

BIDDING DOCUMENT (SINGLE-STAGE)

Issued on: 28th December, 2016



Procurement of Contract

For

Development of ICT Infrastructure in HPPWD and HPRIDC

**IFB No: PW/SRP/RIDC/HP/ICT/ICB-3
HP State Road Project**

HP Road Infrastructure Development Corporation (HPRIDC)
Nirman Bhawan, Nigam Vihar, Himachal Pradesh, Shimla – 171 002
India

Himachal Pradesh Road & Other Infrastructure Development Corporation

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INVITATION FOR BIDS (IFB)

PROCUREMENT NOTICE
GOVERNMENT OF HIMACHAL PARDESH
HIMACHAL PRADESH STATE ROADS PROJECT (HPSRP)
Invitation for Bids (IFB)

Country : India
Project : Himachal Pradesh State Roads Project (HPSRP), HPRIDC.
Loan No. : 4860-IN & 8199-IN
Contract Title : Procurement of System Integrator (SI) to Supply & Installation of Integrated IT Systems (including supply, warranty and post warranty of hardware and software) for Development of ICT infrastructure in HPPWD and HPRIDC under World Bank assisted Himachal Pradesh State Roads Project (HPSRP).
Reference No. : PW/SRP/RIDC/HP/ICT/ICB-3 **Dated:- December 19 , 2016**

1. This Invitation for Bids (IFB) follows the General Procurement Notice (GPN) for this project that appeared in Development Business No. 653 dated 30.04.2005 and posted online on March 31, 2005
2. The Government of Himachal Pradesh through Government of India has received a loan (Loan No. 4860-IN & 8199-IN) from the International Bank for Reconstruction and Development towards the cost of **HP State Road Project** and it is intended that part of the proceeds of this loan will be applied to eligible payments under the agreement(s) resulting from this IFB: PW/SRP/RIDC/HP/ICT/ICB-3 “Development of ICT Infrastructure in HPPWD and HPRIDC”
3. The Chief Engineer-cum-Project Director, State Roads Project, HPRIDC, Nirman Bhawan, Nigam Vihar, Shimla – 171002, Himachal Pradesh, India on behalf of Government of Himachal Pradesh now invites sealed bids from eligible Bidders for Procurement of System Integrator (SI) to Supply & Installation of Integrated IT Systems (including supply, warranty and post warranty of hardware and software) for Development of ICT infrastructure in HPPWD and HPRIDC under World Bank assisted Himachal Pradesh State Roads Project (HPSRP).
4. Bidding will be conducted using the International Competitive Bidding (ICB) procedures specified in the World Bank’s Guidelines: Procurement under IBRD Loans and IDA Credits, edition of **January 2011 and Revised July 2014** and is open to all Bidders eligible as defined in these Guidelines that meet the minimum qualification criteria.
5. Interested eligible Bidders may obtain further information from the office of Chief Engineer-cum-Project Director, State Roads Project, HPRIDC, Nirman Bhawan, Nigam Vihar, Shimla – 171002, Himachal Pradesh and inspect the bidding
Himachal Pradesh Road & Other Infrastructure Development Corporation

- documents at the address given below from **1000 hrs to 1700 hrs (IST)**. A pre-bid meeting, which potential bidders may attend, will be held on **17/01/2017 at 1100 hrs (IST)** at below address.
6. A complete set of bidding documents in English may be obtained from the Office of Chief Engineer-cum-Project Director, State Roads Project, HPRIDC, Nirman Bhawan, Nigam Vihar, Shimla – 171002, Himachal Pradesh from 1000 hrs to 1700 hrs (IST) on all working days **from 28 December, 2016 to 08 February, 2017 on a payment of INR 15,000 (US \$225)** or same can be downloaded from the website of HPRIDC i.e. <http://admis.hp.nic.in/himachal/hpridc>. The tender fees of the bid document downloaded from the website of HPRIDC are to be paid to HPRIDC at the time of submission of the bid. Bidding Documents requested by mail will be dispatched by registered / speed post/courier on payment of an extra amount of INR 1000/- for domestic shipping and INR 5000/- or US\$ 75/- for overseas shipping. The document will be sent by airmail/courier. The Chief Engineer-cum-Project Director, State Roads Project, HPRIDC, Nirman Bhawan, Nigam Vihar, Shimla – 171002, Himachal Pradesh will not be held responsible for the postal delay/courier delay, if any in the delivery of the documents or non receipt of the same. The method of payment will be through Demand Draft payable at Shimla in favour of “Chief Engineer-cum-Project Director, HP State Roads Project, HPRIDC”.
 7. Bids must be delivered to the address below on or before **February 09, 2017 at 1500 hrs (IST)**. Late bids will be rejected. Bids will be opened in the presence of Bidders/ representatives who choose to attend at the address below on **February 09, 2017 at 1530 Hours (IST)**.
 8. The attention of prospective Bidders is drawn to (i) the fact that they will be required to certify in their bids that all software is either covered by a valid license or was produced by the Bidder and (ii) that violations are considered fraud, which can result in ineligibility under World Bank-financed contracts.
 9. All bids must be accompanied by a Bid Security of **INR 1.5 Million/ USD 22500/-**.
 10. **The address referred to above is:**
Chief Engineer-cum-Project Director,
State Roads Project, HPRIDC,
Nirman Bhawan, Nigam Vihar,
Shimla-171002, Himachal Pradesh.
E-mail:- pdsrp-hp@nic.in
Fax: - 0177-2620663.
Tel: - 0177-2620663, 2627602

SECTION I. INSTRUCTIONS TO BIDDERS (ITB)
(Single-Stage Bidding)

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Instructions to Bidders

A. GENERAL

1. Scope of Bid and Bidding Process	<p>1.1 The Purchaser named in the BDS and the SCC for GCC Clause 1.1 (b) (i), or its duly authorized Purchasing Agent if so specified in the BDS (interchangeably referred to as “the Purchaser” in these Bidding Documents), invites bids for the supply and installation of the Information System (IS), as briefly described in the BDS and specified in greater detail in these Bidding Documents.</p>
	<p>1.2 The title and identification number of the Invitation for Bids (IFB) and resulting Contract(s) are provided in the BDS.</p> <p>1.3 Throughout the Bidding Documents, the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt, and the term "days" means calendar days unless a different meaning is evident from the context.</p> <p>1.4 If the BDS so provides, alternative procedures forming part or all of what is commonly known as e-Tendering are available to the extent specified in, or referred to by, the BDS.</p>
2. Source of Funds	<p>2.1 The Borrower named in the BDS has applied for or received a loan or credit (as identified in the BDS, and called a “loan” in these Bidding Documents) from the International Bank for Reconstruction and Development or the International Development Association (called “the Bank” in these Bidding Documents) equivalent to the amount indicated in the BDS toward the cost of the Project specified in the BDS. The Borrower intends to apply a portion of the proceeds of this loan to eligible payments under the Contract for which these Bidding Documents are issued.</p>
	<p>2.2 Payment by the Bank will be made only at the request of the Borrower, or the Borrower’s executing agency, and upon approval by the Bank in accordance with the terms and conditions of the Loan Agreement, and will be subject in all respects to the terms and conditions of that agreement. The Loan Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, if such payment or import, to the knowledge of the Bank, is prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive</p>

	any rights from the Loan Agreement or have any claim to the loan proceeds.
3. Fraud and Corruption	<p>3.1 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their subcontractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts.¹ In pursuance of this policy, the Bank:</p> <p>(a) defines, for the purposes of this provision, the terms set forth below as follows:</p> <p>(i) "corrupt practice"² is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;</p> <p>(ii) "fraudulent practice"³ is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;</p> <p>(iii) "collusive practice"⁴ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;</p> <p>(iv) "coercive practice"⁵ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;</p> <p>(v) "obstructive practice" is</p> <p>(aa) deliberately destroying, falsifying, altering or</p>

¹ In this context, any action taken by a bidder, supplier, contractor, or a sub-contractor to influence the procurement process or contract execution for undue advantage is improper.

² "Another party" refers to a public official acting in relation to the procurement process or contract execution]. In this context, "public official" includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

³ A "party" refers to a public official; the terms "benefit" and "obligation" relate to the procurement process or contract execution; and the "act or omission" is intended to influence the procurement process or contract execution.

⁴ "Parties" refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

⁵ A "party" refers to a participant in the procurement process or contract execution.

	<p>concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or</p> <p>(bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub-clause 3.1 (e) below.</p> <p>(b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;</p> <p>(c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;</p> <p>(d) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a Bank-financed contract; and</p> <p>(e) will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers, and contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.</p>
	<p>3.2 Furthermore, Bidders shall be aware of the provision stated in Clause 9.8 and Clause 41.2 of the General Conditions of Contract.</p>

	3.3 Any communications between the Bidder and the Purchaser related to matters of alleged fraud or corruption must be made in writing.
	3.4 By signing the Bid Submission Form, the Bidder represents that it either is the owner of the Intellectual Property Rights in the hardware, software or materials offered, or that it has proper authorization and/or license to offer them from the owner of such rights. For the purpose of this Clause, Intellectual Property Rights shall be as defined in GCC Clause 1.1 (c) (xvii). Willful misrepresentation of these facts shall be considered a fraudulent practice subject to the provisions of Clauses 3.1 through 3.4 above, without prejudice of other remedies that the Purchaser may take.
4. Eligible Bidders	4.1 A Bidder, and all parties constituting the Bidder, may have the nationality of any country, subject to the restrictions specified in Section III, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country.
	4.2 If a prequalification process has been undertaken for the Contract(s) for which these Bidding Documents have been issued, only those Bidders may participate that had been prequalified and continue to meet the eligibility criteria of this Clause. A prequalified Joint Venture may not change partners or its structure when submitting a bid.
	4.3 A firm may be excluded from bidding if: <ul style="list-style-type: none"> (a) it was engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, or other documents to be used for the procurement of the Information System described in these Bidding Documents; or (b) it is a government-owned enterprise in the Borrower's country, unless it can establish that it (i) is legally and financially autonomous and (ii) operates under commercial law. No dependent agency of the Borrower or Sub-Borrower shall be permitted to bid.
	4.4 A firm that has been determined to be ineligible by the Bank in relation to the Bank Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants shall be not be eligible to be awarded a

	contract.
	<p>4.5 A firm or individual is or will be disqualified from participation in this bidding if, at any time from advertisement of the bidding until and including contract award, the firm or individual is under:</p> <ul style="list-style-type: none"> (a) a suspension by the Purchaser agreed by the Bank as a result of execution of a Bid-Securing Declaration pursuant to ITB Clause 17.6 in another Bank-financed procurement, or under a suspension by the Purchaser for other reasons that have been agreed by the Bank; or (b) a declaration of ineligibility by the Bank in accordance with ITB Clause 3.1 (d). The list of individuals and firms debarred from participating in World Bank projects is available at http://www.worldbank.org/debarr/, or (c) a sanction imposed by the United Nations Security Council, as mentioned in ITB Clause 2.2.
	<p>4.6 A firm or other entity that is ineligible according to any of the above provisions of this Clause, may also not participate as a Joint Venture partner, or as Subcontractor for or supplier of goods, works or services. If a bid becomes materially incomplete after removing ineligible entities, the bid may be disqualified.</p>
	<p>4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.</p>
5. Eligible Goods and Services	<p>5.1 For the purposes of these Bidding Documents, the Information System means all:</p> <ul style="list-style-type: none"> (a) the required information technologies, including all information processing and communications-related hardware, software, supplies, and consumable items that the Supplier is required to supply and install under the Contract, plus all associated documentation, and all other materials and goods to be supplied, installed, integrated, and made operational (collectively called “the Goods” in some clauses of the ITB); and (b) the related software development, transportation, insurance, installation, customization, integration, commissioning, training, technical support, maintenance, repair, and other services necessary for proper operation of

	the Information System to be provided by the selected Bidder and as specified in the Contract.
	<p>5.2 Funds from Bank loans are disbursed only for expenditures for an Information System made up of goods and services provided by nationals of, and produced in or supplied from, eligible source countries as defined in Section III, Eligible Countries. An Information System is deemed to be produced in a certain country when, in the territory of that country, through software development, manufacturing, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.</p> <p>5.3 For purposes of this clause, the nationality of the Bidder is distinct from the country in which the Information System and its goods components are produced or from which the related services are supplied.</p>
6. Qualifications of the Bidder	6.1 By submission of documentary evidence in its bid, the Bidder must establish to the Purchaser's satisfaction:
	<p>(a) that it has the financial, technical, and production capability necessary to perform the Contract, meets the qualification criteria specified in the BDS, and has a successful performance history. If a prequalification process has been undertaken for the Contract(s) for which these Bidding Documents have been issued, the Bidder shall, as part of its bid, update any information submitted with its application for prequalification;</p> <p>(For the purposes of establishing a Bidder's qualifications, and unless stated to the contrary in the BDS, the experience and / or resources of any Subcontractor will not contribute to the Bidder's qualifications; only those of a Joint Venture partner will be considered.)</p>
	<p>(b) that, in the case of a Bidder offering to supply key goods components of the Information System, as identified in the BDS, that the Bidder does not itself produce, the Bidder is duly authorized by the producer to supply those components in the Purchaser's country under the Contract(s) that may result from this bidding; (This will be accomplished by including Manufacturer's Authorizations in the bid, based on the sample found in Section VII.)</p>

	(c) that, if a Bidder proposes Subcontractors for key services if and as identified in the BDS , these Subcontractors have agreed in writing to serve for the Bidder under the Contract(s) that may result from this bidding; and
	(d) that, in the case of a Bidder not doing business within the Purchaser's country, the Bidder is or will be (if awarded the Contract) represented by an Agent in that country who is equipped and able to carry out the Bidder's maintenance, technical support, training, and repair obligations prescribed in the General and Special Conditions of Contract, and/or Technical Requirements.
	<p>6.2 Bids submitted by a Joint Venture of two or more firms as partners shall also comply with the following requirements:</p> <p>(a) the bid shall be signed so as to be legally binding on all partners;</p> <p>(b) one of the partners shall be nominated as being in charge, and this nomination shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;</p> <p>(c) the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture, and the entire execution of the Contract, including payment, shall be done exclusively with the partner in charge;</p> <p>(d) the partner or combination of partners that is responsible for a specific component of the Information System must meet the relevant minimum qualification criteria for that component;</p> <p>(e) a firm may submit bids either as a single Bidder on its own, or as partner in one, and only one, Joint Venture. If, as a result of the bid opening pursuant to ITB Clause 24, this requirement is not met, all bids involving the firm as a single Bidder or Joint Venture partner will be disqualified;</p>
	(f) all partners of the Joint Venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the authorization mentioned under ITB Clause 6.2 (b) above, in the bid as well as in the Contract (in case of a successful bid).

	<p>6.3 If a Bidder intends to subcontract major items of supply or services, it shall include in the bid details of the name and nationality of the proposed Subcontractor for each of those items and shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB Clause 4, and that any Goods or Services components of the Information System to be provided by the Subcontractor comply with the requirements of ITB Clause 5 and the related evidence required by ITB Clause 13.1 (e) (iii) is submitted. Bidders are free to list more than one Subcontractor against each item. Quoted rates and prices will be deemed to apply, whichever Subcontractor is appointed, and no adjustment of the rates or prices will be permitted. The Purchaser reserves the right to delete any proposed Subcontractor from the list. This shall be done prior to Contract signature, by deleting such unacceptable Subcontractors from Appendix 3 to the Contract Agreement, which shall list the approved Subcontractors for each item prior to Contract signature. Subsequent additions and deletions from the list of approved Subcontractors shall be performed in accordance with GCC Clause 20 (as revised in the SCC, if applicable) and Appendix 3 to the Contract Agreement.</p> <p>For the purposes of these Bidding Documents, a Subcontractor is any vendor or service provider with whom the Bidder contracts for the supply or execution of any part of the Information System to be provided by the Bidder under the Contract (such as the supply of major hardware, software, or other components of the required Information Technologies specified, or the performance of related Services, e.g., software development, transportation, installation, customization, integration, commissioning, training, technical support, maintenance, repair, etc.).</p> <p>6.4 A firm which is a Bidder, whether as a single Bidder or as a partner in a Joint Venture, cannot be a Subcontractor in other bids, except for the supply of commercially available hardware or software by the firm, as well as purely incidental services such as installation/configuration, routine training, and ongoing maintenance/support. If the BDS for ITB Clause 6.1 (a) allows the qualification of Subcontractors nominated for certain components to be taken into account in assessing the Bidder's overall qualifications, any Subcontractor so nominated by any Bidder is automatically disqualified from being a Bidder itself or a partner in a Joint Venture. The same will normally apply to firms that have provided Subcontractor agreements for certain services pursuant to ITB Clause 6.1 (c). Non-compliance may</p>
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	result in the rejection of all bids in which the affected firm participates as Bidder or as partner in a Joint Venture. As long as in compliance with these provisions, or as long as unaffected by them due to not participating as Bidder or as partner in a Joint Venture, a firm may be proposed as a Subcontractor in any number of bids. If the BDS for ITB 28.1 permits the submission of bids for Subsystems, lots, or slices, then the provisions of this Clause 6.4 apply only to bids for the same Subsystem(s), lot(s), or slice(s);
7. Cost of Bidding	7.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser will in no case be responsible or liable for those costs.
8. Site Visit	8.1 The Bidder may wish to visit and examine the site or sites of the Information System and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.
	8.2 The Purchaser will arrange for the Bidder and any of its personnel or agents to gain access to the relevant site or sites, provided that the Bidder gives the Purchaser adequate notice of a proposed visit of at least fourteen (14) days. Alternatively, the Purchaser may organize a site visit or visits concurrently with the pre-bid meeting, as specified in the BDS for ITB Clause 10.2. Failure of a Bidder to make a site visit will not be a cause for its disqualification.
	8.3 No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.

B. THE BIDDING DOCUMENTS

9. Content of Bidding Documents	9.1 The contents of the Bidding Documents are listed below and should be read in conjunction with any addenda issued in accordance with ITB Clause 11:
	<div style="display: flex; justify-content: space-between; padding: 0 10px;"> <div style="width: 30%;">Section I</div> <div>Instructions to Bidders (ITB)</div> </div> <div style="display: flex; justify-content: space-between; padding: 0 10px;"> <div style="width: 30%;">Section II</div> <div>Bid Data Sheet (BDS)</div> </div> <div style="display: flex; justify-content: space-between; padding: 0 10px;"> <div style="width: 30%;">Section III</div> <div>Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement</div> </div>

	<p>Section IV General Conditions of Contract (GCC)</p> <p>Section V Special Conditions of Contract (SCC)</p> <p>Section VI Technical Requirements (including Implementation Schedule)</p> <p>Section VII Sample Forms</p> <p>9.2 Bidders are expected to examine all instructions, forms, terms, specifications, and other information in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or to submit a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.</p>
	<p>9.3 The Invitation for Bids is not formally part of the Bidding Documents and is included for reference only. In case of inconsistencies, the actual Bidding Documents shall prevail.</p>
10. Clarification of Bidding Documents and Pre-bid Meeting	<p>10.1 A prospective Bidder requiring any clarification of the Bidding Documents may notify the Purchaser in writing at the Purchaser's address and by one of the means indicated in the BDS. Similarly, if a Bidder feels that any important provision in the documents will be unacceptable, such an issue should be raised as soon as possible. The Purchaser will respond in writing to any request for clarification or modification of the Bidding Documents that it receives no later than twenty-one (21) days prior to the deadline for submission of bids prescribed by the Purchaser. Copies of the Purchaser's response (including an explanation of the query but not identifying its source) will be sent to all prospective Bidders that received the Bidding Documents from the Purchaser.</p>
	<p>10.2 When specified in the BDS, the Purchaser will organize and Bidders are welcome to attend a pre-bid meeting at the time and place indicated in the BDS. The purpose of the meeting will be to clarify issues and answer questions on any matter that may be raised at this stage, with particular attention to issues related to the Technical Requirements. Bidders are requested to submit any questions in writing to reach the Purchaser not later than one week before the meeting. Questions and answers will be transmitted in accordance with ITB Clause 10.1. Minutes of the meeting, including the questions raised and responses given, together with any responses prepared after the meeting, will be transmitted without delay to all those that received the Bidding Documents from the Purchaser. Any modification to the Bidding Documents listed in ITB Clause 9.1, which may</p>

	become necessary as a result of the pre-bid meeting, shall be made by the Purchaser exclusively by issuing an Addendum pursuant to ITB Clause 11 and not through the minutes of the pre-bid meeting.
11. Amendment of Bidding Documents	11.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend the Bidding Documents. Later amendments on the same subject modify or replace earlier ones.
	11.2 Amendments will be provided in the form of Addenda to the Bidding Documents, which will be sent in writing to all prospective Bidders that received the Bidding Documents from the Purchaser. Addenda will be binding on Bidders. Bidders are required to immediately acknowledge receipt of any such Addenda. It will be assumed that the amendments contained in such Addenda will have been taken into account by the Bidder in its bid.
	11.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, in which case, the Purchaser will notify all Bidders in writing of the extended deadline.

C. PREPARATION OF BIDS

12. Language of Bid	12.1 The bid prepared by the Bidder and all correspondence and documents related to the bid exchanged by the Bidder and the Purchaser shall be written in the language specified in the BDS , or, if the BDS so provides, in either one of two languages specified there. Any printed literature furnished by the Bidder as part of its bid may be in a language not specified in the BDS, as long as such literature is accompanied by a translation of its pertinent passages into the language of the bid, in which case, for purposes of interpretation of the bid, the translation shall govern.
13. Documents Comprising the Bid	13.1 The bid submitted by the Bidder shall comprise: <ul style="list-style-type: none"> (a) Bid Submission Form completed and signed by a person or persons duly authorized to bind the Bidder to the Contract; (b) all Price Schedules duly completed in accordance with ITB Clauses 14, 15, and 18 and signed by a person or persons

	<p>duly authorized to bind the Bidder to the Contract;</p> <p>(c) if required, Bid-securing Declaration or Bid Security furnished in accordance with ITB Clause 17;</p> <p>(d) written confirmation authorizing the signatory of the bid to commit the Bidder, in accordance with ITB Clause 19.2;</p> <p>(e) Attachments:</p> <p>(i) Attachment 1: Bidder's Eligibility</p> <p>In the absence of prequalification, documents establishing to the Purchaser's satisfaction the Bidder's eligibility to bid, including but not limited to documentary evidence that the Bidder is legally incorporated in a territory of an eligible source country as defined under ITB Clause 4;</p> <p>(ii) Attachment 2: Bidder's Qualifications</p> <p>Documentary evidence establishing to the Purchaser's satisfaction, and in accordance with ITB Clause 6, that the Bidder is qualified to perform the Contract if its bid is accepted. In the case where prequalification of Bidders has been undertaken, and pursuant to ITB Clause 6.1 (a), the Bidder must provide evidence on any changes in the information submitted as the basis for prequalification or, if there has been no change at all in said information, a statement to this effect;</p> <p>Any Manufacturer's Authorizations and Subcontractor agreements specified as required in the BDS for ITB Clauses 6.1 (b) and 6.1 (c);</p> <p>(iii) Attachment 3: Eligibility of Goods and Services</p> <p>Documents establishing, to the Purchaser's satisfaction, that the Goods and Services components of the Information System to be supplied, installed, and/or performed by the Bidder are eligible Goods and Services as defined under ITB Clause 5. If awarded the Contract, the Bidder shall submit for such components of the Information System evidence of eligibility, which shall be confirmed by a certificate of origin issued at the time of shipment;</p> <p>(iv) Attachment 4: Conformity of the Information System</p>
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	<p>to the Bidding Documents</p> <p>Documentary evidence establishing to the Purchaser's satisfaction, and in accordance with ITB Clause 16, that the Goods and Services components of the Information System to be supplied, installed, and/or performed by the Bidder conform to the Bidding Documents;</p> <p>(v) Attachment 5: Proposed Subcontractors</p> <p>A list of all major items of Goods or Services that the Bidder proposes to purchase or subcontract from others, and the name and nationality of the proposed Subcontractor, including vendors, for each of those items;</p> <p>(vi) Attachment 6: Intellectual Property</p> <p>A list of:</p> <p>(1) all Software included in the Bidder's bid, assigning each item to one of the software categories defined in GCC Clause 1.1 (c):</p> <p style="padding-left: 40px;">(A) System, General Purpose, and Application Software; and</p> <p style="padding-left: 40px;">(B) Standard and Custom Software.</p> <p>(2) all Custom Materials, as defined in GCC Clause 1.1 (c), included in the Bidder's bid.</p> <p>All Materials not identified as Custom Materials shall be deemed Standard Materials, as defined in GCC Clause 1.1 (c).</p> <p>Re-assignments among the Software and Materials categories, if necessary, will be made during the implementation of the Contract according to GCC Clause 39 (Changes to the System).</p>
14. Bid Prices	<p>14.1 All Goods and Services identified in the Supply and Installation Cost Sub-Table and the Recurrent Cost Sub-Table in Section VII (Forms 2.5 and 2.6), and all other Goods and Services proposed by the Bidder to fulfill the requirements of the Information System, must be priced separately in the format of the same tables and summarized in the corresponding Cost Summary Tables in the same Section. Prices must be quoted in accordance with the instructions provided in Section VII for the</p>

	various cost tables, in the manner specified below.
	14.2 The price of items that the Bidder has left blank in the cost tables provided in Section VII shall be assumed to be included in the price of other items. Items omitted altogether from the cost tables shall be assumed to be omitted from the bid and, provided that the bid is substantially responsive, an adjustment to the bid price will be made during evaluation in accordance with ITB Clause 28.6 (c) (iii).
	14.3 Unit prices must be quoted at a level of detail appropriate for calculation of any partial deliveries or partial payments under the contract, in accordance with the Implementation Schedule in Section VI, and with GCC and SCC Clause 12 – Terms of Payment. Bidders may be required to provide a breakdown of any composite or lump-sum items included in the Cost Tables.
	<p>14.4 The prices for Goods components of the System are to be expressed and shall be defined and governed in accordance with the rules prescribed in the edition of Incoterms specified in the BDS, and quoted in the appropriate columns of the cost tables of Section VII as follows:</p> <p>(a) Goods supplied from outside the Purchaser's country:</p> <p>Unless otherwise specified in the BDS, the prices shall be quoted on a CIP (named place of destination) basis, exclusive of all taxes, stamps, duties, levies, and fees imposed in the Purchaser's country. The named place of destination and special instructions for the contract of carriage are as specified in the BDS. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Bidder may obtain insurance services from any eligible source country.</p> <p>(b) Locally supplied Goods:</p> <p>Unit prices of Goods offered from within the Purchaser's Country, shall be quoted on an EXW (ex factory, ex works, ex warehouse or off-the-shelf, as applicable) basis, including all customs duties, levies, fees, sales and other taxes incurred until delivery of the Goods, but excluding all VAT or sales and other taxes and duties/fees incurred for the Goods at the time of invoicing or sales transaction, if the Contract is awarded.</p> <p>(c) Inland transportation:</p>

	<p>Unless otherwise stated in the BDS, inland transportation, insurance and related local costs incidental to the delivery of the Goods to the designated Project Sites must be quoted separately as a Service item in accordance with ITB Clause 14.5, whether the Goods are to be supplied locally or from outside the Purchaser's country, except when these costs are already included in the price of the Goods, as is, e.g., the case, when ITB Clause 14.4 (a) specifies CIP, and the named places of destination are the Project Sites.</p>
	<p>14.5 The price of Services shall be quoted in total for each service (where appropriate, broken down into unit prices), separated into their local and foreign currency components. Prices must include all taxes, duties, levies and fees whatsoever, except only VAT or other indirect taxes, or stamp duties, that may be assessed and/or apply in the Purchaser's country on/to the price of the Services invoiced to the Purchaser, if the Contract is awarded. Unless otherwise specified in the BDS, the prices must include all costs incidental to the performance of the Services, as incurred by the Supplier, such as travel, subsistence, office support, communications, translation, printing of materials, etc. Costs incidental to the delivery of the Services but incurred by the Purchaser or its staff, or by third parties, must be included in the price only to the extent such obligations are made explicit in these Bidding Documents (as, e.g., a requirement for the Bidder to include the travel and subsistence costs of trainees).</p>
	<p>14.6 Prices for Recurrent Costs beyond the scope of warranty services to be incurred during the Warranty Period, defined in SCC Clause 29.4 and prices for Recurrent Costs to be incurred during the Post-Warranty Period, defined in SCC Clause 1.1. (e) (xii), shall be quoted as Service prices in accordance with ITB Clause 14.5 on the Recurrent Cost Sub-Table in detail, and on the Recurrent Cost Summary Table in currency totals. Recurrent costs are all-inclusive of the costs of necessary Goods such as spare parts, software license renewals, labor, etc., needed for the continued and proper operation of the System and, if appropriate, of the Bidder's own allowance for price increases.</p>
	<p>14.7 Unless otherwise specified in the BDS, prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to increases on any account. Bids submitted that are subject to price adjustment will be rejected.</p>

15. Bid Currencies	15.1 Prices shall be quoted in the following currencies:
	<p>(a) The Bidder may quote its prices for all Information Technologies, associated Goods, and Services to be supplied from outside the Purchaser's Country in the currencies of countries eligible according to Section III. If the Bidder wishes to be paid in a combination of different currencies, it must quote unit prices accordingly, but no more than three foreign currencies may be used.</p> <p>(b) Unless otherwise specified in the BDS, the Bidder shall express its prices for such Information Technologies, associated Goods, and Services to be supplied locally (i.e., from within the Purchaser's Country) in the currency of the Purchaser's Country.</p>
16. Documents Establishing the Conformity of the Information System to the Bidding Documents	<p>16.1 Pursuant to ITB Clause 13.1 (e) (iv), the Bidder shall furnish, as part of its bid, documents establishing the conformity to the Bidding Documents of the Information System that the Bidder proposes to supply and install under the Contract.</p> <p>16.2 The documentary evidence of conformity of the Information System to the Bidding Documents shall be in the form of written descriptions, literature, diagrams, certifications, and client references, including:</p>
	<p>(a) the Bidder's technical bid, i.e., a detailed description of the Bidder's proposed technical solution conforming in all material aspects with the Technical Requirements (Section VI) and other parts of these Bidding Documents, overall as well as in regard to the essential technical and performance characteristics of each component making up the proposed Information System;</p> <p>(b) an item-by-item commentary on the Purchaser's Technical Requirements, demonstrating the substantial responsiveness of the Information System offered to those requirements. In demonstrating responsiveness, the commentary shall include explicit cross references to the relevant pages in the supporting materials included in the bid. Whenever a discrepancy arises between the item-by-item commentary and any catalogs, technical specifications, or other preprinted materials submitted with the bid, the item-by-item commentary shall prevail;</p> <p>(c) a Preliminary Project Plan describing, among other things, the methods by which the Bidder will carry out its overall management and coordination responsibilities if awarded</p>

	<p>the Contract, and the human and other resources the Bidder proposes to use. The Plan should include a detailed Contract Implementation Schedule in bar chart form, showing the estimated duration, sequence, and interrelationship of all key activities needed to complete the Contract. The Preliminary Project Plan must also address any other topics specified in the BDS. In addition, the Preliminary Project Plan should state the Bidder's assessment of what it expects the Purchaser and any other party involved in the implementation of the Information System to provide during implementation and how the Bidder proposes to coordinate the activities of all involved parties;</p> <p>(d) a written confirmation that the Bidder accepts responsibility for the successful integration and interoperability of all components of the Information System as required by the Bidding Documents.</p> <p>16.3 For purposes of the commentary to be furnished pursuant to ITB Clause 16.2 (b), the Bidder shall note that references to brand names or model numbers or national or proprietary standards designated by the Purchaser in its Technical Requirements are intended to be descriptive and not restrictive. Except where explicitly prohibited in the BDS for specific items or standards, the Bidder may substitute alternative brand/model names or standards in its bid, provided that it demonstrates to the Purchaser's satisfaction that the use of the substitute(s) will result in the Information System being able to perform substantially equivalent to or better than that specified in the Technical Requirements.</p>
17. Securing the Bid	<p>17.1 The BDS for this Clause specifies whether bids must be secured, and if so, whether by a Bid-Securing Declaration or by a Bid Security. If a Bid Security is required or optional, the BDS also specifies the amount.</p>
	<p>17.2 Securing the bids shall be substantially in accordance with the related sample forms included in Section VII or other forms approved by the Purchaser prior to bid submission. Bids must remain secured for a period of 28 days beyond the validity period of the bids, as extended, if applicable, in accordance with ITB Clause 18.2. In case of a Bid Security, it shall also:</p> <p>(a) at the Bidder's option, be in the form of either a certified check, letter of credit, or a bank guarantee from a banking</p>

	<p>institution, or a bond issued by a surety;</p> <p>(b) be issued by a reputable institution selected by the Bidder and located in any eligible country; if the institution issuing the security is located outside the Purchaser's Country, it shall have a correspondent financial institution located in the Purchaser's Country to make the security enforceable;</p> <p>(c) be payable promptly upon written demand by the Purchaser in case any of the conditions listed in ITB Clause 17.6 is/are invoked;</p> <p>(d) be submitted in its original form; copies will not be accepted.</p> <p>17.3 The Bid-Securing Declaration or the Bid Security of a Joint Venture shall be issued in the name of the Joint Venture submitting the bid provided the Joint Venture has legally been constituted, or else it shall be issued in the name of all partners proposed for the Joint Venture in the bid. Sanctions due to a breach of the terms of a Bid-Securing Declaration pursuant to ITB Clause 17.6 will apply to all partners to the Joint Venture.</p>
	<p>17.4 If a Bid-Securing Declaration or Bid Security is required in accordance with ITB Clause 17.1, any bid not accompanied by a substantially acceptable Bid-Securing Declaration or Bid Security in accordance with ITB Clauses 17.2 and 17.3, shall be rejected by the Purchaser as non-responsive.</p>
	<p>17.5 Unless executed or forfeited pursuant to ITB Clause 17.6, Bid-Securing Declarations, if any, will expire for, or Bid Securities, if any, will be returned as promptly as possible to,</p> <p>(a) all Bidders upon annulment of the bidding pursuant to ITB Clause 34;</p> <p>(b) Bidders refusing a request to extend the period of validity of their bids pursuant to ITB Clause 18.2;</p> <p>(c) the successful Bidder once it has signed the Contract Agreement and furnished a valid Performance Security as required;</p> <p>(d) the unsuccessful Bidders at the same time as in (c), that is, when they are informed about the successful establishment of the contract with the successful Bidder.</p>

	<p>17.6 The Bid-Securing Declaration, if any, may be executed, or the Bid Security, if any, may be forfeited:</p> <ul style="list-style-type: none"> (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form or any extension of validity the Bidder has agreed to pursuant to ITB Clause 18.2; or (b) in the case of the successful Bidder, if the Bidder fails to: <ul style="list-style-type: none"> (i) sign the Contract Agreement in accordance with ITB Clause 36; or (ii) furnish the Performance Security in accordance with ITB Clause 37.
	<p>17.7 If a bid security is not required in the BDS, and</p> <ul style="list-style-type: none"> (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 36; or furnish a performance security in accordance with ITB 37; <p>the Borrower may, if provided for in the BDS, declare the Bidder disqualified to be awarded a contract by the Employer for a period of time as stated in the BDS.</p>
18. Period of Validity of Bids	<p>18.1 Bids shall remain valid, at a minimum, for the period specified in the BDS after the deadline date for bid submission prescribed by the Purchaser, pursuant to ITB Clause 21. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive. For the convenience of Bidders, the BDS spells out the minimal original expiration dates for the validity of the bid and, if applicable pursuant to ITB Clause 17.1, for securing the bid. However, Bidders are responsible for adjusting the dates in the BDS in accordance with any extensions to the deadline date of bid submission pursuant to ITB Clause 21.2.</p>
	<p>18.2 In exceptional circumstances, prior to expiry of the bid validity period, the Purchaser may request that the Bidders extend the period of validity for a specified additional period. The request and the responses to the request shall be made in writing. A Bidder may refuse the request without risking execution of the Bid-Securing Declaration or forfeiting the Bid Security, but in this case the bid will be out of the competition for the award.</p>

	<p>Except as provided in ITB Clause 18.3, a Bidder agreeing to the request will not be required or permitted to modify its bid, but will be required to ensure that the bid remains secured for a correspondingly longer period, pursuant to ITB Clause 17.2.</p> <p>18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the contract price will be adjusted as specified in the request for extension. Bid evaluation will be based on the bid prices without taking into consideration the above correction.</p>
19. Format and Signing of Bid	<p>19.1 The Bidder shall prepare an original and the number of copies/sets of the bid specified in the BDS, clearly marking each one as “ORIGINAL BID,” “COPY NO. 1,” “COPY NO. 2,” etc., as appropriate. In the event of any discrepancy between them, the original shall govern.</p>
	<p>19.2 The original and all copies of the bid, each consisting of the documents listed in ITB Clause 13.1, shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. The authorization must be in writing and included in the bid pursuant to ITB Clause 13.1 (d). The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.</p> <p>19.3 The bid shall contain no interlineations, erasures, or overwriting, except to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the bid.</p> <p>19.4 The Bidder shall furnish in the Bid Submission Form (a sample of which is provided in the Sample Forms Section of the Bidding Documents) information regarding commissions or gratuities, if any, paid or to be paid to agents relating to this procurement and to the execution of the Contract should the Bidder be successful.</p>

D. SUBMISSION OF BIDS

20. Sealing and Marking of Bids	20.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as “ORIGINAL BID” and “COPY NO. [number].” The envelopes shall then be sealed in an outer envelope.
	<p>20.2 The inner and outer envelopes shall</p> <ul style="list-style-type: none"> (a) be addressed to the Purchaser at the address given in the BDS, and (b) bear the loan/Project name indicated in the BDS for ITB Clause 2.1, the Invitation for Bids title and number, and the Contract name(s), as indicated in the BDS for ITB Clause 1.2, and the statement “DO NOT OPEN BEFORE [time and date],” to be completed with the time and date specified in the BDS for ITB Clause 24.1. <p>20.3 The inner envelopes shall also indicate the name and address of the Bidder so that the bid can be returned unopened in case it is declared “late.”</p> <p>20.4 If the outer envelope is not sealed and marked as required by ITB Clause 20.2 above, the Purchaser will assume no responsibility for the bid’s misplacement or premature opening. If the outer envelope discloses the Bidder’s identity, the Purchaser will not guarantee the anonymity of the bid submission, but this disclosure will not constitute grounds for bid rejection.</p>
21. Deadline for Submission of Bids	21.1 Bids must be received by the Purchaser at the address specified in the BDS for ITB Clause 20.2 no later than the time and date stated in the BDS .
	21.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the Bidding Documents in accordance with ITB Clause 11.3, in which case all rights and obligations of the Purchaser and Bidders will thereafter be subject to the deadline as extended.
22. Late Bids	22.1 Any bid received by the Purchaser after the bid submission deadline prescribed by the Purchaser in the BDS for ITB Clause 21, will be rejected and returned unopened to the Bidder.
23. Withdrawal, Substitution, and	23.1 The Bidder may withdraw, substitute, or modify its bid after submission, provided that written notice of the withdrawal, substitution, or modification is received by the Purchaser prior

Modification of Bids	to the deadline prescribed for bid submission. All notices must be duly signed by an authorized representative and shall include a copy of the authorization (the power of attorney) in accordance with ITB Sub-Clause 19.2.
	<p>23.2 All notices of withdrawal, substitution, or modification shall</p> <ul style="list-style-type: none"> (a) be addressed to the Purchaser at the address named in the BDS for ITB Clause 20.2 (a), and (b) bear the Contract name, the IFB Title and IFB Number, and the words “BID WITHDRAWAL NOTICE”, BID SUBSTITUTION NOTICE”, or “BID MODIFICATION NOTICE”. <p>23.3 A notice may also be sent by electronic means such as fax or e-mail, but in this case must include a scan of the mailing receipt showing both the sender's and receiver's addresses for the signed hardcopy of the notice, and a scan of the power of attorney.</p> <p>23.4 Bids requested to be withdrawn in accordance with ITB 23.1 shall be returned unopened to the Bidders. Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a validly submitted bid.</p> <p>23.5 The substitution or modification of the bid shall be prepared, sealed, marked, and dispatched as follows:</p> <ul style="list-style-type: none"> (a) The Bidders shall provide an original and the number of copies specified in the BDS for ITB Clause 19.1 of any substitution or modification to its bid, clearly identified as such, in two inner envelopes duly marked “BID SUBSTITUTION -- ORIGINAL” or “BID MODIFICATION -- ORIGINAL” and “BID SUBSTITUTION -- COPIES” or “BID MODIFICATION -- COPIES.” The inner envelopes shall be sealed in an outer envelope, which shall be duly marked “BID SUBSTITUTION” or “BID MODIFICATION”. (b) Other provisions concerning the marking and dispatch of a bid substitution or modification shall be in accordance with ITB Clauses 20.2, 20.3, and 20.4. <p>23.6 No bid may be withdrawn, substituted, or modified in the interval between the bid submission deadline and the expiration of the bid validity period specified by the Bidder in the Bid Submission Form, or any extension thereof agreed to by the Bidder. Withdrawal of a bid during this interval may result in the execution of the Bid-Securing Declaration, if any, or</p>

	forfeiture of the Bid Security, if any, pursuant to ITB Clause 17.6.
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E. BID OPENING AND EVALUATION

24. Opening of Bids by Purchaser	24.1 The Purchaser will open all bids, including withdrawals, substitutions, and modifications, in public, in the presence of Bidders' representatives who choose to attend, at the time, on the date and at the place specified in the BDS . Bidders' representatives shall sign a register as proof of their attendance.
	<p>24.2 First, envelopes marked "BID WITHDRAWAL NOTICE" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Next, envelopes marked "BID SUBSTITUTION NOTICE" shall be opened and read out and exchanged with the corresponding bid being substituted, and the substituted bid shall not be opened, but returned to the Bidder. No bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening. Envelopes marked "BID MODIFICATION NOTICE" shall be opened and read out with the corresponding bid. No bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at bid opening. Only bids that are opened and read out at bid opening shall be considered further.</p> <p>24.3 Bids shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total bid price including any unconditional discounts, and, if applicable, the prices and unconditional discounts for Subsystems, lots, or slices; the presence or absence of a Bid-Securing Declaration or a Bid Security if one was required; any conditional discounts offered for the award of more than one Subsystem, lot, or slice, if the BDS for ITB Clause 28.1 permits such discounts to be considered in the bid evaluation; and any other such details as the Purchaser may consider appropriate.</p> <p>24.4 Bids and modifications that are not opened and read out at bid opening shall not be considered for further evaluation, irrespective of the circumstances. These bids, including any bids validly withdrawn in accordance with ITB Clause 24.2, will</p>

	<p>promptly be returned, unopened, to their Bidders.</p> <p>24.5 The Purchaser will prepare minutes of the bid opening, including the information disclosed to those present in accordance with ITB Clause 24.3. The minutes will promptly be distributed to all Bidders that met the deadline for submitting bids.</p>
25. Clarification of Bids	<p>25.1 During the bid evaluation, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the price or substance of the bid shall be sought, offered, or permitted.</p>
26. Preliminary Examination of Bids	<p>26.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. In the case where a prequalification process has been undertaken for the Contract(s) for which these Bidding Documents have been issued, the Purchaser will ensure that each bid is from a prequalified Bidder, and in the case of a Joint Venture, that partners and structure of the Joint Venture are unchanged from those in the prequalification.</p>
	<p>26.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price, which is obtained by multiplying the unit price and quantity, or between added or subtracted subtotals and totals, the unit or subtotal price shall prevail and the total price shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit or subtotal prices, in which case the line item total as quoted shall govern and the unit price or sub-total shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail, unless the discrepancy is the result of a typo/error for which the correction is self-evident to the Purchaser. If the Bidder with the Lowest Evaluated Bid does not accept the correction of errors, the bid shall be rejected.</p> <p>26.3 The Purchaser may waive any minor informality, nonconformity, or irregularity in a bid that does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.</p> <p>26.4 Prior to the detailed evaluation, the Purchaser will determine whether each bid is of acceptable quality, is complete, and is</p>

	<p>substantially responsive to the Bidding Documents. For purposes of this determination, a substantially responsive bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviations, exceptions, objections, conditionalities, or reservations. A material deviation, exception, objection, conditionality, or reservation is one: (i) that limits in any substantial way the scope, quality, or performance of the Information System; or (ii) that limits, in any substantial way that is inconsistent with the Bidding Documents, the Purchaser's rights or the successful Bidder's obligations under the Contract; or (iii) the acceptance of which would unfairly affect the competitive position of other Bidders who have submitted substantially responsive bids.</p> <p>26.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity. The Purchaser's determination of bid responsiveness will be based on the contents of the bid itself.</p>
27. Conversion to Single Currency	<p>27.1 For evaluation and comparison purposes, the Purchaser shall convert all bid prices expressed in various currencies and amounts into a single currency specified in the BDS, using the selling exchange rate established by the source and on the date also specified in the BDS.</p>
28. Evaluation and Comparison of Bids	<p>28.1 The Purchaser will evaluate and compare the bids that have been determined to be substantially responsive, pursuant to ITB Clause 26. The evaluation will be performed assuming either that:</p> <p>(a) the Contract will be awarded to the lowest evaluated Bidder for the entire Information System; or</p> <p>(b) if specified in the BDS, Contracts will be awarded to the Bidders for each individual Subsystem, lot, or slice defined in the Technical Requirements whose bids result in the lowest combined evaluated price for the entire System.</p> <p>In the latter case, discounts that are conditional on the award of more than one Subsystem, lot, or slice may be offered in bids. However, such discounts will only be considered in the price evaluation if so confirmed in the BDS.</p> <p>28.2 To be considered for Contract award, Bidders must have submitted bids</p> <p>(a) for which detailed bid evaluation using the same standards</p>

	<p>for compliance determination as listed in ITB Clauses 26.3 and 26.4 confirms that the bids are commercially and technically responsive, and include the hardware, Software, related equipment, products, Materials, and other Goods and Services components of the Information System in, substantially, the full required quantities for the entire Information System or, if allowed in the BDS for ITB Clause 28.1, the individual Subsystem, lot or slice bid on; and</p> <p>(b) that offer Information Technologies that are proven to perform up to the standards promised in the bid by having successfully passed the performance, benchmark, and/or functionality tests the Purchaser may require, pursuant to ITB Clause 31.2.</p>
	<p>28.3 The Purchaser's evaluation of a bid will be made on the basis of prices quoted in accordance with ITB Clause 14 (Bid Prices).</p>
	<p>28.4 If indicated by the BDS, the Purchaser's evaluation of responsive bids will take into account technical factors, in addition to cost factors. An Evaluated Bid Score (B) will be calculated for each responsive bid using the following formula, which permits a comprehensive assessment of the bid price and the technical merits of each bid:</p> $B \equiv \frac{C_{low}}{C} X + \frac{T}{T_{high}} (1 - X)$ <p>where</p> <p>C = Evaluated Bid Price</p> <p>C_{low} = the lowest of all Evaluated Bid Prices among responsive bids</p> <p>T = the total Technical Score awarded to the bid</p> <p>T_{high} = the Technical Score achieved by the bid that was scored highest among all responsive bids</p> <p>X = weight for the Price as specified in the BDS</p> <p>The bid with the highest Evaluated Bid Score (B) among responsive bids shall be termed the Lowest Evaluated Bid and is eligible for Contract award, provided the Bidder was prequalified and/or it was found to be qualified to perform the Contract in accordance with ITB Clause 31 (Post-qualification).</p>

	<p>28.5 If, in addition to the cost factors, the Purchaser has chosen to give weight to important technical factors (i.e., the price weight, X, is less than 1 in the evaluation), that cannot be reduced to life-cycle costs or pass/fail criteria, the Total Technical Points assigned to each bid in the Evaluated Bid Formula will be determined by adding and weighting the scores assigned by an evaluation committee to technical features of the bid in accordance with the criteria set forth below.</p> <p>(a) The technical features to be evaluated are generally defined below and specifically identified in the BDS:</p> <ul style="list-style-type: none"> (i) Performance, capacity, or functionality features that either exceed levels specified as mandatory in the Technical Requirements; and/or influence the life-cycle cost and effectiveness of the Information System. (ii) Usability features, such as ease of use, ease of administration, or ease of expansion, which influence the life-cycle cost and effectiveness of the Information System. (iii) The quality of the Bidder's Preliminary Project Plan as evidenced by the thoroughness, reasonableness, and responsiveness of: (a) the task and resource schedules, both general and specific, and (b) the proposed arrangements for management and coordination, training, quality assurance, technical support, logistics, problem resolution, and transfer of knowledge, and other such activities as specified by the Purchaser in Section VI (Technical Requirements) or proposed by the Bidder based on the Bidder's experience. <p>(b) Feature scores will be grouped into a small number of evaluation categories, generally defined below and specifically identified in the BDS, namely:</p> <ul style="list-style-type: none"> (i) The technical features that reflect how well the Information System meets the Purchaser's Business Requirements (including quality assurance and risk-containment measures associated with the implementation of the Information System). (ii) The technical features that reflect how well the Information System meets the System's Functional
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	<p>Performance Standards.</p> <p>(iii) The technical features that reflect how well the Information System meets the General Technical Requirements for hardware, network and communications, Software, and Services.</p> <p>(c) As specified in the BDS, each category will be given a weight and within each category each feature may also be given a weight.</p> <p>(d) During the evaluation process, the evaluation committee will assign each desirable/preferred feature a whole number score from 0 to 4, where 0 means that the feature is absent, and 1 to 4 either represent predefined values for desirable features amenable to an objective way of rating (as is the case for, e.g., extra memory, or extra mass storage capacity, etc., if these extras would be conducive for the utility of the system), or if the feature represents a desirable functionality (e.g., of a software package) or a quality improving the prospects for a successful implementation (such as the strengths of the proposed project staff, the methodology, the elaboration of the project plan, etc., in the bid), the scoring will be 1 for the feature being present but showing deficiencies; 2 for meeting the requirements; 3 for marginally exceeding the requirements; and 4 for significantly exceeding the requirements.</p> <p>(e) The score for each feature (i) within a category (j) will be combined with the scores of features in the same category as a weighted sum to form the Category Technical Score using the following formula:</p> $S_j \equiv \sum_{i=1}^k t_{ji} * w_{ji}$ <p>where:</p> <p>t_{ji} = the technical score for feature “i” in category “j”</p> <p>w_{ji} = the weight of feature “i” in category “j”</p> <p>k = the number of scored features in category “j”</p> <p>and $\sum_{i=1}^k w_{ji} = 1$</p> <p>(f) The Category Technical Scores will be combined in a</p>
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	<p>weighted sum to form the total Technical Bid Score using the following formula:</p> $T \equiv \sum_{j=1}^n S_j * W_j$ <p>where:</p> <p>S_j = the Category Technical Score of category “j”</p> <p>W_j = the weight of category “j” as specified in the BDS</p> <p>n = the number of categories</p> <p>and $\sum_{j=1}^n W_j = 1$</p>
	<p>28.6 The Evaluated Bid Price (C) for each responsive bid will be determined as the sum of the Adjusted Supply and Installation Costs (P) plus the Recurrent Costs (R);</p> <p>where the Adjusted Supply and Installation Costs (P) are determined as:</p> <ul style="list-style-type: none"> (a) The price of the hardware, Software, related equipment, products, Materials and other Goods offered from within or from outside the Purchaser’s Country, in accordance with ITB 14.4; plus (b) The total price for all software development, transportation, insurance, installation, customization, integration, Commissioning, testing, training, technical support, repair, and other Services, in accordance with ITB 14.5; (c) with adjustments for: <ul style="list-style-type: none"> (i) Deviations proposed to the Implementation Schedule in the Technical Requirements resulting in delayed completion of the entire Information System, if permitted in the BDS and provided they do not exceed the maximum permissible delay period specified in the BDS. For evaluation purposes, a pro rata increase of the total Supply and Installation Costs will be added using the percentage(s) specified in the BDS for each week of delay. Bids offering deliveries beyond the maximum permissible delay specified may be rejected. (ii) Deviations taken to the Contract payment schedule

	<p>specified in the SCC. If deviations are permitted in the BDS, for evaluation purposes the total Supply and Installation Costs will be increased pro rata by the amount of interest that could otherwise be earned on the amount of any payments that would fall due under the proposed schedule earlier than the schedule stipulated in the SCC, at the interest rate specified in the BDS.</p> <p>(iii) Goods and Services that are required for the Information System but have been left out or are necessary to correct minor deviations of the bid will be added to the total Supply and Installation Costs using costs taken from the highest prices from other responsive bids for the same Goods and Services, or in the absence of such information, the cost will be estimated at prevailing list prices. If the missing Goods and Services are a scored technical feature, the relevant score will be set at zero.</p> <p>(iv) Corrections to errors in arithmetic, in accordance with ITB Clause 26.2.</p> <p>(v) Any discounts offered for the award of more than one Subsystem, lot, or slice, if the BDS for ITB Clause 28.1 permits the consideration of discounts in the price evaluation.</p>
	<p>(d) The Recurrent Costs (R) are reduced to net present value and determined using the following formula:</p> $R \equiv \sum_{x=1}^{N+M} \frac{R_x}{(1+I)^x}$ <p>where</p> <p>N = number of years of the Warranty Period, defined in SCC Clause 29.4</p> <p>M = number of years of the Post-Warranty Services Period, as defined in SCC Clause 1.1.(e) (xii)</p> <p>x = an index number 1, 2, 3, ... $N + M$ representing each year of the combined Warranty Service and Post-Warranty Service Periods.</p> <p>R_x = total Recurrent Costs for year “x,” as recorded in the Recurrent Cost Sub-Table.</p> <p>I = discount rate to be used for the Net Present Value</p>

	calculation, as specified in the BDS.
29. Domestic Preference	29.1 No margin of domestic preference will apply.
30. Contacting the Purchaser	30.1 From the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bid, it should do so in writing.
	30.2 If a Bidder tries to directly influence the Purchaser or otherwise interfere in the bid evaluation process and the Contract award decision, its bid may be rejected.

F. POST-QUALIFICATION AND AWARD OF CONTRACT

31. Post-qualification	31.1 The Purchaser will determine at its own cost and to its satisfaction whether the Bidder (including Joint Venture Partners, and any Subcontractors for which the BDS for ITB Clause 6.1 (a) permits that their qualifications count towards the required Bidder qualifications) that is selected as having submitted the Lowest Evaluated Bid is qualified to perform the Contract satisfactorily, in accordance with ITB Clause 6. If a prequalification process was undertaken for the Contract(s) for which these Bidding Documents were issued, the Purchaser will determine in the manner described above that no material changes have occurred after the prequalification that negatively affect the ability of the Bidder that has submitted the Lowest Evaluated Bid to perform the Contract.
	31.2 Pursuant to ITB Clauses 6 and 16, and as additionally may be specified in the BDS , the determination will evaluate the Bidder's financial, technical, design, integration, customization, production, management, and support capabilities and will be based on an examination of the documentary evidence of the Bidder's qualifications, as well as other information the Purchaser deems necessary and appropriate. This determination may include visits or interviews with the Bidder's clients referenced in its bid, site inspections, and any other measures. If so specified in the BDS , at the time of postqualification the Purchaser may also carry out tests to determine that the performance or functionality of the Information System offered meets those stated in the Technical Requirements.
	31.3 An affirmative post-qualification determination will be a prerequisite for award of the Contract to the Lowest Evaluated

	Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated Bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.
32. Award Criteria	32.1 Subject to ITB Clause 34, the Purchaser will award the Contract to the Bidder whose bid has been determined to be substantially responsive and the Lowest Evaluated Bid, provided further that the Bidder has been determined to be qualified to perform the Contract satisfactorily, pursuant to ITB Clause 31.
33. Purchaser's Right to Vary Quantities at Time of Award	33.1 The Purchaser reserves the right at the time of Contract award to increase or decrease, by the percentage(s) indicated in the BDS , any of the following:
	<p>(a) the quantity of substantially identical Subsystems; or</p> <p>(b) the quantity of individual hardware, Software, related equipment, Materials, products, and other Goods components of the Information System; or</p> <p>(c) the quantity of Installation or other Services to be performed,</p> <p>from that originally specified in the Technical Requirements (as amended by any Addenda issued pursuant to ITB Clause 11), without any change in unit prices or other terms and conditions.</p>
34. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids	34.1 The Purchaser reserves the right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.
35. Notification of Award	35.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its bid has been accepted.
	<p>35.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.</p> <p>35.3 The Purchaser shall promptly publish in UNDB online and in dgMarket the results, identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a bid; (ii) bid prices as read out at bid opening; (iii) name, evaluated price and, if the bidding conditions included scoring for technical quality, the technical score of each bid that was</p>

	evaluated; (iv) name of Bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful Bidders may make a request in writing to the Purchaser for a debriefing seeking explanations on the grounds on which their bids were not selected. The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after publication of contract award, requests a debriefing.
	35.4 Upon the successful Bidder furnishing the signed Contract Agreement and the Performance Security pursuant to ITB Clause 37, the Purchaser will promptly notify each unsuccessful Bidder, and will discharge all remaining Bid Securities, if any, as provided in ITB Clause 17.5 (c) and (d).
36. Signing of Contract	36.1 At the same time as the Purchaser notifies the successful Bidder that its bid has been accepted, the Purchaser will send the Bidder the Contract Agreement provided in the Bidding Documents, incorporating all agreements between the parties.
	36.2 As soon as practically possible, but no more than twenty-eight (28) days following receipt of the Contract Agreement, the successful Bidder shall sign and date it, and return it to the Purchaser.
37. Performance Security	37.1 As soon as practically possible, but no more than twenty-eight (28) days following receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the GCC, using the Performance Security form provided in the Bidding Documents or another form acceptable to the Purchaser.
	37.2 Failure of the successful Bidder to comply with the requirements of ITB Clause 36 or ITB Clause 37.1 shall constitute sufficient grounds for the annulment of the award and, if and as applicable, execution of the Bid-Securing Declaration or forfeiture of the Bid Security, in which event the Purchaser may make the award to the next lowest evaluated bid submitted by a qualified Bidder or call for new bids.
38. Adjudicator	38.1 Unless otherwise stated in the BDS , the Purchaser proposes that the person named in the BDS be appointed as Adjudicator under the Contract to assume the role of informal Contract dispute mediator, as described in GCC Clause 6. In this case, a résumé of the named person is attached to the BDS . The proposed hourly fee for the Adjudicator is specified in the BDS . The

	<p>expenses that would be considered reimbursable to the Adjudicator are also specified in the BDS. If a Bidder does not accept the Adjudicator proposed by the Purchaser, it should state its non-acceptance in its Bid Submission Form and make a counterproposal of an Adjudicator and an hourly fee, attaching a résumé of the alternative. If the successful Bidder and the Adjudicator nominated in the BDS happen to be from the same country, and this is not the country of the Purchaser too, the Purchaser reserves the right to cancel the Adjudicator nominated in the BDS and propose a new one. If by the day the Contract is signed, the Purchaser and the successful Bidder have not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed, at the request of either party, by the Appointing Authority specified in the SCC clause relating to GCC Clause 6.1.4, or if no Appointing Authority is specified there, the Contract will be implemented without an Adjudicator.</p>
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SECTION II. BID DATA SHEET (BDS)

Bid Data Sheet

The following specific information relating to the System to be procured and the procurement procedures that will be used shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions in the Bid Data Sheet (BDS) shall prevail over those in the ITB.

A. GENERAL

ITB 1.1	<p>Name of Purchaser: Himachal Pradesh Road & Other Infrastructure Development Corporation</p> <p>Name of authorized Purchasing Agent: Chief Engineer-cum-Project Director, HP State Roads Project</p> <p>Description of the System for which bids are invited:</p> <p>Development of ICT Infrastructure in HPPWD and HPRIDC</p> <p>The primary objectives of the project “Development of ICT Infrastructure in HPPWD and HPRIDC are as follow:</p> <ul style="list-style-type: none"> • Modernization of Existing Infrastructure • Increased Work Force Productivity • Capacity Building and Sensation of various stake holders • Well Informed and faster decision making • Streamlining of Road maintenance activities • Efficient Monitoring of complex projects • Improve in cross functional communications channels and protocols • Integration of core activities of Department • Implementation of an electronic workflow system to improve internal administrative efficiency and transparency • To improve the business processes/functions of department through use of Information Communication and Technology (ICT) • To improve productivity and responsiveness of employees and reduce cycle time through introduction of ICT based processed like workflow automation, personnel management, financial management, asset management • To improve department operations through continuous monitoring, review framework and provide information support to senior
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Himachal Pradesh Road & Other Infrastructure Development Corporation

	management, thereby improving the overall efficiency and effectiveness at the department																				
ITB 1.2	<p>Title of IFB: Development of ICT Infrastructure in HPPWD and HPRIDC</p> <p>Number of IFB: PW/SRP/RIDC/HP/ICT/ICB-3</p> <p>Name of resulting Contract(s):</p> <p>Engaging System Integrator (Supplier) responsible for Supply & Installation of Integrated IT Systems (including supply, warranty and post warranty of hardware and software) for Development of ICT Infrastructure in HPPWD and HPRIDC</p>																				
ITB 1.4	Alternative e-Tendering procedures are not available in this procurement																				
ITB 2.1	<p>Name of the Borrower: Government of Himachal Pradesh through the Government of India</p> <p>Loan number: 4860-IN & 8199-IN</p> <p>Loan amount: USD 220 Million Plus USD 61.7 million</p> <p>Name of Project: Himachal Pradesh State Roads Project</p>																				
ITB 6.1 (a)	<p>By submission of documentary evidence in its bid, the Bidder must establish to Purchaser's satisfaction:</p> <table><tr><th>Sr. No.</th><th>Qualification Criteria</th><th>Documents/Information to be Provided in the submitted Proposal</th><th>Responsibilities</th></tr><tr><td>1.</td><td>The Prime bidder and its Joint venture partner should be registered under Companies Act, 1956</td><td>Certificate of Incorporation</td><td>Both Prime Bidder and Joint venture Partner shall qualify Individually</td></tr><tr><td>2.</td><td>The Net Worth of the Prime Bidder and its Joint venture partner must be positive as per the last three financial year's ending 31.03.2016 audited Balance Sheet.</td><td>Certificate from practicing Chartered Accountants for Net worth</td><td>Both Prime Bidder and Joint venture Partner shall qualify Individually</td></tr><tr><td>3.</td><td>The Prime Bidder should be ISO 9001:2008 certified</td><td>Copy of certification which is valid on date of Bid Opening</td><td>Prime Bidder</td></tr><tr><td>4.</td><td>The Prime Bidder should be minimum CMMi (Capability</td><td>Relevant certificate needs to be attached which is valid on date of Bid</td><td>Prime Bidder</td></tr></table>	Sr. No.	Qualification Criteria	Documents/Information to be Provided in the submitted Proposal	Responsibilities	1.	The Prime bidder and its Joint venture partner should be registered under Companies Act, 1956	Certificate of Incorporation	Both Prime Bidder and Joint venture Partner shall qualify Individually	2.	The Net Worth of the Prime Bidder and its Joint venture partner must be positive as per the last three financial year's ending 31.03.2016 audited Balance Sheet.	Certificate from practicing Chartered Accountants for Net worth	Both Prime Bidder and Joint venture Partner shall qualify Individually	3.	The Prime Bidder should be ISO 9001:2008 certified	Copy of certification which is valid on date of Bid Opening	Prime Bidder	4.	The Prime Bidder should be minimum CMMi (Capability	Relevant certificate needs to be attached which is valid on date of Bid	Prime Bidder
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		Maturity Model Integration) Level 3 or more.	Opening	
	5.	Average Annual Turnover of Prime Bidder from its IT and ITES operations during the last three (3) financial years (FY 13- 14, FY 14-15, FY 15- 16) as per the last audited balance sheets of INR 75 Crores. or more	Extracts from the audited Balance sheet and Profit & Loss statement And Certificate from the statutory auditor (for confirming that the turnover is for IT and ITES only).	Prime Bidder
	6.	Average Annual Turnover of Joint venture Partner from its IT and ITES operations during the last three (3) financial years (FY 13- 14, FY 14-15, FY 15- 16) as per the last audited balance sheets of INR 15 Crores. or more	Extracts from the audited Balance sheet and Profit & Loss statement in respect of the annual turnover And Certificate from the statutory auditor (for confirming that the turnover is for IT and ITES only).	Each Joint venture Partner
	7.	Three (3) completed/Substantially completed projects, each of minimum value INR 3 Crores in Government/Public Sector Undertaking (PSU) of similar complexity and scale preferably in road sector covering System development (Hardware supply & installation, Software implementation, Training and change management, Network), System Integration and Managed IT in the past five financial years	Form 3.6.3a (Details of Contracts of Similar Nature and Complexity): For details of Experience of responding firm/ Project Citation supported with Copy of Contract / Agreement clearly defining the scope and cost of the project. Client completion Certificate mentioning the value of the project and Duration of the project, supported by Proof of Go-live and Project Satisfactory certificate from client	Prime Bidder

	ending 31.03.2016)		
8.	Prime Bidder should have minimum 250 fulltime employees working on its rolls on IT and IT Enabled Services (IT & ITES) during the last three financial years i.e. 2013-2014, 2014-2015, 2015-2016	Certificate from HR Department for number of technically qualified professionals employed by the company	Prime Bidder
9.	Authorized Signatory of the Prime Bidder	Power of Attorney in the name of the signatory of the Proposal	Prime Bidder

Note:

- a) Projects will be considered substantially completed only in case they are at least in operation & maintenance phase. Bidder should submit Project Satisfactory certificate from client for substantially completed projects.
- b) The legal & technical requirements to form Joint venture are mentioned below (In Addition to ITB 6.2)
 1. The Prime bidder should have the OEM authorization either in its name or in the name of the OEM, if associated as a member of joint venture. Such authorization is needed for software as well as hardware from the respective OEM for selling and supporting the product offered.
 2. The number of joint venture partners including the Prime Bidder cannot exceed three. The joint venture partners should have experience in IT enabled services/IT Solutions/Process Automation.
 3. If, as a legal entity, the bidder has multiple Companies under its umbrella with the bidder having majority of shareholdings and other administrative linkages with these companies, in that situation, the turnover, number of projects etc., while deciding eligibility of the company only the experience of the bidder who is participating will be considered and experience of parent company / associated/ subsidiaries or sister concerns would not be taken into consideration for evaluation.
 4. The joint venture will draw upon human, technical and other resources of members during supply and maintenance of the hardware/software. The Technical Bid shall include details of internal arrangements between Joint venture partners for supply,

	<p>installation and after sales service, so that a joint venture is not artificially created only to improve the pre-qualification/ Technical eligibility.</p> <ol style="list-style-type: none"> 5. Under no circumstances, internal disputes between Joint venture members will either be offered or accepted as any excuse for delay or non-completion of work. 6. The Prime Bidder and Joint venture partners can't be a partner in more than one joint venture 7. The Application partner of joint venture will be the Prime Bidder of joint venture. 8. There shall be a valid joint venture agreement (duly registered) among all the members signed by the Chief Executives/ Authorized Signatories of the companies dated prior to the submission of the bid. The agreement shall clearly specify the stake of each member and outline the roles and responsibilities of each member.
ITB 6.1 (b)	<p>Manufacturer's Authorizations for Information Technologies - except for those technologies which the Bidder itself manufactures - are required for the following types/categories:</p> <p>All key Technologies being quoted by the Bidder</p>
ITB 6.1 (c)	<p>If the Bidder proposes to use Subcontractors for the provision of certain key services, written agreements by the proposed firms to provide these services in case of contract(s) resulting from this bidding are required for the following types/categories of services:</p> <p><i>All Services except SCC-20 representing GCC-20 required for the Project and undertaken by the Sub-Contractor on behalf of the bidder.</i></p>

B. THE BIDDING DOCUMENTS

ITB 10.1	<p>Purchaser's / duly authorized Purchasing Agent's address:</p> <p>Chief Engineer-cum-Project Director, HPRIDC HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla – 171 002 Tel: 0177 – 2627602, 2620663 Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p>
ITB 10.2	<p>Pre meeting</p> <p>Date: 17/01/2017</p>

	<p>Time:1100 hrs</p> <p>Address: Chief Engineer-cum-Project Director, HPRIDC HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla – 171 002 Tel: 0177 – 2627602, 2620663 Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p> <p>The queries for Pre- meeting should be necessarily be submitted in the following format:</p>														
	<table border="1"> <thead> <tr> <th style="text-align: center;">S. No</th> <th style="text-align: center;">Bidding Document Reference(s) (Section No. & Page No.)</th> <th style="text-align: center;">Content of Bidding Document requiring Clarification(s)</th> <th style="text-align: center;">Points of clarification</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">2</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	S. No	Bidding Document Reference(s) (Section No. & Page No.)	Content of Bidding Document requiring Clarification(s)	Points of clarification	1				2					
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1															
2															

C. PREPARATION OF BIDS

ITB 12.1	The language of the bid and of all correspondence and documents related to it is: English.
ITB 14.1	Recurrent cost items are required.
ITB 14.4	Applicable Incoterms are Incoterms 2010 — ICC Official Rules for the Interpretation of Trade Terms published by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France
ITB 14.4(a)	<p>For foreign goods priced on a CIP (named place of destination) basis:</p> <p>A. The contract of carriage shall include the cost of unloading the goods at destination, as well as payment by the Supplier of the cost of custom formalities, duties, taxes or other charges payable on the foreign Goods for their transit through any country other than the Purchaser's country.</p> <p>B. The named place of destination shall be the HP State Roads Project, Nirman</p>

	Bhawan, Nigam Vihar, Shimla – 171 002
ITB 14.4 (c)	The Bidder will assume the responsibility, including for the transport risks, for arranging, at its cost, the inland transport of the Goods to the Project Sites.
ITB 14.7	Prices quoted by the Bidder shall be FIXED
ITB 15.1 (b)	The currency to be used for quoting prices of the Goods and Services components of the System offered locally (i.e., from within the Purchaser's Country), as well as local currency expenditures for local technical support, training, maintenance, transportation, insurance, and other local services incidental to delivery, installation and operation of the System, is: Indian Rupees (INR).
ITB 16.2 (c)	In addition to the topics described in ITB Clause 16.2 (c), the Preliminary Project Plan must address the following topics: Refer SCC Related to GCC clause 19: Project Plan
ITB 16.3	In the interest of effective integration, cost-effective technical support, and reduced re-training and staffing costs, Bidders are required to offer specific brand names and models for the limited number of specific items: As listed in Supply & Installation Form
ITB 17.1	Bids need to be secured "by a Bid Security" The amount of Bid Security required is INR 1.5 Million/ USD 22500 or an equivalent amount in any freely convertible currency.
ITB 18.1	The bid validity period shall be 120 days after the deadline for bid submission, as specified below in reference to ITB Clause 21. Accordingly, each bid shall be valid through the actual date of the expiration of the bid validity period (i.e., the date that happens to be 120 days after the date of bid opening) Accordingly, a bid with a "Bid Security" that expires before twenty-eight (28) days after the end of the bid validity period shall be rejected as non-responsive
ITB 19.1	Required number of bid copies, besides the original: 4 Copies of Technical Bid In addition, soft copy of the documents must be enclosed in Portable Document Format No copy of Financial bid except the original is required

D. SUBMISSION OF BIDS

ITB 20.2 (a)	<p>The address for bid submission is:</p> <p>Chief Engineer-cum-Project Director HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla 171002 Tel:0177-2627602,2620663Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p>
ITB 21.1	<p>Deadline for bid submission is: 09/02/2017 Time: 15:00 hrs (IST)</p>

E. BID OPENING AND EVALUATION

ITB 24.1	<p>Time, date, and place for bid opening are: Time: 15:30 hrs (IST) Date: 09/02/2017 Place: Chief Engineer-cum-Project Director HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla 171002 Tel:0177-2627602,2620663Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p>
ITB 27.1	<p>The currency chosen for the purpose of converting to a common currency is: INR. The source of exchange rate is: Daily average rate of selling and buying shall be: Market Bills selling exchange rates as published by State Bank of India (SBI) (Corporate Accounts Group (CAG) Branch, Janpath, New Delhi).</p> <p>The date of exchange rate determination is 28 days before last date for submission of the bid proposal. In case that no exchange rates are available on this date from the source indicated above, the latest available exchange rates from the same source prior to this date will be used.</p>
ITB 28.1	<p>Bids for individual Subsystems, lots, or slices of the overall Information System will not be accepted.</p> <p>Discounts for the award of multiple Subsystems, lots, or slices will not be considered in bid evaluation.</p>
ITB 28.4	<p>The bid evaluation will take into account technical factors in addition to cost factors as below:</p>

	<p>The weight of the Technical $(1-X) = 70\%$, i.e. $(1-X)=0.7$</p> <p>The weight of the Price $(X) = 30\%$, i.e. $X=0.30$</p>
ITB 28.5	The technical evaluation will be done as per the scores mentioned in the table below.

Technical Evaluation Data

S. No.	Criteria	Max Sub Marks	Criteria/ Criteria
1.	Past Experience of the Responding Firm	20	
2.	Solution proposed for the Project by the responding firm	30	
3.	Qualifications and experience of key personnel	40	
4.	Knowledge Transfer	10	
	Total Points	100	

Detailed break-up of Technical Qualification Criteria:

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
1	Past Experience of the responding firm			20
a.	Organizational Capability	<p>The bidder should have implemented ICT Project each having a minimum value of INR 4 Crores which includes:</p> <p>a) COTS/Packaged Application/Application Development Implementation & Customization</p> <p>b) Software development & support</p> <p>c) Hardware supply, installation and commissioning</p> <p>d) O&M phase for maintaining all of the</p>	1.5 point for each successfully completed project – up to 5 projects	7.5

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
		above.		
b.	Software Solutions	COTS/Packaged Application/application development software solution projects (at least project should be Go-Live) each having a minimum value of INR 4 crore. Each project should have modules – Works Module, E-Procurement, Asset Management, Project Management System, HRM (Human Resource Management), Accounting, Finance & Budget Management & Contractor Management. (Each citation should have at least four of the above mentioned modules).	1.5 point for each successfully completed project – up to 5 projects	7.5
c.	Maintenance Services and Helpdesk	Providing Maintenance Services / Helpdesk services in the field of IT services with a minimum order size of INR 50 Lakhs each for the Maintenance Services / Helpdesk services only	0.5 point for each successfully completed project – up to 5 projects	2.5
d.	Exp. in Capacity Building (Training)/ Change Management	Should have experience in implementing Capacity Building (Training)/ Change Management as a System Integrator with a minimum order size of INR 50 Lakhs each for the Capacity Building (Training)/ Change Management only	0.5 point for each successfully completed project – up to 5 projects	2.5
Note : 1. For all the above, the Completion Certificate of the projects completed in the last 5 financial years (as on 31/03/2016) need to be provided (issued to the responding firm by the respective customers). However, substantially completed project can be				

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
<p>considered only in case they are at least in operation & maintenance phase.</p> <p>2. The value of the projects considered in the above criterion would be based on the Purchase Order or the LOI issued, or the Contract value signed with the responding firm. Only documents issued by the client at the time of order shall be considered. In absence of the supporting documents, the projects would not be considered for evaluation.</p> <p>3. One project can be cited against multiple categories for evaluation purpose.</p> <p>4. Works Module includes following sub-modules Estimation Preparation, Technical Sanction & Approval, Architecture Design, Work Allocation & Agreement, Progress Monitoring, Work Deviation, and Time Deviation</p> <p>5. Form 3.6.3a (Details of Contracts of Similar Nature and Complexity) will be used for citing above technical criterion. All the citation should be supported with relevant document such as work order, completion certificate signed by client, contract agreement, Purchase order etc.</p>				
2	Solution proposed			30
a.	Technical Solution	<p>Evaluation Committee will evaluate the proposed solution on the basis of following parameters</p> <ul style="list-style-type: none"> ▪ Solution/System Architecture <ul style="list-style-type: none"> - Technology and proposed platforms - Scalability - Interoperability - Maintainability - Ease of Use ▪ Project Implementation Plan ▪ Application deployment and testing Strategy ▪ Quality Control Strategy ▪ Training and Change management Plan ▪ Security Architecture ▪ IT Infrastructure 	Evaluation Committee will evaluate whether all the points/requirements mentioned in the Bidding Document are addressed well and award.	30

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
3	Resource Deployment			40
1	Project Manager Essential Requirements: • B.E. / B. Tech / MCA / M.Sc. in the field of computer science/IT • Minimum 10 year of experience as Project Manager in IT projects	<p>Experience as Project Manager in IT projects</p> <p>Experience in e-Governance project Projects</p> <p>Relevant Certification (either of PMP /PMI /Prince2)</p> <p>Education Qualifications - (MBA or M. Tech.)</p>	<p>• More than 12 years: 4 point</p> <p>• 11 to 12 Years: 2 point</p> <p>• 10 years or Less than 10 years: 0 point</p> <p>• More than 3 e-Governance project (Complete life cycle): 2 point</p> <p>• Relevant Certification: 2 point</p> <p>• Qualification of MBA or M. Tech.:2 point</p>	10
2	Domain Specialist Essential Requirements: • B.E. / B. Tech./M.Sc. in civil Engineering • Minimum 15 year experience in Public works domain	Proven professional experience in the Public Works Domain	<p>• Experience of more than 20 years: 6 point</p> <p>• 16 to 20 years of Experience: 3 point</p> <p>• 15 years or Less than 15 years: 0 point</p>	6
3	Network Administrator Essential Requirements: • B.E. / B. Tech./ MCA / M.Sc. in the	IT infrastructure management, networking, and troubleshooting experience in IT projects.	<p>• Experience of more than 10 years: 6 point</p> <p>• 8 to 10 years of Experience: 4 point</p> <p>• 7 years or Less</p>	6

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
	field of computer science/IT • Minimum 7 year experience as Network Administrator		than 7years: 0 Points	
4	Application Lead Essential Qualifications • B.E. / B. Tech./ MCA / M.Sc. in the field of computer science • Minimum 7 year experience as application lead in IT projects	Experience as application lead in IT projects	<ul style="list-style-type: none"> • Experience of more than 10 years: 6 point • 8 to 10 years of Experience: 4 point • 7 years or Less than 7years: 0 Points 	6
5	Training and Change Expert Essential Qualifications • MBA with specialization in HR / Change Management • Minimum 7 year experience as Master Trainer for IT projects	Experience as Master Trainer for IT projects	<ul style="list-style-type: none"> • Experience of more than 10 years: 6 point • 8 to 10 years of Experience: 4 point • 7 years or Less than 7years: 0 Points 	6

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
6	Database Administrator Essential Qualifications • B.E./ B. Tech. / MCA • Minimum 5 year experience as database administrator for IT projects	Experience as Database Administrator for IT project	• Experience of more than 7 years: 6 point • 6 to 7 years of Experience: 4 point • 5 years or Less than 5 years: 0 Points	6
4	Knowledge Transfer			10
a.	Evaluation Committee will evaluate the Knowledge Transfer plan on the basis of following parameters ▪ Methodology /Mechanism ▪ Exit Management Plan ▪ Sustenance plan ▪ Licensing policy Evaluation Committee will evaluate whether all the points/ requirements mentioned in the Bidding Document are addressed well and award.			10
	Total Points			100

ITB 28.6 (c) (i)	The Purchaser will not accept deviations in the schedule of installation and commissioning specified in the Implementation Schedule.
ITB 28.6 (c) (ii)	The Purchaser will not accept deviations in the payment schedule in the SCC
ITB 28.6 (d)	Interest Rate (I) for net present value calculations of recurrent costs = 10%

F. POST-QUALIFICATION AND AWARD OF CONTRACT

ITB 31.2	As additional post-qualification measures, the Information System offered by the Lowest Evaluated Bidder may be subjected to the following tests and performance benchmarks prior to Contract award: None
ITB 33.1	Percentage for quantity increase or decrease: Upto 25 %.
ITB 38.1	<p>The proposed Adjudicator is: Dharmesh Sharma (Technical Director NIC, HP-sect. Shimla)</p> <p>The proposed hourly fee is [To be Intimated later]</p> <p>The expenses that would be considered reimbursable to the Adjudicator are: [To be Intimated later]</p>

**SECTION III. ELIGIBLE COUNTRIES FOR THE PROVISION
OF GOODS, WORKS, AND SERVICES IN BANK-FINANCED
PROCUREMENT**

Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement

As of September 2007

1. Eligible for this procurement are firms of, and goods manufactured in, all countries except countries, if any, listed in the following restrictions.
2. In accordance with para. 1.8 (a) of the Guidelines: Procurement under IBRD Loans and IDA Credits, firms of a Country or goods manufactured in a Country may be excluded if
 - (i) as a matter of law or official regulation, the Borrower's Country prohibits commercial relations with that Country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of the goods or works required, or
 - (ii) by an Act of Compliance with a Decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's Country prohibits any import of goods from that Country or any payments to persons or entities in that Country.
3. For the information of borrowers and bidders, at the present time firms, goods and services from the following countries are excluded from this bidding:

With reference to paragraph (i) above: None

With reference to paragraph (ii) above: None

SECTION IV. GENERAL CONDITIONS OF CONTRACT

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General Conditions of Contract

A. CONTRACT AND INTERPRETATION

1. Definitions	<p>1.1 In this Contract, the following terms shall be interpreted as indicated below.</p>
	<p>(a) contract elements</p> <p>(i) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein. The Contract Agreement and the Contract Documents shall constitute the Contract, and the term “the Contract” shall in all such documents be construed accordingly.</p> <p>(ii) “Contract Documents” means the documents specified in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments to these Documents).</p> <p>(iii) “Contract Agreement” means the agreement entered into between the Purchaser and the Supplier using the form of Contract Agreement contained in the Sample Forms Section of the Bidding Documents and any modifications to this form agreed to by the Purchaser and the Supplier. The date of the Contract Agreement shall be recorded in the signed form.</p> <p>(iv) “GCC” means the General Conditions of Contract.</p> <p>(v) “SCC” means the Special Conditions of Contract.</p> <p>(vi) “Technical Requirements” means the Technical Requirements Section of the Bidding Documents.</p> <p>(vii) “Implementation Schedule” means the Implementation Schedule Sub-section of the Technical Requirements.</p> <p>viii) “Contract Price” means the price or prices defined in Article 2 (Contract Price and Terms</p>

	<p>of Payment) of the Contract Agreement.</p> <p>(ix) “Procurement Guidelines” refers to the edition specified in the SCC of the World Bank Guidelines: Procurement under IBRD Loans and IDA Credits.</p> <p>(x) “Bidding Documents” refers to the collection of documents issued by the Purchaser to instruct and inform potential suppliers of the processes for bidding, selection of the winning bid, and Contract formation, as well as the contractual conditions governing the relationship between the Purchaser and the Supplier. The General and Special Conditions of Contract, the Technical Requirements, and all other documents included in the Bidding Documents reflect the Procurement Guidelines that the Purchaser is obligated to follow during procurement and administration of this Contract.</p>
	<p>(b) entities</p> <p>(i) “Purchaser” means the entity purchasing the Information System, as specified in the SCC.</p> <p>(ii) “Project Manager” means the person named as such in the SCC or otherwise appointed by the Purchaser in the manner provided in GCC Clause 18.1 (Project Manager) to perform the duties delegated by the Purchaser.</p> <p>(iii) “Supplier” means the firm or Joint Venture whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.</p> <p>(iv) “Supplier’s Representative” means any person nominated by the Supplier and named as such in the Contract Agreement or otherwise approved by the Purchaser in the manner provided in GCC Clause 18.2 (Supplier’s Representative) to perform the duties delegated by the Supplier.</p> <p>(v) “Subcontractor” means any firm to whom any of the obligations of the Supplier, including preparation of any design or supply of any Information Technologies or other Goods or</p>

	<p>Services, is subcontracted directly or indirectly by the Supplier.</p> <p>(vi) “Adjudicator” means the person named in Appendix 2 of the Contract Agreement, appointed by agreement between the Purchaser and the Supplier to make a decision on or to settle any dispute between the Purchaser and the Supplier referred to him or her by the parties, pursuant to GCC Clause 6.1 (Adjudication).</p> <p>(vii) “The World Bank” (also called “The Bank”) means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).</p>
	<p>(c) scope</p> <p>(i) “Information System,” also called “the System,” means all the Information Technologies, Materials, and other Goods to be supplied, installed, integrated, and made operational (exclusive of the Supplier’s Equipment), together with the Services to be carried out by the Supplier under the Contract.</p> <p>(ii) “Subsystem” means any subset of the System identified as such in the Contract that may be supplied, installed, tested, and commissioned individually before Commissioning of the entire System.</p> <p>(iii) “Information Technologies” means all information processing and communications-related hardware, Software, supplies, and consumable items that the Supplier is required to supply and install under the Contract.</p> <p>(iv) “Goods” means all equipment, machinery, furnishings, Materials, and other tangible items that the Supplier is required to supply or supply and install under the Contract, including, without limitation, the Information Technologies and Materials, but excluding the Supplier’s Equipment.</p> <p>(v) “Services” means all technical, logistical, management, and any other Services to be</p>

	<p>provided by the Supplier under the Contract to supply, install, customize, integrate, and make operational the System. Such Services may include, but are not restricted to, activity management and quality assurance, design, development, customization, documentation, transportation, insurance, inspection, expediting, site preparation, installation, integration, training, data migration, Pre-commissioning, Commissioning, maintenance, and technical support.</p> <p>(vi) “The Project Plan” means the document to be developed by the Supplier and approved by the Purchaser, pursuant to GCC Clause 19, based on the requirements of the Contract and the Preliminary Project Plan included in the Supplier’s bid. The “Agreed and Finalized Project Plan” is the version of the Project Plan approved by the Purchaser, in accordance with GCC Clause 19.2. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.</p> <p>(vii) “Software” means that part of the System which are instructions that cause information processing Subsystems to perform in a specific manner or execute specific operations.</p> <p>(viii) “System Software” means Software that provides the operating and management instructions for the underlying hardware and other components, and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Systems Software. Such System Software includes, but is not restricted to, micro-code embedded in hardware (i.e., “firmware”), operating systems, communications, system and network management, and utility software.</p> <p>(ix) “General-Purpose Software” means Software that supports general-purpose office and software development activities and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the</p>
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	<p>parties may agree in writing to be General-Purpose Software. Such General-Purpose Software may include, but is not restricted to, word processing, spreadsheet, generic database management, and application development software.</p> <p>(x) “Application Software” means Software formulated to perform specific business or technical functions and interface with the business or technical users of the System and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Application Software.</p> <p>(xi) “Standard Software” means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Standard Software.</p> <p>(xii) “Custom Software” means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Custom Software.</p> <p>(xiii) “Source Code” means the database structures, dictionaries, definitions, program source files, and any other symbolic representations necessary for the compilation, execution, and subsequent maintenance of the Software (typically, but not exclusively, required for Custom Software).</p> <p>(xiv) “Materials” means all documentation in printed or printable form and all instructional and informational aides in any form (including audio, video, and text) and on any medium, provided to the Purchaser under the Contract.</p> <p>(xv) “Standard Materials” means all Materials not specified as Custom Materials.</p> <p>(xvi) “Custom Materials” means Materials developed by the Supplier at the Purchaser’s expense under the Contract and identified as such in Appendix 5 of the Contract Agreement and such other</p>
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	<p>Materials as the parties may agree in writing to be Custom Materials. Custom Materials includes Materials created from Standard Materials.</p> <p>(xvii) “Intellectual Property Rights” means any and all copyright, moral rights, trademark, patent, and other intellectual and proprietary rights, title and interests worldwide, whether vested, contingent, or future, including without limitation all economic rights and all exclusive rights to reproduce, fix, adapt, modify, translate, create derivative works from, extract or re-utilize data from, manufacture, introduce into circulation, publish, distribute, sell, license, sublicense, transfer, rent, lease, transmit or provide access electronically, broadcast, display, enter into computer memory, or otherwise use any portion or copy, in whole or in part, in any form, directly or indirectly, or to authorize or assign others to do so.</p> <p>(xviii) “Supplier’s Equipment” means all equipment, tools, apparatus, or things of every kind required in or for installation, completion and maintenance of the System that are to be provided by the Supplier, but excluding the Information Technologies, or other items forming part of the System.</p>
	<p>(d) activities</p> <p>(i) “Delivery” means the transfer of the Goods from the Supplier to the Purchaser in accordance with the current edition Incoterms specified in the Contract.</p> <p>(ii) “Installation” means that the System or a Subsystem as specified in the Contract is ready for Commissioning as provided in GCC Clause 26 (Installation).</p> <p>(iii) “Pre-commissioning” means the testing, checking, and any other required activity that may be specified in the Technical Requirements that are to be carried out by the Supplier in preparation for Commissioning of the System as provided in GCC</p>

	<p>Clause 26 (Installation).</p> <p>(iv) “Commissioning” means operation of the System or any Subsystem by the Supplier following Installation, which operation is to be carried out by the Supplier as provided in GCC Clause 27.1 (Commissioning), for the purpose of carrying out Operational Acceptance Test(s).</p> <p>(v) “Operational Acceptance Tests” means the tests specified in the Technical Requirements and Agreed and Finalized Project Plan to be carried out to ascertain whether the System, or a specified Subsystem, is able to attain the functional and performance requirements specified in the Technical Requirements and Agreed and Finalized Project Plan, in accordance with the provisions of GCC Clause 27.2 (Operational Acceptance Test).</p> <p>(vi) “Operational Acceptance” means the acceptance by the Purchaser of the System (or any Subsystem(s) where the Contract provides for acceptance of the System in parts), in accordance with GCC Clause 27.3 (Operational Acceptance).</p>
	<p>(e) place and time</p> <p>(i) “Purchaser’s Country” is the country named in the SCC.</p> <p>(ii) “Supplier’s Country” is the country in which the Supplier is legally organized, as named in the Contract Agreement.</p> <p>(iii) “Project Site(s)” means the place(s) specified in the SCC for the supply and installation of the System.</p> <p>(iv) “Eligible Country” means the countries and territories eligible for participation in procurements financed by the World Bank as defined in the Procurement Guidelines. (Note: The World Bank maintains a list of countries from which Bidders, Goods, and Services are not eligible to participate in procurement financed by the Bank. The list is regularly</p>

	<p>updated and can be obtained from the Public Information Center of the Bank or its web site on procurement. A copy of the list is contained in the Section of the Bidding Documents entitled “Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement”).</p> <p>(v) “Day” means calendar day of the Gregorian Calendar.</p> <p>(vi) “Week” means seven (7) consecutive Days, beginning the day of the week as is customary in the Purchaser’s Country.</p> <p>(vii) “Month” means calendar month of the Gregorian Calendar.</p> <p>(viii) “Year” means twelve (12) consecutive Months.</p> <p>(ix) “Effective Date” means the date of fulfillment of all conditions specified in Article 3 (Effective Date for Determining Time for Achieving Operational Acceptance) of the Contract Agreement, for the purpose of determining the Delivery, Installation, and Operational Acceptance dates for the System or Subsystem(s).</p> <p>(x) “Contract Period” is the time period during which this Contract governs the relations and obligations of the Purchaser and Supplier in relation to the System, as specified in the SCC.</p> <p>(xi) “Defect Liability Period” (also referred to as the “Warranty Period”) means the period of validity of the warranties given by the Supplier commencing at date of the Operational Acceptance Certificate of the System or Subsystem(s), during which the Supplier is responsible for defects with respect to the System (or the relevant Subsystem[s]) as provided in GCC Clause 29 (Defect Liability).</p> <p>(xii) “The Post-Warranty Services Period” means the number of years defined in the SCC (if any), following the expiration of the Warranty Period during which the Supplier may be obligated to</p>
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	<p>provide Software licenses, maintenance, and/or technical support services for the System, either under this Contract or under separate contract(s).</p> <p>(xiii) “The Coverage Period” means the Days of the Week and the hours of those Days during which maintenance, operational, and/or technical support services (if any) must be available.</p>
2. Contract Documents	<p>2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary, and mutually explanatory. The Contract shall be read as a whole.</p>
3. Interpretation	<p>3.1 Governing Language</p> <p>3.1.1 All Contract Documents and related correspondence exchanged between Purchaser and Supplier shall be written in the language specified in the SCC, and the Contract shall be construed and interpreted in accordance with that language.</p> <p>3.1.2 If any of the Contract Documents or related correspondence are prepared in a language other than the governing language under GCC Clause 3.1.1 above, the translation of such documents into the governing language shall prevail in matters of interpretation. The originating party, with respect to such documents shall bear the costs and risks of such translation.</p> <p>3.2 Singular and Plural</p> <p>The singular shall include the plural and the plural the singular, except where the context otherwise requires.</p> <p>3.3 Headings</p> <p>The headings and marginal notes in the GCC are included for ease of reference and shall neither constitute a part of the Contract nor affect its interpretation.</p> <p>3.4 Persons</p> <p>Words importing persons or parties shall include firms, corporations, and government entities.</p>

	<p>3.5 Incoterms</p> <p>Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by the current Incoterms (“Incoterms 2000” or a more recent version if and as published). Incoterms are the international rules for interpreting trade terms published by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France.</p> <p>3.6 Entire Agreement</p> <p>The Contract constitutes the entire agreement between the Purchaser and Supplier with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect to the subject matter of the Contract made prior to the date of Contract.</p> <p>3.7 Amendment</p> <p>No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party to the Contract.</p> <p>3.8 Independent Supplier</p> <p>The Supplier shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture, or other joint relationship between the parties to the Contract.</p> <p>Subject to the provisions of the Contract, the Supplier shall be solely responsible for the manner in which the Contract is performed. All employees, representatives, or Subcontractors engaged by the Supplier in connection with the performance of the Contract shall be under the complete control of the Supplier and shall not be deemed to be employees of the Purchaser, and nothing contained in the Contract or in any subcontract awarded by the Supplier shall be construed to create any contractual relationship between any such employees, representatives, or Subcontractors and the Purchaser.</p> <p>3.9 Joint Venture</p>
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	<p>If the Supplier is a Joint Venture of two or more firms, all such firms shall be jointly and severally bound to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one of such firms to act as a leader with authority to bind the Joint Venture. The composition or constitution of the Joint Venture shall not be altered without the prior consent of the Purchaser.</p> <p>3.10 Nonwaiver</p> <p>3.10.1 Subject to GCC Clause 3.10.2 below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.</p> <p>3.10.2 Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.</p> <p>3.11 Severability</p> <p>If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.</p> <p>3.12 Country of Origin</p> <p>"Origin" means the place where the Information Technologies, Materials, and other Goods for the System were produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, Software development, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components. The Origin of Goods and Services is distinct from the nationality of the Supplier and may be different.</p>
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4. Notices	<p>4.1 Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing and shall be sent, pursuant to GCC Clause 4.3 below, by personal delivery, airmail post, special courier, cable, telegraph, telex, facsimile, electronic mail, or Electronic Data Interchange (EDI), with the following provisions.</p>
	<p>4.1.1 Any notice sent by cable, telegraph, telex, facsimile, electronic mail, or EDI shall be confirmed within two (2) days after dispatch by notice sent by airmail post or special courier, except as otherwise specified in the Contract.</p> <p>4.1.2 Any notice sent by airmail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered ten (10) days after dispatch. In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped, and conveyed to the postal authorities or courier service for transmission by airmail or special courier.</p> <p>4.1.3 Any notice delivered personally or sent by cable, telegraph, telex, facsimile, electronic mail, or EDI shall be deemed to have been delivered on the date of its dispatch.</p> <p>4.1.4 Either party may change its postal, cable, telex, facsimile, electronic mail, or EDI addresses for receipt of such notices by ten (10) days' notice to the other party in writing.</p> <p>4.2 Notices shall be deemed to include any approvals, consents, instructions, orders, certificates, information and other communication to be given under the Contract.</p> <p>4.3 Pursuant to GCC Clause 18, notices from/to the Purchaser are normally given by, or addressed to, the Project Manager, while notices from/to the Supplier are normally given by, or addressed to, the Supplier's Representative, or in its absence its deputy if any. If there is no appointed Project Manager or Supplier's Representative (or deputy), or if their related authority is limited by the SCC for GCC Clauses 18.1 or 18.2.2, or for any other reason, the Purchaser or Supplier may give and receive notices at their fallback addresses. The address of the Project Manager and the fallback address of the Purchaser are as specified in the</p>

	<p>SCC or as subsequently established/amended. The address of the Supplier's Representative and the fallback address of the Supplier are as specified in Appendix 1 of the Contract Agreement or as subsequently established/amended.</p>
5. Governing Law	<p>5.1 The Contract shall be governed by and interpreted in accordance with the laws of the country specified in the SCC.</p>
6. Settlement of Disputes	<p>6.1 Adjudication</p>
	<p>6.1.1 If any dispute of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity, or termination, or the operation of the System (whether during the progress of implementation or after its achieving Operational Acceptance and whether before or after the termination, abandonment, or breach of the Contract), the parties shall seek to resolve any such dispute by mutual consultation. If the parties fail to resolve such a dispute by mutual consultation within fourteen (14) days after one party has notified the other in writing of the dispute, then, if the Contract Agreement in Appendix 2 includes and names an Adjudicator, the dispute shall, within another fourteen (14) days, be referred in writing by either party to the Adjudicator, with a copy to the other party. If there is no Adjudicator specified in the Contract Agreement, the mutual consultation period stated above shall last twenty-eight (28) days (instead of fourteen), upon expiry of which either party may move to the notification of arbitration pursuant to GCC Clause 6.2.1.</p>
	<p>6.1.2 The Adjudicator shall give his or her decision in writing to both parties within twenty-eight (28) days of the dispute being referred to the Adjudicator. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the Purchaser or the Supplier within fifty-six (56) days of such reference, the decision shall become final and binding upon the Purchaser and the Supplier. Any decision that has become final and binding shall be implemented by the parties forthwith.</p>

	<p>6.1.3 The Adjudicator shall be paid an hourly fee at the rate specified in the Contract Agreement plus reasonable expenditures incurred in the execution of duties as Adjudicator, and these costs shall be divided equally between the Purchaser and the Supplier.</p> <p>6.1.4 Should the Adjudicator resign or die, or should the Purchaser and the Supplier agree that the Adjudicator is not fulfilling his or her functions in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Purchaser and the Supplier. Failing agreement between the two within twenty-eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority specified in the SCC, or, if no Appointing Authority is specified in SCC, the Contract shall, from this point onward and until the parties may otherwise agree on an Adjudicator or an Appointing Authority, be implemented as if there is no Adjudicator.</p> <p>6.2 Arbitration</p> <p>6.2.1 If</p> <ul style="list-style-type: none"> (a) the Purchaser or the Supplier is dissatisfied with the Adjudicator's decision and acts before this decision has become final and binding pursuant to GCC Clause 6.1.2, or (b) the Adjudicator fails to give a decision within the allotted time from referral of the dispute pursuant to GCC Clause 6.1.2, and the Purchaser or the Supplier acts within the following fourteen (14) days, or (c) in the absence of an Adjudicator from the Contract Agreement, the mutual consultation pursuant to GCC Clause 6.1.1 expires without resolution of the dispute and the Purchaser or the Supplier acts within the following fourteen (14) days, <p>then either the Purchaser or the Supplier may act to give notice to the other party, with a copy for information to the Adjudicator in case an Adjudicator had been involved, of its intention to commence</p>
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	<p>arbitration, as provided below, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.</p> <p>6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Clause 6.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after Installation of the Information System.</p> <p>6.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.</p> <p>6.3 Notwithstanding any reference to the Adjudicator or arbitration in this clause,</p> <p>(a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree;</p> <p>(b) the Purchaser shall pay the Supplier any monies due the Supplier.</p>
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B. SUBJECT MATTER OF CONTRACT

7. Scope of the System	<p>7.1 Unless otherwise expressly limited in the SCC or Technical Requirements, the Supplier's obligations cover the provision of all Information Technologies, Materials and other Goods as well as the performance of all Services required for the design, development, and implementation (including procurement, quality assurance, assembly, associated site preparation, Delivery, Pre-commissioning, Installation, Testing, and Commissioning) of the System, in accordance with the plans, procedures, specifications, drawings, codes, and any other documents specified in the Contract and the Agreed and Finalized Project Plan.</p>
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	<p>7.2 The Supplier shall, unless specifically excluded in the Contract, perform all such work and / or supply all such items and Materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Operational Acceptance of the System as if such work and / or items and Materials were expressly mentioned in the Contract.</p> <p>7.3 The Supplier's obligations (if any) to provide Goods and Services as implied by the Recurrent Cost tables of the Supplier's bid, such as consumables, spare parts, and technical services (e.g., maintenance, technical assistance, and operational support), are as specified in the SCC, including the relevant terms, characteristics, and timings.</p>
8. Time for Commencement and Operational Acceptance	<p>8.1 The Supplier shall commence work on the System within the period specified in the SCC, and without prejudice to GCC Clause 28.2, the Supplier shall thereafter proceed with the System in accordance with the time schedule specified in the Implementation Schedule in the Technical Requirements Section and any refinements made in the Agreed and Finalized Project Plan.</p>
	<p>8.2 The Supplier shall achieve Operational Acceptance of the System (or Subsystem(s) where a separate time for Operational Acceptance of such Subsystem(s) is specified in the Contract) within the time specified in the SCC and in accordance with the time schedule specified in the Implementation Schedule in the Technical Requirements Section and any refinements made in the Agreed and Finalized Project Plan, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).</p>
9. Supplier's Responsibilities	<p>9.1 The Supplier shall conduct all activities with due care and diligence, in accordance with the Contract and with the skill and care expected of a competent provider of information technologies, information systems, support, maintenance, training, and other related services, or in accordance with best industry practices. In particular, the Supplier shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.</p>

	<p>9.2 The Supplier confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the System provided by the Purchaser and on the basis of information that the Supplier could have obtained from a visual inspection of the site (if access to the site was available) and of other data readily available to the Supplier relating to the System as at the date twenty-eight (28) days prior to bid submission. The Supplier acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Contract.</p> <p>9.3 The Supplier shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach a mutually Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for termination pursuant to GCC Clause 41.2.</p>
	<p>9.4 The Supplier shall acquire in its name all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the Purchaser's Country that are necessary for the performance of the Contract, including, without limitation, visas for the Supplier's and Subcontractor's personnel and entry permits for all imported Supplier's Equipment. The Supplier shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Purchaser under GCC Clause 10.4 and that are necessary for the performance of the Contract.</p> <p>9.5 The Supplier shall comply with all laws in force in the Purchaser's Country. The laws will include all national, provincial, municipal, or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless the Purchaser from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Clause 10.1. The Supplier shall not indemnify the Purchaser</p>

	to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of the Purchaser.
	<p>9.6 The Supplier shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs, and all local laws and regulations pertaining to the employment of labor.</p> <p>9.7 Any Information Technologies or other Goods and Services that will be incorporated in or be required for the System and other supplies shall have their Origin, as defined in GCC Clause 3.12, in a country that shall be an Eligible Country, as defined in GCC Clause 1.1 (e) (iv).</p> <p>9.8 The Supplier shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Supplier's attention is drawn to Sub-Clause 41.2.1(c), which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 9.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines)</p>
	9.9 Other Supplier responsibilities, if any, are as stated in the SCC.
10. Purchaser's Responsibilities	10.1 The Purchaser shall ensure the accuracy of all information and/or data to be supplied by the Purchaser to the Supplier, except when otherwise expressly stated in the Contract.
	<p>10.2 The Purchaser shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.3.1 (b).</p> <p>10.3 The Purchaser shall be responsible for acquiring and providing legal and physical possession of the site and access to it, and</p>

	<p>for providing possession of and access to all other areas reasonably required for the proper execution of the Contract.</p> <p>10.4 If requested by the Supplier, the Purchaser shall use its best endeavors to assist the Supplier in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities or public service undertakings that such authorities or undertakings require the Supplier or Subcontractors or the personnel of the Supplier or Subcontractors, as the case may be, to obtain.</p> <p>10.5 In such cases where the responsibilities of specifying and acquiring or upgrading telecommunications and/or electric power services falls to the Supplier, as specified in the Technical Requirements, SCC, Agreed and Finalized Project Plan, or other parts of the Contract, the Purchaser shall use its best endeavors to assist the Supplier in obtaining such services in a timely and expeditious manner.</p> <p>10.6 The Purchaser shall be responsible for timely provision of all resources, access, and information necessary for the Installation and Operational Acceptance of the System (including, but not limited to, any required telecommunications or electric power services), as identified in the Agreed and Finalized Project Plan, except where provision of such items is explicitly identified in the Contract as being the responsibility of the Supplier. Delay by the Purchaser may result in an appropriate extension of the Time for Operational Acceptance, at the Supplier's discretion.</p> <p>10.7 Unless otherwise specified in the Contract or agreed upon by the Purchaser and the Supplier, the Purchaser shall provide sufficient, properly qualified operating and technical personnel, as required by the Supplier to properly carry out Delivery, Pre-commissioning, Installation, Commissioning, and Operational Acceptance, at or before the time specified in the Technical Requirements Section's Implementation Schedule and the Agreed and Finalized Project Plan.</p> <p>10.8 The Purchaser will designate appropriate staff for the training courses to be given by the Supplier and shall make all appropriate logistical arrangements for such training as specified in the Technical Requirements, SCC, the Agreed and Finalized Project Plan, or other parts of the Contract.</p>
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	<p>10.9 The Purchaser assumes primary responsibility for the Operational Acceptance Test(s) for the System, in accordance with GCC Clause 27.2, and shall be responsible for the continued operation of the System after Operational Acceptance. However, this shall not limit in any way the Supplier's responsibilities after the date of Operational Acceptance otherwise specified in the Contract.</p> <p>10.10 The Purchaser is responsible for performing and safely storing timely and regular backups of its data and Software in accordance with accepted data management principles, except where such responsibility is clearly assigned to the Supplier elsewhere in the Contract.</p> <p>10.11 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of the Purchaser, save those to be incurred by the Supplier with respect to the performance of the Operational Acceptance Test(s), in accordance with GCC Clause 27.2.</p> <p>10.12 Other Purchaser responsibilities, if any, are as stated in the SCC.</p>
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C. PAYMENT

11. Contract Price	11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
	<p>11.2 The Contract Price shall be a firm lump sum not subject to any alteration, except:</p> <ul style="list-style-type: none"> (a) in the event of a Change in the System pursuant to GCC Clause 39 or to other clauses in the Contract; (b) in accordance with the price adjustment formula (if any) specified in the SCC.
	11.3 The Supplier shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
12. Terms of Payment	12.1 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the System or Subsystem(s), Delivered, Pre-

	<p>commissioned, Installed, and Operationally Accepted, and by documents submitted pursuant to GCC Clause 22.5 and upon fulfillment of other obligations stipulated in the Contract.</p> <p>The Contract Price shall be paid as specified in the SCC.</p>
	<p>12.2 No payment made by the Purchaser herein shall be deemed to constitute acceptance by the Purchaser of the System or any Subsystem(s).</p> <p>12.3 Payments shall be made promptly by the Purchaser, but in no case later than forty five (45) days after submission of a valid invoice by the Supplier. In the event that the Purchaser fails to make any payment by its respective due date or within the period set forth in the Contract, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate(s) specified in the SCC for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.</p> <p>12.4 All payments shall be made in the currency(ies) specified in the Contract Agreement, pursuant to GCC Clause 11. For Goods and Services supplied locally, payments shall be made in the currency of the Purchaser's Country, unless otherwise specified in the SCC.</p> <p>12.5 Unless otherwise specified in the SCC, payment of the foreign currