venture, trust, unincorporated organization, government or governmental authority or Government Agency or any other legal entity.
- "Political Event" shall have the meaning ascribed thereto in Clause 12.4.
- "Project" means the project described in Schedules 'A' and 'B' which the Concessionaire is required to design, engineer, procure, finance, construct, operate, maintain and transfer in accordance with the provisions of this Agreement.
- "Project Agreements" means collectively this Agreement, any contract for the design, engineering, procurement and construction of the Project, O&M Contract and any other material contract (other than the Financing Documents) entered into or may hereafter be entered into by the Concessionaire

in connection with the Project/Project Facility.

"Project Assets" means all physical and other assets relating to and forming part of the Project including but not limited to (i) rights over the Project Site in the form of license, or otherwise, (ii) tangible assets such as civil works including foundations, embankments, pavements, drainage works, lighting facilities, sign boards, electrical works for lighting on the Project, telephone and other communication systems, equipment for the Project, and wayside amenities, `

"**Project Completion**" shall have the meaning ascribed thereto in Clause 7.2.

"Project Completion Schedule" means the progressive Project milestones set forth in Schedule 'C' for the implementation of the Project.

"Project Facility" means collectively the facilities on the Project Site to be constructed, built installed, erected or provided by the Concessionaire for use of the users by implementing the Project and more specifically set out in Schedule 'B'.

"Provisional Certificate" shall have the meaning ascribed to it in Clause 7.3(e).

"Punch List" shall have the meaning ascribed thereto in Clause 7.3(e).

"Scheduled Project Completion Date" shall have the meaning set forth in Clause 7.2(b).

"Specifications and Standards" means the specifications and standards relating to the quality, capacity and other requirements for the Project as set forth in Schedule 'G' and any modifications thereof, or additions thereto as included in the design and engineering for the Project submitted by the Concessionaire to, and expressly approved by HDSCL.

**"Statutory Auditors"** means a reputed firm of Chartered Accountants duly licensed to practice in India acting as statutory auditors of the Concessionaire.

"Termination" means termination of this Agreement and the Concession hereunder pursuant to a Termination Notice or otherwise in accordance with the provisions of this Agreement but shall not, unless the context otherwise requires, include the expiry of this Agreement/Concession due to expiry to the Concession Period in the normal course.

"Termination Date" means the date on which the Termination occurs which shall be the date on which Termination Notice has been delivered or deemed to have been delivered by a Party issuing the same to the other Party in accordance with the provisions of this Agreement.

**"Termination Notice"** means a communication in writing by a Party to the other Party regarding Termination in accordance with the applicable provisions of this Agreement.

"Tests" means the tests to be carried out to determine the Project Completion and its certification by the Officer-in-Charge prior to commencement of commercial operation of the Project.

"Total Project Cost" means the lowest of the following:

- (a) Actual capital cost of the Project upon completion of the Project as certified by the Statutory Auditors; or
- (b) Total project cost as set forth in Financing Documents.

## 1.2. Principles of Interpretation

- a. The Article numbers, clause numbers, headings and marginal headings in this Agreement are solely for the purpose of facilitating reference and shall not impact the construction or interpretation of this Agreement.
- b. Words importing Persons or Parties shall include firms, companies, corporations, trusts, associations and any organizations having legal capacity to sue and be sued in their names.
- c. Words importing the singular also include the plural and vice-versa where the context requires.
- d. Words importing one gender also include other gender.
- e. In case of ambiguities or discrepancies in this Agreement, the following shall apply;
  - (i) between two Articles of this Agreement, the provisions of specific Articles relevant to the issue under consideration shall prevail over those in other Articles;
  - (ii) between the Clauses and the Schedules, the Clauses shall prevail;
  - iii) between the written description on the drawings and the Specifications and Standards, the latter shall prevail;
  - iv) between the dimensions scaled from the drawings and their specific written dimensions, the latter shall prevail;
  - v) Between any value written in numerals and that in words, the latter shall prevail. Any word not specifically defined herein shall have the same meaning as is given in the standard Oxford Dictionary, with reference to the context in which it is used.

#### 1.3. Priority of Documents

The documents referred to in this Agreement and forming part thereof are to be taken as mutually explanatory of one another. If there is an ambiguity or discrepancy in the documents, the Concessioning Authority shall issue any necessary clarification or instruction to the Concessionaire, and the priority of the documents shall be as follows: -

- (i) This Concession Agreement
- (ii) The Schedules to this Agreement
- (iii) The "Letter of Award"
- (iv) The Bids submitted by the Concessionaire
- (v) The written clarifications issued to the Concessionaires
- (vi) Written addenda to the RFP

## ARTICLE – 2: CONCESSION AND PROJECT SITE

#### 2.1. Grant of Concession

- a) Subject to and in accordance with the terms and conditions set forth in this Agreement, HDSCL hereby grants and authorizes the Concessionaire to investigate, study, finance, construct, operate and maintain the Project Facility and to exercise and/or enjoy the rights to collect revenue from commercial utilization of space allocated as set forth in this Agreement (viz. advertisements etc), collectively known as "the Concession".
- b) The title of interest, ownership and rights with regard to project implemented by the Concessionaire for HDSCL along with fixtures/ fittings provided therein shall rest with the Concessionaire until the expiry of the Contract or as per Termination provisions and rights related to the land allotted by the HDSCL shall vest with the HDSCL except that these will be operated and maintained by the Concessionaire as agreed in this Agreement.

#### 2.2. Concession Period

The Concession hereby granted is for a period of **Fifteen (15) years** (Including construction period of 12 months) commencing from the Commencement Date during which the Concessionaire is authorized to implement the Project and to operate the Project Facility in accordance with the provisions hereof.

#### Provided that:

- (a) In the event of the Concession being extended by the Concessioning Authority beyond the said period of fifteen (15) years in accordance with the provisions of this Agreement, the Concession Period shall include the period by which the Concession is so extended; and
- (b) In the event of an early termination/determination of the Concession/this Agreement by either Party in accordance with the provisions hereof, the Concession Period shall mean and be limited to the period commencing from the COD and ending with the date of termination/determination of the Concession/this Agreement.

#### 2.3. Acceptance of the Concession

The Concessionaire hereby accepts the Concession and agrees and undertakes to implement the Project/ provide the Project Facility, and to perform/discharge all of its obligations in accordance with the terms and conditions set forth in this Agreement. Subject to and in accordance with the provisions of this Agreement and Applicable Laws and Applicable Permits, the Concessionaire shall at its costs, charges, expenses and risk including but not limited to foreign exchange variation risk, if any, conceptualize, design, engineer, finance, construct, equip, operate, maintain, and replace the Project/Project Facility.

#### 2.4. Project Site

- (a) HDSCL hereby undertakes to handover to the Concessionaire physical possession of the Project Site as specified in the RFP free from Encumbrance within 15 days from the date of issue of the Letter of Award / Work Order together with the necessary rights of way/way leaves for the purpose of implementing the Project in accordance with this Agreement.
- (b) HDSCL confirms that upon the Project Site being handed over pursuant to the preceding sub-Clause (a) the Concessionaire shall have the exclusive right to enter upon, occupy and use the Project Site and to make at its costs, charges and expenses such development and improvements in the Project Site as may be necessary or appropriate to implement the Project and to provide the Project Facility subject to and in accordance with the provisions of this Agreement, Applicable Laws, and Applicable Permits.

#### 2.5. Use of the Project Site

The Concessionaire shall not without prior written consent or approval of HDSCL use the Project Site for any purpose other than for the purposes of the Project/ the Project Facility and purposes incidental thereto as permitted under this Agreement or as may otherwise be approved by HDSCL.

## 2.6. Information about the Project Site

The information about the Project Site set out in Schedule 'B' is provided by HDSCL in good faith and with due regard to the matters for which such information is required by the Concessionaire. HDSCL agrees to provide to the Concessionaire, upon a reasonable request, any further information relating to the Project Site, which HDSCL may now possess or may hereafter come to possess, as may be relevant to the implementation of this Project. Subject to this HDSCL makes no representation and gives no warranty to the Concessionaire in respect of the condition of the Project Site.

#### 2.7. Peaceful Possession

**HDSCL** warrants that:

- (a) the Project Site having been acquired through the due process of law belongs to and is vested in HDSCL, and that HDSCL has full powers to hold, dispose of and deal with the same consistent, inter alia, with the provisions of this Agreement;
- (b) the Concessionaire shall have no obligation/liability as to payment of any compensation whatsoever to whomsoever the Project Site or any part thereof had been acquired from and that the same shall be the sole responsibility of HDSCL; and
- (c) The Concessionaire shall, subject to complying with the terms and conditions of this Agreement, remain in peaceful possession and enjoyment of the Project Site during the Concession Period. In the event the Concessionaire is obstructed by any Person / Company

claiming any right, title or interest in or over the Project Site or any part thereof HDSCL shall, if called upon by the Concessionaire, defend the Concessionaire against such claims and proceedings and also keep the Concessionaire indemnified against any direct or consequential loss or damages which the Concessionaire may suffer, on account of any such right, title, interest or charge.

## 2.8. Rights over the Project Site

- (a) The Concessionaire shall have exclusive rights to the use of the Project Site in accordance with the provisions of this Agreement. The Concessionaire shall allow access to, and use of the Project Site/ Project Facility for the authorities/agencies laying telecommunication lines, electric lines or such other public purposes as HDSCL may specify, provided that such access or use does not result in a Material Adverse Effect or closure of Project Facility for a period exceeding 30 days at a stretch at any location and that HDSCL undertakes to ensure that the Project Facility is restored at the cost and expenses of HDSCL as per the Specifications and Standards. Where such access or use causes any loss of revenue to the Concessionaire, HDSCL shall compensate the Concessionaire for such loss by increasing the Concession Period suitably.
- (b) The Concessionaire shall not part with or create any Encumbrance on the whole or any part of the Project Site save and except as set forth and permitted under this Agreement provided however that nothing contained herein shall be construed or interpreted as restriction on the right of the Concessionaire to appoint any Contractor for the performance of its obligations hereunder including for operation and maintenance of all or any part of the Project/ Project Facility.

#### **ARTICLE – 3: PERFORMANCE SECURITY**

#### 3.1. Performance Security

- a) The Concessionaire shall for due and punctual performance of obligations during the Project Construction, Implementation and O&M Period deliver to HDSCL, will submit Performance Security as per the RFP.
  - (i) The Concessionaire shall submit a Performance Security in the form of an irrevocable and unconditional Bank Guarantee within 15 days of issuance of LOA, valid for a period of twelve (12) months from any scheduled bank for an amount equivalent to one fourth of Annual Revenue Share mentioned in **Schedule K** for corresponding year of the Concession Period.
  - (ii) The Concessionaire shall be responsible for submission of the Performance Security fifteen (15) days prior to commencing of a particular year except the first year.
- b) The Performance Security shall be in the same format as detailed in **Schedule I**nitially valid for twelve (12) months from the date of its issue.
- c) The Concessionaire shall renew the Performance Security fifteen (15) days before its expiry date as per provisions of Clause 3.1(b) and furnish the same to the Authority, failing which the Authority shall have the right to invoke the Performance Security.
- d) The Concessionaire shall, within ten (10) days of drawl from the Bank Guarantee by the Authority, restore the value of Bank Guarantee to the original amount existing as on the date prior to such drawl, failing which the Authority shall have the right to draw from the amount of Performance Security in full, notwithstanding to any other right as per the Agreement.
- e) The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms:

Cash or

- Banker's cheque/Demand draft, /Pay Order in favour of The Commissioner, HDMC, Hubballi
- A bank guarantee in the form given in Section 10; or
- Specified Small Savings Instruments pledged to The Commissioner, HDMC, Hubballi
- Fixed Deposit Receipts pledged in the name of **The Commissioner**, **HDMC**, **Hubballi**

#### **ARTICLE – 4: REVENUE**

#### 4.1. Collection and Appropriation of Revenue

- a) Subject to the provisions of this Agreement, the Concessionaire shall, during Operations Period be entitled to demand and collect revenue from advertisements, LED Energy Saving, Wi-Fi, Intelligent street pole rentals, Fiber leasing etc at the Project Site as specified and permitted by HDSCL.
- b) The Concessionaire shall not collect any revenue until it has received Completion Certificate or the Provisional Certificate from the Officer-in-Charge.
- c) In case any advertisement space remains unutilized, no adjustment in the Bid Variable will be allowed under any circumstances.

# 4.2. Collection and Appropriation of Revenue from Advertisement at identified locations

a) Subject to the provisions of this Agreement, the Concessionaire shall during Operations Period be entitled to collect revenue from advertisements, Wi-Fi, intelligent street pole rentals, Leasing of Fiber etc. as specified in this Agreement.

#### **ARTICLE - 5 OBLIGATIONS AND UNDERTAKINGS**

In addition to and not in derogation or substitution of any of the obligations set out elsewhere in this Agreement, the Parties agree and undertake as under

## 5.1. General Obligations of the Concessionaire

The Concessionaire shall at its own cost and expense:

- Investigate, study, construct, operate and maintain the Project Assets/Project Facility in accordance with the provisions of this Agreement, Good Industry Practice and Applicable Laws.
- (ii) Obtain all Applicable Permits in conformity with the Applicable Laws and be in compliance thereof at all times during the Concession Period;
- (iii) Ensure that services of water supply, sewerage, drainage, electricity, telephone etc. in the vicinity, encountered during the period of implementation/ operation/ maintenance are not damaged. In case these are required to be shifted, the same shall be done by the Concessionaire at their cost. During shifting incase damage to the assets created, same shall be replaced by Concessionaire.
- (iv) procure and maintain in full force and effect, as necessary, appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes and systems used in or incorporated into the Project;
- (v) ensure and procure that each Project Agreement contains provisions that would entitle HDSCL or a nominee of HDSCL to step into such Agreement at HDSCL's discretion, in place and

- substitution of the Concessionaire in the event of Termination pursuant to the provisions of this Agreement;
- (vi) provide all assistance to the Officer-in-Charge/ HDSCL Nodal Officer as they may reasonably require for the performance of their duties and services under this Agreement;
- (vii) provide to the Officer-in-Charge/ HDSCL Nodal Officer, reports on a regular basis during the Implementation Period and the Operations Period in accordance with the provisions of this Agreement; The Concessionaire shall adhere to the provisions of Applicable Laws, by-laws and rules in connection with project implementation and revenue generation. The Concessionaire shall also pay/ ensure payment to HDSCL of revenue tax, if any, in respect of the revenue generated in accordance with the provisions of Applicable Laws and the by-laws and rules there under.
- (viii)appoint, supervise, monitor and control the activities of Contractors under their respective Project Agreements as may be necessary;
- (ix) make efforts to maintain harmony and good industrial relations among the personnel employed in connection with the performance of the Concessionaire's obligations under this Agreement;
- (x) develop, implement and administer a surveillance and safety program for the Project/Project Facility and the users thereof and the Contractors' personnel engaged in the provision of any services under any of the Project Agreements including correction of safety violations and deficiencies, and taking of all other actions necessary to provide a safe environment in accordance with Applicable Laws and Good Industry Practice;
- (xi) not place or create nor permit any Contractor or other person claiming through or under the Concessionaire to create or place any Encumbrance over all or any part of the Project Assets, or on any rights of the Concessionaire therein, save and except as expressly set forth in this Agreement;
- (xii) be responsible for safety, soundness and durability of the Project Facility including all structures forming part thereof and their compliance with the Specifications and Standards;
- (xiii)ensure that the Project Site remains free from all encroachments and take all steps necessary to remove encroachments, if any;
- (xiv) operate and maintain the Project at all times during the Operations Period in conformity with this Agreement including but not limited to the Specifications and Standards, the Maintenance Programme and Good Industry Practice;
- (xv) Ensure that Project Site and facilities created are not defaced by any kind of writings/ posters

#### 5.2. Obligations of the Concessionaire during Implementation Period

(a) The Concessionaire shall, before commencement of implementation of the Project;

- (i) submit to the Nodal Officer with due regard to Project Completion Schedule and Scheduled Project Completion Date, its construction time schedule;
- (ii) have requisite organization and designate and appoint suitable officers/ representatives as it may deem appropriate to supervise the Project and to liaison with the Nodal Officer and to be responsible for all necessary exchange of information required pursuant to this Agreement;
- (iii) undertake, do and perform all such acts, deeds and things as may be necessary or required to adhere to the Project Completion Schedule and to achieve Project Completion under and in accordance with this Agreement;
- (b) The Concessionaire shall, at all times, afford access to the Project Site, to the authorized representatives of HDSCL and officer of any Government Agency having jurisdiction over the Project, including those concerned with safety, security or environmental protection, to inspect the Project and to investigate any matter within their authority and upon reasonable notice, the Concessionaire shall provide to such persons reasonable assistance necessary to carry out their respective duties and functions.
- (c) The Concessionaire shall apply for and obtain all necessary clearances and/ or approvals for the project implementation.

The Concessionaire shall bear all costs and charges for special or temporary sites required by it in connection with access to the Project Site. The Concessionaire shall obtain at its cost such facilities on or outside the Project Site as may be required by it for the purposes of the Project and the performance of its obligations under this Agreement.

- (d) In case of loss due to theft or damage to the assets created at the project site, the Concessionaire shall be responsible for making good the same immediately at its own cost and shall continue to keep the project sites operational and available for public use, at all times, within the Concession Period.
- (e) Any agreements that the Concessionaire enters into with third parties towards revenue generation streams needs to be shared with the Authority along with the corresponding Contract Documentation (all forms of sub-contracts).

#### 5.3. Obligations of Member of the Consortium

M/s.\_\_\_\_\_\_\_\_, the parties of the third part and fourth part respectively to this Agreement hereby agree and undertake that during the entire Concession Period they shall remain responsible to HDSCL for the due performance by the Concessionaire of all its obligations under this Agreement and for any failure on the part of the Concessionaire HDSCL shall have the right to take action against all the entire Consortium.

#### **5.4. Obligations of HDSCL**

Following will be the responsibilities of HDSCL during the execution of project;

#### a) Fiber

- Non Exclusive ROW (Right of way) free of cost for laying of fiber will be provided by the Authority within Municipal limits. This right shall be available for the duration of the concession period.
- The fiber so laid in this ROW can be monetized by the Bidder at his discretion and at rates which the Bidder deems fit.
- Apart from ROW permissions if any other permission is required for lying of fiber then Authority shall be responsible for obtaining the same from relevant authorities.
- While laying the new fiber if any other fiber is cut laid by utility which is already existing in the place where new fiber is being laid then HDSCL will liaison with the other party to provide a window of eight hours for rectification during the laying phase and six hours during the maintenance phase. During this period there will be not be any penalty to the Bidder.
- Similarly, if any other entity cuts the fiber inadvertently which belonging to Bidder.
   Concessionaire will get the fiber rectified, other entity will reimburse the expenses incurred by Concessionaire.
- After laying the fiber, Bidder shall be responsible for making good the cuts if any made in the road.
- Authority shall have right to use 10% of the fiber laid (10% of 48 Cores 5 Fiber Strands) for its own purpose and other Governmental programs

#### b) Smart Pole

- Concessionaire will have the exclusive right of way, free of cost, for telecom site deployment in area of HDSCL and it shall lease out the sites to telecom operators
- This right shall be available for the duration of the concession period to the Bidder.
- HDSCL will inform all UASL providers that they need to approach the concessionaire for obtaining right of way for deploying telecom sites in future in HDSCL area.
- HDSCL will ensure that all telecom sites deployed presently by UASL providers with the approval of HDSCL will be shifted to Smart Poles.
- In the event Authority fails to adhere to issue the necessary Governmental notification/ by-law, Authority shall compensate the Bidder by an amount as Indicated in the contract by the Bidder.

#### c) Wi-Fi Access point

- Exclusive ROW, free of cost, for provisioning of Wi-Fi Services in 100 Locations to be provided by the Authority with in Municipal limits. This right shall be available for the duration of the concession period.
- Concessionaire shall have exclusive the right to earn revenue on account of usage of Wi-Fi beyond the free Usage of 30 Minutes per day/Person
- Concessionaire shall have exclusive right to earn revenue account of advertisement through WIFI.

#### d) Advertisement Rights

Authority shall provide exclusive advertisement rights to the Bidder to earn revenue out of
advertisements, digital signage, WIFI, Conventional Bill Boards etc. from the supply made for
this project.

## e) Coordination Support

 Authority shall coordinate with other governmental departments if any required for faster implementation of this Project. Such delays shall be excused from Bidders performance without any penalty.

#### f) Other Support

- Authority will provide uninterrupted electricity free of cost to the Bidder for the smart poles, surveillance camera and Wi-Fi access points, cellular base stations, Environmental sensors and any other device which is the part of the RFP. Please note that the purpose of Energy Saving calculations, the electricity consumed for the aforementioned devices shall not be taken in to account.
- In the event of electricity not being made available the same shall not affect the Bidder's SLA and no penalty will be imposed.

#### **ARTICLE - 6 OFFICER-IN-CHARGE**

## 6.1. Appointment of Officer-in-Charge

As CEO will the Officer-in-Charge to undertake, perform and carry-out the duties, responsibilities, services and activities set forth in Schedule 'D'.

(a) The Officer-in-Charge shall submit to the HDSCL reports at least once every month or more frequently as the situation may warrant, on the progress of implementation of the Project. Such reports of the Officer-in-Charge shall include but not be limited to the

- matters and things set forth in said Schedule 'D'.
- (b) If either party disputes any advice, instruction or decision of the Officer-in-Charge, the same shall be resolved in accordance with the Dispute Resolution Procedure set forth in the Agreement.

# ARTICLE – 7: PROJECT IMPLEMENTATION AND OPERATIONS

## 7.1. Monitoring and Supervision during Implementation

(a) The Concessionaire shall submit to the Officer-in-Charge, a programme supported with Bar Chart for implementation of activities in a phased manner so as to cause least inconvenience to the public. Most of the implementation work shall be carried out during night hours/ restricted hours (leaving peak traffic time) keeping in view the safety of pedestrian/traffic. The Concessionaire shall give to the Officer-in-Charge, its complete programme for different stages of execution, planning, fabrication, and erection etc. of the Project.

During the Implementation Period, the Concessionaire shall furnish to HDSCL monthly reports on actual progress of the Implementation Works and furnish any other relevant information as may reasonably be required by HDSCL.

(b) For the purposes of determining that the Implementation Works are being undertaken in accordance with Specifications and Standards and Good Industry Practice and for quality assurance, the Concessionaire shall carry out such Tests at such time and frequency and in such manner as may be required by the Officer-in-Charge or as may be necessary in accordance with Good Industry Practice. The Concessionaire shall with due diligence carry out all such Tests in accordance with the instructions and under the supervision of the Officer-in-Charge. The Concessionaire shall promptly carry out such remedial measures as may be necessary to cure the defects or deficiencies, if any, indicated in such Test results. The Officer-in-Charge shall furnish the results of such Tests to HDSCL within seven days thereof and also promptly report to the HDSCL the remedial measures taken by the Concessionaire to cure the defects/deficiencies if any indicated in the Test results.

If the Officer-in-Charge reasonably determines that the rate of progress of the construction of the Project is such that the Project Completion is not feasible on or before the Scheduled Project Completion Date, it shall so notify the Concessionaire and the HDSCL. Thereupon, the Concessionaire shall within seven (7) days thereof notify the HDSCL and the Officer-in-Charge about the steps it proposes to take to expedite progress and the period within which it shall achieve COD.

#### 7.2. Project Completion

(a) The Project shall be deemed to be complete only when the Completion Certificate is issued by the Officer-in-Charge in accordance with the provisions of Clause 7.3(d) (the "Project

Completion") or as per para 19.9 (Acceptance Testing).

- (b) The Concessionaire guarantees that the Project Completion shall be achieved in accordance with the provisions of this Agreement on a date not later than twelve (12) Months from the Commencement Date ("The Scheduled Project Completion Date"). The schedule submitted by the Concessionaire along with Technical submission is to be adhered to.
- (c) Liquidated Damages (LD):- If the Project Completion is not achieved by the Scheduled Project Completion Date for any reason other than Force Majeure or reasons attributable to HDSCL, the Concessionaire shall be liable to pay liquidated damages for delay beyond the Scheduled Project Completion Date, an amount of 0.1% of the undelivered store or part thereof for delay of every week or part thereof, provided that such liquidated damages do not exceed an aggregate of 10% of the undelivered store to HDSCL Provided further that nothing contained in this sub-clause (c) shall be deemed or construed to authorize any delay in achieving Project Completion. Liquidated damages shall be sole and exclusive remedy by HDSCL to Concessionaire.
- (d) If the entire works are not completed twelve (12) Months from the date of issue of Letter of Award /Work Order, HDSCL shall, subject to the provisions of this Agreement relating to excuse from performance of the Concessionaire's obligations hereunder, be entitled to Terminate this Agreement in accordance with the provisions of Clause 13.2.

#### **7.3. Tests**

- (a) At least 15 (fifteen) days prior to the likely completion of each phase of the Project, the Concessionaire shall notify the Officer-in-Charge and the HDSCL the same and shall give notice to them of its intent to conduct Tests. The Concessionaire shall give the Officer-in-Charge and the HDSCL at least 10 (ten) days prior notice of the actual date on which it intends to commence the Tests and at least 7 (seven) days prior notice of the commencement date of any subsequent Tests.
- (b) All Tests shall be conducted in accordance with the Applicable Laws and Applicable Permits. The Officer-in-Charge shall have the right to suspend or postpone any Test if it is reasonably anticipated or determined during the course of the Test that the performance of the Project or any part thereof does not meet the Specifications and Standards. The Officerin-Charge may designate a representative with suitable qualifications and experience to witness and observe the Tests.
- (c) The Officer-in-Charge shall monitor the results of the Tests to determine the compliance of the Project with the Specifications and Standards and shall provide to the HDSCL copies of all Test data including detailed Test results.
- (d) Upon the Officer-in-Charge determining the Tests to be successful, it shall forthwith issue to the Concessionaire a certificate (the "Completion Certificate").

- (e) The Officer-in-Charge may at the request of the Concessionaire issue a provisional certificate of completion ("Provisional Certificate") if the Tests are successful and all parts of Project can be legally, safely and reliably opened for commercial operation though certain works or things forming part thereof are not yet complete. In such an event, the Provisional Certificate shall have appended thereto a list of outstanding items signed jointly by the Officer-in-Charge and the Concessionaire ("Punch List"). All Punch List items shall be completed by the Concessionaire within 30 (Thirty) days of the date of issue of such Provisional Certificate. Upon completion of all Punch List items to the satisfaction of the Officer-in-Charge, it shall issue the Completion Certificate to the Concessionaire with a copy marked to HDSCL. In the event of the Concessionaire's failure to complete the Punch List items within the said period of 30 (Thirty) days, HDSCL may, without prejudice to any other rights or remedy available to it under this Agreement, have such items completed at the risk and costs of the Concessionaire. The Concessionaire shall reimburse to HDSCL on demand the entire costs incurred by HDSCL in completing the Punch List items.
- (f) If the Officer-in-Charge certifies that it is unable to issue the Completion Certificate or Provisional Certificate because of events or circumstances which excuse the performance of the Concessionaire's obligations in accordance with this Agreement and as a consequence thereof the Tests could not be held or had to be suspended, the Concessionaire shall reschedule the Tests and hold the same as soon as reasonably practicable.
- (g) The Concessionaire shall bear all the expenses relating to Tests under this Agreement.

## 7.4. Operation and Maintenance

The Concessionaire shall operate and maintain the Project/Project Facility and if required, modify, repair or otherwise make improvements to the Project/ Project Facility to comply with Specifications and Standards, and other requirements set forth in this Agreement, Good Industry Practice, Applicable Laws and Applicable Permits. More specifically, the Concessionaire shall be responsible for:

- (i) Undertaking daily cleanliness of the Project Facility.
- (ii) Ensuring the safety and security of the Project Facility.
- (iii) Undertaking maintenance works in accordance with Maintenance Manual and the Maintenance Programme.
- (iv) preventing any encroachments or any unauthorized usage of the Project Facility

#### 7.5. Maintenance Manual

The Concessionaire shall in consultation with the HDSCL evolve not later than 30 (thirty) days before the Scheduled Project Completion Date, a manual for the regular and preventive maintenance (the "Maintenance Manual"), and shall ensure and procure that at all times during the Operations Period, the Project is maintained in a manner that it complies with the Specifications and Standards. The Concessionaire shall supply, at least one month before the

COD, 5 (five) copies of the Maintenance Manual to the HDSCL.

## 7.6. Maintenance Programme

- (a) Not later than forty five (45) days before the beginning of each Accounting Year, the Concessionaire shall provide to HDSCL, its proposed programme of preventive and other scheduled maintenance of the Project subject to the Minimum Maintenance Requirements set forth in Schedule 'H' necessary to maintain the Project at all times in conformity with the Specifications and Standards (the "Maintenance Programme"). Such Maintenance Programme shall include but not be limited to the following:
  - (i) intervals and procedures for the carrying out of inspection of all elements of the Project;
  - (ii) criteria to be adopted for deciding maintenance needs;
  - (iii) preventive maintenance schedule;
  - (iv) intervals at which the Concessionaire shall carry out periodic maintenance; and
  - (v) Intervals for major maintenance and the scope thereof.
- (b) Maintenance shall include replacement of equipment, consumables and repairs to equipment, structures and other works, which are part of the Project/Project Facility.
- (c) The Concessionaire shall keep the Project Facility in a clean, tidy and orderly condition free of litter and debris. The Concessionaire shall clean and empty the litterbins into suitable garbage bags and will be collected and removed by the Concerned Agency.

## 7.7. Emergency De-commissioning

- (a) If HDSCL, in public interest, is of the opinion that there exists an Emergency or any other situation, which warrants decommissioning and closure of whole or any part of the Project/Project Facility (BS), HDSCL shall notify to the concessionaire to de-commission and close the whole, or the relevant part of the Project for so long as such Emergency and the consequences thereof warrant. The HDSCL may issue such directions as it may deem appropriate to the Concessionaire for dealing with such Emergency and the Concessionaire shall abide by the same.
- (b) The Concessionaire shall re-commission the Project/Project Facility or the affected part thereof on receiving the instructions from HDSCL in this regard. In such a case the cost of relocation of the Smart Poles shall be borne by the HDSCL at the prevailing Schedule of rates at that time.
- (c) In case the decommissioning or closure is of permanent nature then HDSCL will allocate alternative sites if available. In case alternative locations are not made available HDSCL shall pay the depreciated cost of Smart Poles as per the applicable accounting Standard to

the Concessionaire. The minimum Revenue Share shall also be adjusted proportionately. Equivalent site shall be provided where the revenue earning is almost same as the current site which has been forced to close down

#### 7.8. Rectification of Defects

- (a) Unless and except as otherwise expressly provided in this Agreement, if the Project or any part thereof shall suffer any loss or damage during the Concession Period, from any cause whatsoever, the Concessionaire shall, at its cost and expense rectify and remedy such loss or damage in a manner so as to make the Project conform in every respect to the Specifications and Standards, quality and performance as prescribed by this Agreement.
- (b) In the event the Concessionaire does not maintain and/ or repair the Project or part thereof up to and in accordance with the Specifications and Standards and / or in accordance with the Maintenance Programme or the Maintenance Manual or the O&M Inspection Report, as the case may be, and shall have failed to commence remedial works within (7) Seven days of notice in this behalf from HDSCL, HDSCL shall, without prejudice to its rights/remedies under this Agreement, including Termination, be entitled to undertake to cause the repair and maintenance of the Project at the risk and cost of the Concessionaire. The Concessionaire shall reimburse to HDSCL within seven days of demand the costs and expenses incurred by HDSCL for undertaking such repairs and maintenance.
- (c) If the Concessionaire commences any works for curing any defects or deficiencies in the Project, it shall complete such works expeditiously in accordance with Good Industry Practice.
- (d) The Concessionaire shall not be considered in breach of its obligations under this Agreement if any part of the Project is not available on account of any of the following, for the duration thereof:
  - (i) Force Majeure Event;
  - (ii) Compliance with a request from HDSCL or the directions of any Government Agency the effect of which is to close all or any part of the Project.

Notwithstanding the above, the Concessionaire shall keep all unaffected parts of the Project for use provided they can be safely operated and kept open for users.

## 7.9. Monitoring and Supervision during Operations

(a) The Concessionaire shall undertake periodic inspection of the Project in accordance with the Maintenance Manual, the Maintenance Programme, Specifications and Standards and this Agreement and shall submit reports of such inspection ("Maintenance Reports") to the Authority

#### **ARTICLE – 8: FINANCING ARRANGEMENT**

## 8.1. Financing Arrangement

- (a) The Concessionaire shall at its cost, expenses and risk make such financing arrangement as would be necessary to finance the Project and to meet its obligations under this Agreement in a timely manner.
- (b) In the event of the Concessionaire employing the funds borrowed from the Lenders to finance the Project, the provisions relating to Lenders including those relating to Financial Close shall apply.
- (c) The Concessionaire shall within 7 days of achieving Financial Close submit to HDSCL one set of Financing Documents evidencing Financial Close.

## 8.2. Amendments to Financing Documents

For the avoidance of doubt the Parties agree that no amendment made to the Financing Documents without express consent of HDSCL shall have the effect of enlarging in any manner, the obligation of HDSCL in respect of Termination Payment under this Agreement.

## **ARTICLE- 9: Revenue Share**

#### 9.1. Revenue Share

- a) The Concessionaire will deposit the revenues with Hubballi-Dharwad Municipal Corporation (HDMC) through an Escrow account opened by the Concessionaire for this purpose.
- b) The Concessionaire shall open an Escrow with a Bank (the "Escrow Bank") prior to entering into this agreement. During Operations Period all revenue collected by the Concessionaire shall be exclusively deposited therein every 3 months. This deposit shall be credited into the Escrow account before the 5<sup>th</sup> day of the immediately following month in the next cycle.
- c) The Concessionaire shall give, at the time of the opening of the Escrow Account, irrevocable instructions by way of an Escrow Agreement to the Escrow Bank instructing, inter alia, that the deposits into the Escrow Account shall be appropriated in the pre-defined order every 6 months.
- d) In situations where the Revenues have not been deposited into the Escrow account in accordance with clause 9.1 (b), the Concessionaire will be given an additional time of 7 days to cure the breach. For any breach further to this timeline, a penalty point will be awarded to the concessionaire. In addition, each notified breach shall lead to the award of a penalty point to the Concessionaire. A total of 10 penalty points in any continuous period of 365 days shall constitute a Breach of this Agreement.
- e) The Concessionaire may delegate its right to collect revenues to any agency/person, however, that notwithstanding such delegation, the Concessionaire shall be and remain solely liable and responsible for the collection of Revenue in accordance with this Agreement and its deposit into the above-mentioned Escrow Account.
- f) The Concessionaire shall maintain full accounts of all revenues including Revenue Share and of O&M Expenses and other costs paid out of the Project Escrow Account and shall provide copies of the said accounts duly audited and certified by the Concessionaire's Statutory Auditors within 120 (one hundred twenty) days of the close of each Accounting Year to which they pertain, during the subsistence of this Agreement. Such audited accounts shall form the basis of various payments by either Party under this Agreement. The Concessionaire shall also furnish, within one week of its publication, a certified copy of the audited accounts and annual report published by the Company under the Applicable Laws.
- g) Notwithstanding anything to the contrary contained in the Escrow Agreement, upon Termination of this Agreement, all amounts standing to the credit of the Project Escrow Account shall be appropriated and dealt with in the following order:
  - all Taxes due and payable by the Concessionaire;
  - all Revenue Share payable to the HDMC under this Agreement;
  - all accrued Debt Service Payment;
  - any payments and Damages due and payable by the Concessionaire to the Authority pursuant to this Agreement, including Termination claims and repayment of Revenue Shortfall Loans;

- all accrued O&M Expenses;
- any other payments required to be made under this Agreement; and
- balance, if any, on the instructions of the Concessionaire.
- h) The instructions contained in the Escrow Agreement shall remain in full force and effect until the obligations set forth in ARTICLE 5 have been discharged.

#### **ARTICLE- 10: INSURANCES**

## 10.1. Insurance during the Implementation Period

The Concessionaire shall, at its cost and expense, purchase and maintain during the Implementation Period such insurances as are necessary, including but not limited to the following:

- (a) Workmen's compensation insurance;
- (b) Comprehensive third party liability insurance including injury or death to the personnel of the Concessioning Authority and others who may enter the Project Site:
- (c) Loss, damage or destruction of the Project Facility, at replacement value;
- (d) any other insurance that may be necessary to protect the Concessionaire as deemed needed by Concessionaire, its employees and its assets (against loss, damage or destruction, at replacement value) including all Force Majeure Events that are insurable and not otherwise covered in items (a), (b) & (c).

#### 10.2. Insurance Companies

The Concessionaire shall insure all insurable assets comprised in the Project Assets and/or the Project Facility through Indian insurance companies and if so permitted by the Authority, through foreign insurance companies backed by Indian companies, to the extent that insurances are necessary to be effected through them.

#### 10.3. Evidence of Insurance Cover

The Concessionaire shall, from time to time, provide to Authority copies of all insurance policies (or appropriate endorsements, certifications or other satisfactory evidence of insurance) obtained by the Concessionaire in accordance with this Agreement.

## 10.4. Application of Insurance Proceeds

Subject to the provisions of the Financing Documents, all moneys received under

insurance policies shall be promptly applied by the Concessionaire towards construction, repair or renovation or restoration or substitution of the Project Facility or any part thereof which may have been damaged or destroyed and in respect of which the claim is lodged. The Concessionaire may designate the Lenders as the loss payees under the insurance policies/assign the insurance policies in their favour as security for the financial assistance. The Concessionaire shall carry out such repair or renovation or restoration or substitution to the extent possible and in such manner that the Project Facility or any part thereof, shall, after such repair or renovation or restoration or substitution be as far as possible in the same condition as it was before such damage or destruction, normal wear and tear excepted.

## 10.5. Validity of the Insurance Cover

The Concessionaire shall pay the premium payable on such insurance policy(ies) so as to keep the policy(ies) in force and valid throughout the Concession Period and furnish copies of the same to the Authority. Each insurance policy shall provide that the same shall not be cancelled or terminated unless 15 Days' clear notice of cancellation is provided to the Authority in writing.

## 10.6. Insurance during the Operations Period

The Concessionaire shall, at its cost and expense, purchase and maintain during the Operations Period insurance to cover against:

- (a) loss, damage or destruction of the Project Facility, at replacement value;
- (b) the Concessionaire's general liability arising out of the Concession;
- (c) liability to third parties; and
- (d) any other insurance that may be necessary to protect the Concessionaire and its employees, including all Force Majeure Events that are insurable and not otherwise covered in items (a) to (c).

## ARTICLE - 11 CHANGE OF SCOPE

## 11.1. Change of Scope

The Authority may, notwithstanding anything to the contrary contained in this Agreement, require provision of such addition/deletion to the works and services on or about the Project which are beyond the scope of the Project as contemplated by this Agreement ("Change of Scope"), the Concessionaire shall carry out such additions/deletions on such terms and conditions as mutually agreed upon.

## ARTICLE - 12 FORCE MAJEURE

## 12.1. Force Majeure Event

As used in this Agreement, a Force Majeure Event shall mean occurrence in India of any or all of a Non Political Event, Indirect Political Event and/or Political Event as defined in Clauses12.2, 12.3 and 12.4 respectively which prevent the Party claiming Force Majeure (the "Affected Party") from performing its obligations under this Agreement and which act or event (i) is beyond the reasonable control and not arising out of the fault of the Affected Party,(ii) the Affected Party has been unable to overcome such act or event by the exercise of due diligence and reasonable efforts, skill and care, and (iii) has a Material Adverse Effect on the Project.

#### 12.2. Non - Political Event

For purposes of Clause 13.1 hereinabove, a Non - Political Event shall mean one or more of the following acts or events:

- (i) act of God or events beyond the reasonable control of the Affected Party which could not reasonably have been expected to occur, like epidemic, exceptionally adverse weather conditions, lightning, earthquake, cyclone, flood, volcanic eruption or fire (to the extent originating from a source external to the Project Site or beyond design specifications for the Construction Works and by reasons not attributable to the Concessionaire or its Contractors or any of the employees or agents of the Concessionaire or its Contractors) or landslide;
- (ii) radioactive contamination or ionizing radiation;
- (iii) General strikes or boycotts (other than those involving the Concessionaire, its Contractors or their respective employees/representatives or attributable to any act or omission of any of them) interrupting supplies and services to the Project for a period exceeding 7 (seven) days in an Accounting Year, and not being an Indirect Political Event set forth in Clause 12.3;
- (iv) any failure or delay of a Contractor but only to the extent caused by another Non-Political Event and which does not result in any offsetting compensation being payable to the Concessionaire by or on behalf of such Contractor;
- (v) Any judgment or order of any court of competent jurisdiction or statutory authority in India made against the Concessionaire in any proceedings for reasons other than failure of the Concessionaire to comply with any Applicable Law or Applicable Permits or on account of breach thereof, or of any contract, or enforcement of this Agreement or exercise of any of its rights under this Agreement by Authority;

(vi) Any event or circumstances of nature analogous to any of the foregoing.

#### 12.3. Indirect Political Event

For purposes of Clause 12.1 hereinabove, an Indirect Political Event shall mean one or more of the following acts or events:

- (i) An act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion, or politically motivated sabotage which prevents collection of revenue by the Concessionaire for a period exceeding a continuous period of 7 (seven ) days in an Accounting Year;
- (ii) Industry wide or state wide or India wide strikes or industrial action which prevent collection of revenue by the Concessionaire for a period exceeding a continuous period of 15 (fifteen) days in an Accounting Year; or
- (iii) Any public agitation which prevents collection of revenue by the Concessionaire for a period exceeding a continuous period of 15 (fifteen) days in an Accounting Year.

#### 12.4. Political Event

For purposes of Clause 12.1 hereinabove, a Political Event shall mean one or more of the following acts or events by or on account of Authority, or any other Government Agency:

- (i) Change in Law, only when provisions of Article 16 cannot be applied;
- (ii) Expropriation or compulsory acquisition by any Government Agency of any Project Assets or rights of the Concessionaire or of the Contractors; or
- (iii) Any unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause any consent or approval required by the Concessionaire or any of the Contractors to perform their respective obligations under the Project Agreements (other than a consent the obtaining of which is condition precedent) provided that such delay, modification, denial, refusal or revocation did not result from the Concessionaire's or any Contactor's inability or failure to comply with any condition relating to grant, maintenance or renewal of such consent or permit.

## 12.5. Effect of Force Majeure Event

Upon occurrence of any Force Majeure Event, the following shall apply:

(a) There shall be no Termination of this Agreement.

- (b) Where the Force Majeure Event occurs before COD, the dates set forth in the Project Completion Schedule and the Concession Period shall be extended by the period for which such Force Majeure Event shall subsist;
- (c) Where a Force Majeure Event occurs after COD, the Concessionaire shall continue to make all reasonable efforts to operate the Project and/ or to collect revenue, but if it is unable or prevented from doing so, the Concession Period shall, having due regard to the extent of the impact thereof as determined by the Authority, be extended by the period for which collection of revenue remains affected on account thereof; and
- (d) Costs arising out of or concerning such Force Majeure Event shall be borne in accordance with the provisions of the Clause 12.6 hereinafter.

## 12.6. Allocation of costs during subsistence of Force Majeure

Subject to the provisions of Clause 12.5 hereinabove, upon occurrence of a Force Majeure Event, the costs arising out of such event shall be allocated as follows:

- (a) When the Force Majeure Event is a Non Political Event, the Parties shall bear their respective costs and neither Party shall be required to pay to the other Party any costs arising out of any such Force Majeure Event;
- (b) Where the Force Majeure Event is an Indirect Political Event, the costs attributable to such Force Majeure Event and directly relating to the Project (the "Force Majeure Costs") shall be borne by the Concessionaire to the extent of the Insurance Cover, and to the extent the Force Majeure Costs as duly certified by the Statutory Auditors exceed the Insurance Cover, one half of the same shall be reimbursed by Authority to the Concessionaire within 90 days from the date of receipt of Concessionaire's claim;
- (c) Where the Force Majeure Event is a Political Event, the Force Majeure Costs to the extent actually incurred and certified by the statutory Auditors of the Concessionaire subject to approval of Authority shall be reimbursed by Authority to the Concessionaire within 90 days from the date of receipt of Concessionaire's claim; and
- (d) Authority may at its option reimburse the Force Majeure Costs to the Concessionaire in cash (through adjustment in the Revenue Share) or compensate the Concessionaire for such costs by appropriate extension of the Concession Period, which extension shall also be given effect within the period of 90 days specified in preceding sub-clauses (b) or (c) as the case may be.

For avoidance of doubt, Force Majeure Costs shall not include loss of revenues or any debt repayment obligations but shall include interest payments on such debt, O&M Expenses and all other costs directly attributable to the Force Majeure Event.

# 12.7. Dispute Resolution

In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such Dispute shall be finally settled with the Court in Hubballi Dharwad, provided however that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief and/ or excuse on account of such Force Majeure Event.

# 12.8. Liability for other losses, damages etc

Save and except as expressly provided in this Article 12, neither Party hereto shall be liable in any manner whatsoever to the other Party in respect of any loss, damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant to this Article 12.

# 12.9. Duty to Report

The Affected Party shall discharge the following obligations in relation to reporting the occurrence of a Force Majeure Event to the other Party:

- (a) The Affected Party shall not claim any relief for or in respect of a Force Majeure Event unless it shall have notified the other Party in writing of the occurrence of the Force Majeure Event as soon as reasonably practicable, and in any event within 7 (seven) days after the Affected Party knew, or ought reasonably to have known, of its occurrence and the probable material affect that the Force Majeure Event is likely to have on the performance of its obligations under this Agreement.
- (b) Any notice pursuant to this Clause 12.9 shall include full particulars of:
  - (i) the nature and extent of each Force Majeure Event which is the subject of any claim for relief under this Article 12 with evidence in support thereof;
  - (ii) the estimated duration and the effect or probable effect which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under this Agreement;
  - (iii) the measures which the Affected Party is taking, or proposes to take, to alleviate the impact of such Force Majeure Event; and
  - (iv) any other information relevant to the Affected Party's claim.

(c) For so long as the Affected Party continues to claim to be affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) written reports containing information as required by this Clause and such other information as the other Party may reasonably request the Affected Party to provide.

# 12.10. Excuse from performance of obligations

If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations to the extent it is unable to perform on account of such Force Majeure Event provided that:

- a. the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event;
- b. the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence: and
- c. when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party written notice to that effect and shall promptly resume performance of its obligations hereunder.

# ARTICLE - 13 EVENTS OF DEFAULT AND TERMINATION

# 13.1. Event of Default

Event of Default means the Concessionaire Event of Default.

#### **Concessionaire Event of Default**

Any of the following events shall constitute an event of default by the Concessionaire ("Concessionaire Events of Default") unless such event has occurred as a result of an Event of Default or a Force Majeure Event;

- (1) The Concessionaire fails to perform or discharge any of its obligations in accordance with the provisions of this Agreement;
- (2) The Concessionaire fails to perform or discharge any of its obligations under any other Project Contract, which has or is likely to affect the Project/Project Facility, materially;

- (3) The Concessionaire fails to commence the Construction Works within 15 days from the Commencement Date.
- (4) The Concessionaire fails to achieve COD within 1 Year from the Commencement Date.
- (5) Any representation made or warranty given by the Concessionaire under this Agreement is found to be false or misleading.
- (6) The Concessionaire creates any Encumbrance on the Project Site/ Project Facility in favour of any Person save and except as otherwise expressly permitted under Schedules.
- (7) The aggregate shareholding of the members of the Concessionaire falls below the minimum prescribed under Clause 17.1 (xi).
- (8) The transfer, pursuant to law of either (a) the rights and/or obligations of the Concessionaire under any of the Project Agreements, or (b) all or material part of the Concessionaire except where such transfer in the reasonable opinion of Authority does not affect the ability of the Concessionaire to perform, and the Concessionaire has the financial and technical capability to perform its material obligations under the Project Agreements.
- (9) A resolution is passed by the shareholders of the Concessionaire for the voluntary winding up of the Concessionaire.
- (10) Appointment of a provisional liquidator, administrator, trustee or receiver of the whole or substantially whole of the undertaking of the Concessionaire by a court of competent jurisdiction in proceedings for winding up or any other legal proceedings;
- (11) Any petition for winding up of the Concessionaire is admitted by a court of competent jurisdiction or the Concessionaire is ordered to be wound up by Court except for the purpose of amalgamation or reconstruction, provided that, as part of such amalgamation or reconstruction, the property, assets and undertaking of the Concessionaire are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Concessionaire under this Agreement and the Project Agreements, and provided that:
  - (i) the amalgamated or reconstructed entity has the technical capability and operating experience necessary for the performance of its obligations under this Agreement and the Project Agreements;
  - (ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and the Project Agreements

and has a creditworthiness at least as good as that of the Concessionaire as at the Commencement Date; and

- (iii) each of the Project Agreements remains in full force and effect.
- (12) A default has occurred under any of the Financing Documents and any of the Lenders has recalled its financial assistance and demanded payment of the amounts outstanding under the Financing Documents or any of them as applicable.
- (13) The Concessionaire suspends or abandons the operations of the Project without the prior consent of Authority, provided that the Concessionaire shall be deemed not to have suspended/ abandoned operation if such suspension/ abandonment was (i) as a result of Force Majeure Event and is only for the period such Force Majeure is continuing, or (ii) on account of a breach by Authority of its obligations under this Agreement.
- (14) The Concessionaire repudiates this Agreement or otherwise evidences an intention not to be bound by this Agreement.
- (15) The Concessionaire suffers an attachment being levied on any of its assets causing a Material Adverse effect on the Project and such attachment continues for a period exceeding 45 days.
- (16) The Concessionaire has neglected or failed to regularly and properly maintain the Smart Poles in clean and hygienic conditions and to keep the Smart Poles in a state of good repair at its own cost.
- (17) The Concessionaire has delayed any payment that has fallen due under this Agreement and if such delay exceeds 90(ninety) days.
- (18) The Concessionaire is otherwise in Material Breach of this Agreement and wishes to surrender. The surrender will be accepted for complete package of the Smart Poles only and not partly.
- (19) Any breach of terms and conditions of this agreement.

# 13.2. Termination due to Event of Default

In the event that HDSCL believes that the Concessionaire is in material breach of its obligations under the RFP or the Contract, HDSCL shall give notice to the Concessionaire and shall give up to 30 days' time to it for curing such breach. In case the breach continues till / after the expiry of such cure period, HDSCL will have the option to terminate the Agreement. Further, HDSCL may afford a reasonable opportunity to the Concessionaire to explain the circumstances leading to such a breach and may increase the time limit for curing such breach before terminating the Agreement. Any notice served pursuant to this Clause shall give reasonable details of the breach.

# 13.3. Termination of this Agreement due to bankruptcy of the Concessionaire

# 13.3.1. Termination due to bankruptcy

HDSCL may serve written notice on the Concessionaire at any time to terminate this Agreement with immediate effect in the event that the Concessionaire reporting an apprehension of bankruptcy to the HDSCL or its nominated agencies. No charges to Concessionaire shall be payable in case of termination under this Clause except payment for all charges for Services / Deliverables / Goods provided by it and accepted by HDSCL till effective date of termination

#### 13.4. Effects of termination

#### 13.4.1. Bank Guarantee

In the event HDSCL terminates this Agreement pursuant to breach by the Concessionaire, Bank Guarantee furnished by it may be forfeited.

# 13.4.2. Exit Management Schedule

Upon termination (or prior to expiry/ upon expiry, as the case may be) of this Agreement, the Parties will comply with the Exit Management Schedule/ Plan set out in the RFP (as may be revised from time to time).

# 13.4.3. Charges

HDSCL agrees to pay the Concessionaire for all charges for Services / Deliverables / Goods provided by it and accepted by HDSCL till effective date of termination.

#### 13.4.4. Compliance to Exit Management Plan

Any and all payments under this clause shall be payable only after the Concessionaire has complied with and completed the transition and exit management as per the Exit Management Plan to the satisfaction of HDSCL.

13.4.5. Compliance to transition and exit management plan

Any and all payments under this clause shall be payable only after the Concessionaire has complied with and completed the transition and exit management as per the Exit Management Plan to the satisfaction of HDSCL. In case of expiry of the Agreement, the last due payment shall be payable to the Concessionaire after it has complied with and

# **Termination for Concessionaire Event of Default**

(1) Without prejudice to any other right or remedy which Authority may have in respect thereof under this Agreement, upon the occurrence of a Concessionaire Event of Default, Authority shall, be entitled to terminate this Agreement by issuing a Termination Notice to the Concessionaire, provided that before issuing the Termination Notice, Authority shall by a notice in writing inform the Concessionaire of its intention to issue the Termination Notice (the "Preliminary Notice"). In case the underlying breach/default is not cured within a period of 60 (sixty) days from the date of the Preliminary Notice (Cure Period) Authority shall be entitled to terminate this Agreement by issuing the Termination Notice. Provided further, that

- (a) if the default is not cured within 30 (thirty) days of the Preliminary Notice, Authority shall be entitled to encash the Performance Security with a notice to the Concessionaire (**Encashment Notice**),
- (b) if the default is not cured within 30 (thirty) days of the Encashment Notice and a fresh Performance Security is not furnished within the same period in accordance with Clause 3.2, Authority shall subject to the provisions of the Substitution Agreement be entitled to issue the Termination Notice.
- (2) The following shall apply in respect of cure of any of the defaults and/or breaches of this Agreement:
  - (i) The Cure Period provided in this Agreement shall not relieve the Concessionaire from liability for damages caused by its breach or default;
  - (ii) The Cure Period shall not in any way be extended by any period of suspension under this Agreement;
  - (iii) If the cure of any breach by the Concessionaire requires any reasonable action by the Concessionaire that must be approved by Authority or any Government Agency hereunder the applicable Cure Period shall be extended by the period taken by Authority or the Government Agency to accord the required approval.

#### 13.5. Rights of Authority on Termination

#### 13.5.1. Rights of Authority

Upon Termination of this Agreement for reason of Default whatsoever, Authority shall have the power and authority to

- (i) take possession and control of Project Assets forthwith;
- (ii) prohibit the Concessionaire and any person claiming through or under the Concessionaire from entering upon the Project Assets/dealing with the Project or any part thereof;
- (iii) step in and succeed upon, without the necessity of any further action by the Concessionaire, to the interests of the Concessionaire under such of the Project Agreements as Authority may in its discretion deem appropriate with effect from the date of communication of such election to the counter party to the relative Project Agreements. Provided any sums claimed by such counter party as being due and owing for the works and services performed or accruing on account of any act, omission or event prior to such date of election, shall and shall always constitute debt between the Concessionaire and such counter party and Authority shall in no way or manner be liable or

responsible for such sums. The Concessionaire shall ensure that the Project Agreements contain provisions necessary to give effect to the provision of this Clause 13.5.

(iv) Concessionaire shall not be entitled for any interest on any security/advance/earnest money etc.

# 13.6. Exit Management

## **13.6.1.** Purpose

- i. This clause sets out the provisions which shall apply on expiry or termination of the Agreement on account of material breach by Concessionaire. In the case of termination of the Agreement due to any illegal activity performed by the selected Concessionaire during/ as part of the activities related to the project, or due to material breach by the Concessionaire of Contract, HDSCL shall have the right to, at its sole discretion, apply this clause.
- ii. The Parties shall ensure that their respective associated entities, in case of the HDSCL or its nominated agencies and any nominated agencies in case of the selected Concessionaire, carry out their respective obligations set out in this Exit Management Clause.

#### 13.6.2. Transfer of Assets

This clause is valid till the date of expiry or notice of termination of the Agreement after which the assets have to be transferred to HDSCL.

- During this period, the Successful Concessionaire will transfer all the assets in good working condition and as per the specifications of the bidding document including the ones being upgraded to the HDSCL.
- The Concessionaire, if not already done, shall transfer all the right to use software licenses under the name of HDSCL during the Exit Management Period. The Concessionaire shall also transfer all the relevant Software Passwords, User Names and Keys. If such a transfer of Assets happens before the expiry of Work Contract Period, Parties shall mutually discuss and agree on the transfer value of the Assets together with the termination and transfer assistance fee.
- The Successful Concessionaire shall be entitled to use the Assets for the duration of the exit
  management period which shall be three months from the date of expiry or notice of
  termination of the Agreement.
- For any material breach on the part of Concessionaire during the Project Implementation Phase and Operation & Management Phase, HDSCL is entitled to provide notice in writing on the selected Concessionaire at any time during the exit management period as detailed here in above requiring the selected Concessionaire to provide the department or its

nominated agencies with a complete and up to date list of the Assets within 30 days of such notice.

Upon service of a notice as mentioned in point above, the following provisions shall apply:

- All risk in and title to the Assets to be transferred to HDSCL on the last day of the exit
  management period. All expenses incurred during transfer of assets shall be borne by the
  Successful Concessionaire.
- That on the expiry of this clause, the Successful Concessionaire and any individual assigned for the performance of the services under this clause must hand overall Confidential Information and all other related materials in its possession, including all the software and hardware supplied by selected Concessionaire under this clause to the department.
- As Concessionaire is supposed to provide 10 years ((extendable up to 15 years)) of comprehensive maintenance of all the hardware/Software as detailed in RFP, Concessionaire must ensure that all the items are in working condition with support of OEM related to repair/replacement/availability of spare parts for at least 05 years at the time of exit.

# 13.6.3. Cooperation and Provision of Information

During the exit management period:

- (i) The Concessionaire shall permit HDSCL or its nominated agencies access to information reasonably required to classify the current mode of operation related with the provision of the services to enable it to Client assess the existing services being delivered.
- (ii) In the event of there being a termination owing to material breach by Concessionaire, on quick request by HDSCL or its nominated agencies, the selected Concessionaire shall provide access to and copies of all information held or controlled by it which it has prepared or maintained in accordance with the MSA (Master Service Agreement), the Project Implementation, the Operation and Management SLA and SoW (Scope of Work) relating to any material aspect of the services (whether provided by the selected Concessionaire). HDSCL or its nominated agencies shall be entitled to copy all such information. Such information shall include details pertaining to the services rendered and other performance data. The selected Concessionaire shall permit HDSCL or its nominated agencies and/or any entity nominated by HDSCL to have reasonable access to it employees and facilities as reasonably required to understand the methods of delivery of the services employed by the selected Concessionaire and to support appropriate knowledge transfer.

# 13.6.4. Confidential Information, Security and Data

• The selected Concessionaire shall be quick on the commencement of the exit management period and supply to HDSCL the following:

- Information relating to the present services provided and customer satisfaction surveys.
- o Documentation pertaining to Project related data and confidential information.
- All current and updated data as is needed for purposes of the HDSCL or its nominated agencies for transitioning the services either to HDSCL or the entity nominated by HDSCL.
- O All other information (including but not limited to documents, records and agreements) relating to the services reasonably compulsory to enable HDSCL or its nominated agencies, or to the entity nominated by HDSCL to carry out due diligence in order to transition the provision of the Services to the HDSCL or its nominated agencies, or to any entity nominated by HDSCL (as the case may be).
- Before the exit management period expire, the selected Concessionaire shall deliver to HDSCL or its nominated agencies all new or up-dated materials from the categories set out in point (i) above and shall not keep any copies thereof, except that the selected Concessionaire shall be permitted to keep one copy of such materials for archival purposes only.
- Before the exit management period expire, unless otherwise provided under the MSA, HDSCL or its nominated agencies shall deliver to the selected Concessionaire all forms of selected Concessionaire confidential Data which is in the possession or control of HDSCL or its nominated agencies or during the exit management period In any time, the selected Concessionaire shall, subject to applicable laws, restraints and regulations(including in particular those relating to privacy) provide to HDSCL or its nominated agencies a list of all employees (with job titles) of the selected Concessionaire dedicated to providing the services at the beginning of the exit management period; its users.

## 13.6.5. Employees

- Where any national, regional law or regulation relating to the mandatory or automatic transfer of the contracts of employment from the selected Concessionaire to the department or its nominees, or an entity nominated by HDSCL applies to any or all of the employees of the selected Concessionaire, then the Parties shall comply with their respective obligations under such Transfer Regulations.
- To the extent that any Transfer Regulation does not apply to any employee of the selected Concessionaire or its nominated agencies or its entity nominated by HDSCL may make an offer of employment or contract for services to such employee of the selected Concessionaire and the selected Concessionaire shall not enforce or impose any contractual provision that would prevent any such employee from being hired by the HDSCL or its nominated agencies or any Replacement Concessionaire.

#### 13.6.6. Transfer of Certain Agreements

On request by the HDSCL or its nominated agencies, the selected Concessionaire shall effect such assignments, transfers, novation, licenses and sub-licenses in favor of HDSCL or its nominated agencies, or its entity nominated by HDSCL in relation to any equipment lease, maintenance or service provision agreement between selected Concessionaire and third party lessors, Concessionaires or Concessionaire, and which are related to the services and reasonably necessary for the carrying out of replacement Concessionaire.

## 13.6.7. Right of Access to Premises

- At any time during the exit management period, where Assets are located at the selected Concessionaire's premises, the selected Concessionaire shall be obliged to give full rights of access to (or, in the case of Assets located on a third party's premises, procure reasonable rights of access to HDSCL or its nominated agencies, and/or any entity nominated by HDSCL in order to inventory the assets or Assets.
- The selected Concessionaire shall also give the HDSCL or its nominated agencies, or any entity nominated by HDSCL right of reasonable access to the selected Concessionaire's premises and shall procure the department or its nominated agencies and any entity nominated by HDSCL rights of access to relevant third party premises during the exit management period and for such period of time following termination or expiry of the MSA as is reasonably necessary to migrate the services to HDSCL or its nominated agencies, or a Replacement Concessionaire.

# 13.6.8. General Obligations of the Selected Concessionaire

- The selected Concessionaire shall provide all such information as may reasonably be
  necessary to effect as seamless a handover as practicable in the circumstances to HDSCL
  or its nominated agencies or any entity nominated by the HDSCL and which the selected
  Concessionaire has in its possession or control at any time during the exit management
  period.
- For the purposes of this Clause, anything in the possession or control of any selected Concessionaire or associated entity is deemed to be in the possession or control of the selected Concessionaire.
- The selected Concessionaire shall commit adequate resources to comply with its obligations under this Exit Management Clause.

# 13.6.9. Exit Management Plan

The Successful Concessionaire shall provide the HDSCL or its nominated agencies with recommended exit management plan ("Exit Management Plan") which shall deal with MSA as a whole and in relation to the Project Implementation, the Operation and Management, SLA and SOWs.

#### 13.6.10.End of Support

While handling over the completely working and functional network and systems, Concessionaire must ensure that OEM of all hardware/software/ equipment are contractually bound to provide support for repair/replacement/availability of its spare parts for further five years (total 10 years at similar rates). It shall be part of exit plan to submit letter from OEMs in this regard.

# ARTICLE - 14 CHANGE IN LAW

### 14.1. Change in Law

This agreement shall be in force and binding on both the parties hereto till the expiry of the concession period and no change in law or other circumstances shall affect the respective rights and obligations of the parties. No claim of whatsoever nature shall be made by one party on the other on account of any such change in law or other circumstances.

# ARTICLE - 15 HANDOVER AND DEFECT LIABILITY PERIOD

## 15.1. Handing Over of the Project Assets

Upon the expiry of the Concession by efflux of time and in the normal course, the Concessionaire shall at the end of the Concession Period, hand over encumbrance free and peaceful possession of the Project Assets in working conditions including Project Site/Facility at no cost to Authority.

## 15.2. Joint Inspection and Removal of Deficiency

The handing over process shall be initiated at least 6 months before the actual date of expiry of the Concession Period by a joint inspection by the Authority Engineer and the Concessionaire. The Authority Engineer shall, within 15 days of such inspection prepare and furnish to the Concessionaire works/jobs/additions/alterations, if any, to be carried out to bring the Project to the prescribed level of service condition at least two months prior to the date of expiry of the Concession Period. In case the Concessionaire fails to carry out the above works, within the stipulated time period the Authority shall be at liberty to have these works executed by any other Person at the risk and cost of the Concessionaire and any cost incurred by Authority in this regard shall be reimbursed by the Concessionaire to Authority within 7 days of receipt of demand. For this purpose, Authority shall without prejudice to any other right/remedy available to it, under this Agreement, have the right to appropriate the Performance Security and/or to set off any amounts due, if any, and payable by Authority to the Concessionaire to the extent required/ available and to recover deficit amount, if any, from the Concessionaire.

# 15.3. Recovery of Balance Revenue Share

The share of Authority due in the cumulated revenue receivable of the concessionaire at the end on Concession Period as reflected in the last audited project account shall be recovered by Authority from the performance security and the amount of project bank balance under lien of Authority. The balance remaining un recovered amount, if any shall be paid by the concessionaire to Authority along with the Revenue Share payable for the last quarter.

The share of Authority due shall be calculated at the rate applicable as on the date of respective outstanding invoice.

# ARTICLE - 16 DISPUTE RESOLUTION

#### 16.1. Amicable Resolution

- (a) Save where expressly stated otherwise in this Agreement, any dispute, difference or controversy of whatever nature howsoever arising under, out of or in relation to this Agreement including non-completion of the Project between the Parties and so notified in writing by either Party to the other (the "Dispute") in the first instance shall be attempted to be resolved amicably by the Authority and failing such resolution of the same, in accordance with the procedure set forth in sub-clause (b) below.
- (b) Either Party may require the Dispute to be referred to Authority for amicable settlement. Upon such reference, both the Parties and the Authority shall meet at the earliest mutual convenience and in any event within 15 days of such reference to discuss and attempt to amicably resolve the Dispute. If the Dispute is not amicably settled within 15 (fifteen) days of such meeting, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 16.2 below.

## 16.2. Arbitration

#### a) Arbitrators

Any Dispute which is not resolved amicably as provided in Clause 16.1(a) shall be finally settled by binding arbitration under the Arbitration and Conciliation Act, 1996. The Arbitration shall be by a committee of three arbitrators chosen from a panel of five arbitrators on the list of arbitrators available with Authority. One arbitrator is to be chosen by each Party and the third to be appointed by the two arbitrators chosen by the Parties. If either Party fails to choose its arbitrator, the other Party shall take steps in accordance with Arbitration and Conciliation Act, 1996.

# b) Place of Arbitration

The place of arbitration shall be **Hubballi Dharwad**, **Karnataka**.

### c) Language

The request for Arbitration, the answer to the request, the terms of reference, any written submissions, any orders and rulings shall be in English and, if oral hearings take place, English shall be the language to be used in the hearings.

# d) Procedure

The procedure to be followed within the arbitration, / arbitral tribunal and the rules of evidence which are to apply shall be in accordance with the Arbitration and Conciliation Act, 1996.

### e) Enforcement of Award

Any decision or award resulting from arbitration shall be final and binding upon the Parties. The Parties hereto hereby waive, to the extent permitted by law, any rights to appeal or to review of such award by any court or tribunal. The Parties hereto agree that the arbitral award may be enforced against the Parties to the arbitration proceedings or their assets wherever they may be found and that a judgment upon the arbitral award may be entered in any court having jurisdiction thereof.

## f) Fees and Expenses

The fees and expenses of the arbitrators and all other expenses of the arbitration shall be initially borne and paid by respective Parties subject to determination by the arbitrators. The arbitrators may provide in the arbitral award for the reimbursement to the prevailing party of its costs and expenses in bringing or defending the arbitration claim, including legal fees and expenses incurred by the said Party.

## g) Performance during Arbitration

Pending the submission of and/or decision on a Dispute, difference or claim or until the arbitral award is published, the Parties shall continue to perform all of their obligations under this Agreement without prejudice to a final adjustment in accordance with such award.

# ARTICLE - 17 REPRESENTATIONS, WARRANTIES AND DISCLAIMER

# 17.1. Representations and Warranties of the Concessionaire

The Concessionaire represents and warrants to Authority that:

- (i) it is duly organized, validly existing and in good standing under the laws of India and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising thereunder any obligation, liability or responsibility hereunder;
- (ii) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;
- (iii) it has taken all necessary corporate and other action under Applicable Laws and its constitutional documents to authorize the execution, delivery and performance of this Agreement;
- (iv) it has the financial standing and capacity to undertake the Project;
- (v) this Agreement constitutes the legal, valid and binding obligation of the Concessionaire, enforceable against it in accordance with the terms hereof;
- (vi) it is subject to civil and commercial laws of India with respect to this Agreement and it hereby expressly and irrevocably waives any immunity in any jurisdiction in respect thereof;
- (vii) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under or accelerate performance required by any of the terms of the Concessionaire's Memorandum and Articles of Association or of any member of the Consortium or any Applicable Laws or any covenant, agreement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;
- (viii) there are no actions, suits, proceedings, or investigations pending or, to the Concessionaire's knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of or constitute a default of the Concessionaire under this Agreement or which individually or in the aggregate may result in any Material Adverse Effect;
- (ix) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Authority which may result in any Material Adverse Effect or impairment of the Concessionaire's ability to perform its obligations and duties under this Agreement, and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;
- (x) it has complied with all Applicable Laws and has not been subject to any

- fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have Material Adverse Effect;
- (xi) each member of Consortium was and is duly organized and existing under the laws of the jurisdiction of its incorporation and has full power and authority to consent to and has validly consented to and requested Authority to enter into this Agreement with the Concessionaire and has agreed to and unconditionally accepted the terms and conditions set forth in this Agreement;
- (xii) Upon Termination of this Agreement, under the applicable provisions of this Agreement all rights and interests of the Concessionaire in and to the Project Assets shall pass to and vest in Authority on the Termination Date free and clear of all Encumbrances without any further act or deed on the part of the Concessionaire or Authority;
- (xiii) no representation or warranty by the Concessionaire contained herein or in any other document furnished by it to Authority or to any Government Concessionaire in relation to Applicable Permits contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not misleading; and
- (xiv) no sums, in cash or kind, have been paid or will be paid, by or on behalf of the Concessionaire, to any person by way of fees, commission or otherwise for securing the Concession or entering into of this Agreement or for influencing or attempting to influence any officer or employee of Authority in connection therewith.
- (xv) It agrees that the execution, delivery, and performance by it of this Agreement and all other agreements, contracts, documents and writings relating to this Agreement constitute private and commercial acts and not public or governmental acts; and
- (xvi) It consents generally in respect of the enforcement of any judgement against it in any proceedings in any jurisdiction to the giving of any relief or the issue of any process in connection with such proceedings.

## 17.2. Disclaimer

(a) Without prejudice to any express provision contained in this Agreement, the Concessionaire acknowledges that prior to the execution of this Agreement, the Concessionaire has after a complete and careful examination made an independent evaluation of the traffic volumes, specifications and Standards, Project Site and all the information provided by Authority, and has determined to the Concessionaire's satisfaction the nature and extent of such difficulties, risks and hazards as are likely to arise or may be faced by the Concessionaire in the course of performance of its obligations hereunder. (b) The Concessionaire further acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in (a) above and hereby confirms that Authority shall not be liable for the same in any manner whatsoever to the Concessionaire.

# 17.3. Representations and Warranties of Authority

Authority represents and warrants to the Concessionaire that:

- (i) Authority has full power and authority to grant the Concession;
- (ii) Authority has taken all necessary action to authorize the execution, delivery and performance of this Agreement;
- (iii) this Agreement constitutes its legal, valid and binding obligation enforceable against it in accordance with the terms hereof.

## 18.4 Disclosure

In the event that any occurrence or circumstance comes to the attention of either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or correct nor shall it adversely affect or waive any obligation of either Party under this Agreement.

# ARTICLE - 18 MISCELLANEOUS

## 18.1. Transfer

- a) At the end of Concession period/ termination of Concession Agreement, transfer the project facilities and assets to the Authority at zero cost.
- b) Concessionaire shall be responsible for the costs and expenses, including stamp duties, taxes, legal fees and expenses incurred in connection with the transfer of the Project Assets and the Project to the Authority or its nominated agency. These costs can be borne by the Authority as well if the concessionaire is found to deliberately delaying the transfer of assets. The Authority shall recover such costs from concessionaire by adopting the ways and means available.
- c) Authority or its nominated agency shall at its own cost obtain or effect all clearances and take such other actions as may be necessary for such transfer.

# 18.2. Assignment and Charges

- (a) Subject to sub-clauses (b) and (c) herein below, this Agreement shall not be assigned by the Concessionaire save and except with prior consent in writing of Authority, which consent Authority shall be entitled to decline without assigning any reason whatsoever.
- (b) Subject to sub-clause (c) herein below, the Concessionaire shall not create nor permit to subsist any Encumbrance over or otherwise transfer or dispose of all or any of its rights and benefits under this Agreement or any Project Agreement to which Concessionaire is a party except with prior consent in writing of Authority, which consent Authority shall be entitled to decline without assigning any reason whatsoever.
- (c) The restraint set forth in sub-clauses (a) and (b) above shall not apply to liens/encumbrances arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Project

# 18.3. Liability and Indemnity

# **General Indemnity**

- (i) The Concessionaire shall indemnify, defend and hold Authority harmless against any and all proceedings, actions and, third party claims arising out of a breach by the Concessionaire of any of its obligations under this Agreement except to the extent that any such claim has arisen due to Authority Event of Default).
- (ii) Authority will indemnify, defend and hold harmless the Concessionaire against any and all proceedings, actions, third party claims for loss, damage and expense of whatever kind and nature arising out of defect in title and/or the rights of Authority and/or arising out of a breach by Authority, its officers, servants and agents of any obligations of Authority under this Agreement except to the extent that any such claim has arisen due to Concessionaire Event of Default.
- (a) Without limiting the generality of this Clause 18.3 the Concessionaire shall fully indemnify, save harmless and defend Authority including its officers servants, agents and subsidiaries from and against any and all loss and damages arising out of or with respect to (a) failure of the Concessionaire to comply with Applicable Laws and Applicable Permits, (b) failure in payments of taxes relating to the Concessionaire's Contractors, suppliers and representatives income or other taxes required to be paid by the Concessionaire without reimbursement hereunder, or (c) non-payment of amounts due as a result of materials or services furnished to the Concessionaire or any of its Contractors which are payable by the Concessionaire or any of its Contractors.

- (b) Without limiting the generality of the provisions of this Article Clause 18.3, the Concessionaire shall fully indemnify, save harmless and defend the Authority from and against any and all damages which the Authority may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign patent rights, copyrights or other intellectual property, proprietary or confidentiality rights with respect to any materials, information, design or process used by the Concessionaire or by the Concessionaire's Contractors in performing the Concessionaire's obligations or in any way incorporated in or related to the Project. If in any such suit, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Concessionaire shall make every reasonable effort, by giving a satisfactory bond or otherwise, to secure the suspension of the injunction or restraint order. If, in any such suit claim or proceedings, the Project, or any part thereof or comprised therein is held to constitute an infringement and its use is permanently injuncted, the Concessionaire shall promptly make every reasonable effort to secure for Authority a license, at no cost to Authority, authorizing continued use of the infringing work. If the Concessionaire is unable to secure such license within a reasonable time, the Concessionaire shall, at its own expense and without impairing the Specifications and Standards either replace the affected work, or part, or process thereof with non-infringing work or parts or process, or modify the same so that it becomes non-infringing. Bidder shall indemnify the HDSCL for any violations of IPRs and Patents for the individual products only arising out of execution and performance under this contract However in case of any violation the maximum penalty on account of above shall be restricted to 100% of the Quarterly revenue realized by the Bidder.
  - (c) In the event that either Party receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under this Clause 18.3 (the 'Indemnified Party') it shall notify the other Party ("Indemnifying Party") within 14 (fourteen) days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, such approval not to be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim it may conduct the proceedings in the name of the Indemnified Party subject to the Indemnified Party being secured against any costs involved to its reasonable satisfaction.

# (d) Defence of Claims

(i) The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder and its reasonable costs and expenses shall be indemnified by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by

this Clause 18.3, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action. suit or proceeding and the liabilities, payments and obligations at its expense and through counsel of its choice provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable costs and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnified Party unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

- (ii) If the Indemnifying Party has exercised its rights under Clause 18.3 (d) above, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the indemnifying Party (which consent shall not be unreasonably withheld or delayed).
- (iii) If the Indemnifying Party exercises its rights under Clause 18.3 (d) above, then the Indemnified Party shall nevertheless have the right to employ its own counsel and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party, when and as incurred, unless:
  - (1) the employment of counsel by such party has been authorized in writing by the Indemnifying Party; or
  - (2) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action; or
  - (3) the indemnifying Party shall not in fact have employed independent counsel reasonably satisfactory to the Indemnified Party to assume the defence of such action and shall have been so notified by the Indemnified Party; or
  - (4) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either
    - (a) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or
    - (b) that such claim, action, suit or proceeding involves or could have a Material Adverse Effect upon it beyond the scope of this Agreement,

provided that if sub-clauses (2), (3) or (4) of Clause 18.3 (d) (iii) shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defence of such

claim, action, suit or proceeding on behalf of the Indemnified Party and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

- a. Notwithstanding anything to the contrary contained in the Contract, in no event shall either Party be liable to the other Party for indirect or consequential damages and for the following types of damages, whether or not they are considered as direct or indirect damages: loss of production, loss of use, loss of business, loss of data, loss of access, loss of market share, loss of revenue, loss of savings, and loss of profit, , whether or not the possibility of such damages could have been reasonably foreseen and whether as a result of breach of this Principal Agreement, Warranty or in tort. These limitations shall not apply in case of breach of confidentiality, Bidders breach of the license conditions, or non-payment by Bidder.
- b. Subject to clause (Force Majeure), notwithstanding anything under this Contract and this Contract Bidder shall be liable to HDSCL or any third party under this Contract for damages up to 100% (One Hundred percent) of the Quarterly realised revenue. When calculating the said percentage figure, any taxes, fees or levies, if any, forming part of the revenue as indicated in the Financial Bid shall be excluded.
- c. No action, regardless of form, arising out of any alleged breach of this Contract shall be brought by either Bidder or HDSCL more than three (3) years after the cause of action has occurred.
- d. HDSCL or Bidder suffering loss or damages shall take all reasonable measures to mitigate such loss or damage.

# 18.4. Governing Law and Jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India and the Courts at Hubballi Dharwad, India shall have jurisdiction over all matters arising out of or relating to this Agreement.

## 18.5. Software licenses

The Bidder shall be responsible for providing right to use software (system software, application software, device drivers, iOS, etc.) Required, if any, during operation period to HDSCL. All license software must be in the name of HDSCL. Such licenses entitle the HDSCL of Right to Use the Software only. No Source code is required to be provided.

#### **18.6.** Waiver

- a. Waiver by either Party of any default by the other Party in the observance and performance of any provision of or obligations or under this Agreement:
  - (i) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions or obligations under this Agreement:
  - (ii) shall not be effective unless it is in writing and executed by a duly

authorized representative of such Party; and

- (iii) shall not affect the validity or enforceability of this Agreement in any manner.
- b. Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation hereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance or any variation or the relinquishment of any such right hereunder.

#### 18.7. Survival

Termination of this Agreement (a) shall not relieve the Concessionaire or Authority of any obligations hereunder which expressly or by implication survive Termination hereof, and (b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

# **18.8.** Acceptance Test:

Acceptance Test will be conducted in as follows

- The Bidder shall be responsible for preparation and submission of detailed UAT schedules/ procedures/ formats. After acceptance of UAT reports by HDSCL, the entire infrastructure (including network) would be deemed to have been commissioned.
- For the purpose of Acceptance Testing, Bidder would be required to demonstrate all COTS hardware and software with minimum quantities to carry out the process of acceptance testing for verifying the technical specifications. In case any developmental work is required to be done, the same would be demonstrated over a period of time without hindering the process of acceptance and payment. Once the acceptance is done for certain type of equipment then mass deployment could be done without the need for acceptance again.
- After the successful UAT the Bidder shall be responsible for obtaining installation and commissioning certificate (sign-off) of the complete network from HDSCL.
- Entire system at any particular location/control room, if any, not passing the UAT, shall be rectified by the Bidder in a timely manner with a request for retest by HDSCL. If any component/system fails the UAT repeatedly, HDSCL

may ask Bidder to remove the device, without any claim for payment to Bidder.

- On successful UAT by HDSCL of the entire system, the event shall be marked as the "date of commissioning" of the project. However, in case of delay/ non-completion of work by Bidder at any site(s) due to reasons not attributable to the Bidder, HDSCL shall treat the last day of the successful UAT of the commissioned network (excluding the delayed and non-feasible sites) as the "date of commissioning" of the project.
- Documentation: provide technical documentation with equipment supplied.
   The technical documentation should include technical manuals and operation manuals.
- HDSCL reserve the right to inspect equipment's and OFC/IFC, cat-5/cat-6 cables etc. The cost of all such tests shall be borne by the Bidder. Any inspected goods fail for confirm to specification after installation, the HDSCL may reject them and the Bidder shall have to replace the rejected goods. Sample approval should be obtained before installation for such material.
  - The first step will involve successful installation of all sites. The provisional acceptance of these sites will be defined as partial acceptance.
  - The date on which acceptance certificate is issued shall be deemed to be the date of successful commissioning of the system.
  - Any delay by the Bidder in the acceptance testing shall render the Bidder liable to the imposition of appropriate penalties
  - All goods and services should have approval of TEC (Technical Evaluation Committee) with ISO or other certification, as applicable, to prove the quality standards applicable in India.
  - The User acceptance test (UAT) report should confirm with cabling standard under the ISO certification.

#### 18.9. Amendments

This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the Agreement between the Parties on the subject hereof and no amendment or modification hereto shall be valid and effective unless agreed to by all the Parties hereto and evidenced in writing.

# **18.10.** Notices

Unless otherwise stated, notices to be given under this Agreement including but

not limited to a notice of waiver of any term, breach of any term of this Agreement and termination of this Agreement, shall be in writing and shall be given by hand delivery, recognized international courier, mail, telex or facsimile transmission and delivered or transmitted to the Parties at their respective addresses set forth below:

If to the Authority:
•••••
•••••
If to the Concessionaire:
The Managing Director,

Or such addresses, telex numbers, or facsimile numbers as may be duly notified by the respective Parties from time to time, and shall be deemed to have been made or delivered (i) in the case of any communication made by letter, when delivered by hand, by recognized international courier or by mail (registered, return receipt requested) at that address and (ii) in the case of any communication made by telex or facsimile, when transmitted properly addressed to such telex number or facsimile number.

# 18.11. Severability

If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing upon one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable. Provided failure to agree upon any such provisions shall not be subject to dispute resolution under this Agreement or otherwise.

# 18.12. No Partnership

Nothing contained in this Agreement shall be construed or interpreted as constituting a partnership between the Parties. Neither Party shall have any authority to bind the other in any manner whatsoever.

#### 18.13. Language

All notices required to be given under this Agreement and all communications, documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in **English** language.

# 18.14. Exclusion of Implied Warranties etc.

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by any Party not contained in a binding legal agreement executed by the Parties.

# 18.15. Counterparts

This Agreement may be executed in two counterparts, each of which when executed and delivered shall constitute an original of this Agreement.

# **SCHEDULE A - PROJECT SITE**

# Details provided in the Section 11 to the RFP

# **SCHEDULE B - PROJECT FACILITY**

(The facilities to be constructed, built, installed, erected, or provided by the Concessionaire in the Project Sites with brief description& specifications and Scope of Work for the Concessionaire have been mentioned in Section 11 of the RFP).

# **SCHEDULE C - PROJECT COMPLETION SCHEDULE**

(The Project Completion Schedule as agreed to with the Concessionaire would need to be set out here).

The Project Completion Schedule submitted by the Concessionaire with the RFP is attached herewith.

Please refer to the Project Schedule submitted in the RFP.

# SCHEDULE D - OFFICER-IN-CHARGE'S SERVICES (Implementation Period)

#### TERMS OF REFERENCE

# 1. OBJECTIVES

The Officer-in-Charge shall be required to:

- (i) Act independently on behalf of both Authority and the Concessionaire to review and monitor all activities associated with construction, operation, and maintenance to ensure compliance with provisions of the Concession Agreement.
- (ii)Visit, inspect, and report to the MD/Authority on various aspects of the project and carry out all such activities as are provided in the Concession Agreement. Without prejudice to this, the scope of services of the Officer-in-Charge shall be as specified in paras 2 to 4 below.

The Officer-in-Charge shall have no authority to relieve the Concessionaire of any of its duties or to impose additional obligations other than those expressly provided in the Concession Agreement.

# 2. SCOPE OF SERVICES

#### 2.1. Pre-implementation Period

- (i) Review the Project Report prepared by the Concessionaire.
- (ii) Review the Implementation Schedule submitted by the Concessionaire.
- (iii) Proof checking of designs, calculations and working drawings prepared by the Concessionaire for the construction of various components of the Project Facility in accordance with provisions of the Concession Agreement.
- (iv) Review the adequacy of the geo-technical studies, sub-soil investigations, hydrological investigations and the topographical survey, if any, carried out by the Concessionaire.
- (v) Review the environmental management plan for the Project during Implementation Period and Operations Period.
- (vi) Review the proposed quality assurance and quality control procedures during the Implementation Period and Operations Period.

(vii) Review the safety measures proposed during Implementation Period and Operations Period

# 2.2. Implementation Period

- (i) Monitor quality assurance and quality control during Implementation period.
- (ii) Review the material testing results, mix designs and order special tests of materials and/or completed works, and/or order removal and substitution of substandard materials and/or works as required.
- (iii) Ensure that the construction work is carried out in accordance with the Specifications and Standards and Good Industry Practice.
- (iv) Identify delays in completion and recommend to the MD/Authority / Concessionaire the remedial measures to expedite the progress.
- (v) Review "As Built" drawings for each component of the works prepared by the Concessionaire.
- (vi) Review the safety measures provided by the Concessionaire.
- (vii) Supervise and monitor various Completion Tests as provided in the Concession Agreement
- (viii)Issue Provisional Completion Certificate or the Completion Certificate, as the case may be, in accordance with the provisions of the Concession Agreement.
- (ix) Review and approve the Maintenance Manual prepared by the Concessionaire.

#### 2.3. General

- (i) Design a Management Information System (MIS) for monitoring of the Project by Authority.
- (ii) Determine and recommend changes to the Project Completion Schedule, Scheduled
- (iii) Project Completion Date and the Concession Period in accordance with the Concession Agreement.
- (iv) Mediate and assist in resolving disputes between Authority and Concessionaire.

# 3. INTERACTION WITH THE MD/Authority

The Officer-in-Charge shall interact with the MD/Authority on a regular basis.

# 4. REPORTING REQUIREMENTS

The Officer-in-Charge shall prepare and submit to the MD/Authority three copies and to the Concessionaire two copies each of the following reports.

# **Monthly Progress Report**

Various other reports as provided in the Concession Agreement such as Completion Report.

# 5. PERIOD OF SERVICES

The period of services shall be the Implementation Period.

# SCHEDULE E -AUTHORITY'S ENGINEER'S SERVICES (Operations Period) TERMS OF REFERENCE

# 1. OBJECTIVES

The Authority Engineer shall be required to:

- (i) To review and monitor all activities associated with operation and maintenance to ensure compliance with provisions of the Concession Agreement.
- (ii) Visit, inspect, and report to the MD/Authority on various aspects of the project and carry out such other activities as provided in the Concession Agreement. Without prejudice to this, the scope of services of the Authority Engineer shall be as specified in para 2 to 4.

The Authority Engineer shall have no authority to relieve the Concessionaire of any of their duties or to impose additional obligations other than those expressly provided in the Concession Agreement.

#### 2. SCOPE OF SERVICES

Review work plan and schedules of various operation and maintenance activities.

- (i) Review and ensure compliance with Maintenance Programme, Minimum Maintenance Requirements and the Maintenance Manual.
- (ii) Supervise actions undertaken by Authority's contractor(s) to carry out maintenance obligations of the Concessionaire at the risk and cost of the Concessionaire in the event of his failure to carry out the same.
- (iii) Undertake audit of the traffic using the Project at least once a month.
- (iv) Review and inspect the Project at least once a month during the Operations Period and submit an Inspection Report thereafter to Authority.
- (v) Mediate and assist in resolving disputes between Authority and Concessionaire.

# 3. REPORTING REQUIREMENTS

The Officer-in-Charge shall prepare and submit to the MD/Authority three copies and to the Concessionaire two copies each of the following reports.

Monthly and Quarterly Inspection Reports

•Monthly reports on audit of advertisement displayed

# 4. PERIOD OF SERVICES

The period of services shall be the Operations Period.

# SCHEDULE F – DRAWINGS

# SCHEDULE G - SPECIFICATIONS AND STANDARDS

(Provided in Section 11 of the RFP)

# SCHEDULE H – SERVICE LEVEL CONDITION REQUIREMENTS

(Provided in Section 13.2 of the RFP)

# SCHEDULE- I: PARTICULARS OF FINANCIAL ASSISTANCE.

# SCHEDULE J - MEMORANDUM OF UNDERSTANDING

(Where the Project is being implemented by a Consortium, the Memorandum of Understanding provided as part of Bid and entered into by them for the purpose of implementing the Project should be appended here as applicable).

# SCHEDULE K-REVENUE SHARE

#### SCHEDULE L-PERFORMANCE SECURITY

#### **Bank Guarantee Format**

To,

<insert name address>

Whereas, <name of the supplier and address> (hereinafter called "the Concessionaire") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for 'Selection of Concessionaire for Implementing Smart City Pan City Projects in Hubballi Dharwad under PPP on BOOT model' to Hubballi Dharwad Smart City Development Co. Ltd (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the Concessionaire shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of INR <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of INR <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Concessionaire 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 <Insert Date>)

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed INR. <Insert Value> (Rupees <Insert Value in Words> only).
- II. This bank guarantee shall be valid up to <Insert Expiry Date>)

III.	It is condition of our liability for payment of the guaranteed amount or any part thereof arising
	under this bank guarantee that we receive a valid written claim or demand for payment under
	this bank guarantee on or before <insert date="" expiry="">) failing which our liability under the</insert>
	guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date:

#### SCHEDULE M-GRANT

# **Bank Guarantee Format**

To.

<insert name address>

Whereas, <name of the supplier and address> (hereinafter called "the Concessionaire") has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> to provide Implementation services for 'Selection of Concessionaire for Implementing Smart City Pan City Projects in Hubballi Dharwad under PPP on BOOT model' to Hubballi Dharwad Smart City Development Co. Ltd (hereinafter called "the beneficiary")

And whereas it has been stipulated by in the said contract that the Concessionaire shall furnish you with a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract;

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its office at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of INR <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of INR <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

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

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Concessionaire 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 <Insert Date>)

Notwithstanding anything contained herein:

- I. Our liability under this bank guarantee shall not exceed INR. <Insert Value> (Rupees <Insert Value in Words> only).
- II. This bank guarantee shall be valid up to <Insert date for 180 days from date of signing of Agreement Date>)

III.	It is condition of our liability for payment of the guaranteed amount or any part thereof arising
	under this bank guarantee that we receive a valid written claim or demand for payment under
	this bank guarantee on or before < Insert date for 180 days from date of signing of Agreement
	Date>) failing which our liability under the guarantee will automatically cease.

(Authorized Signatory of the Bank)

Seal:

Date: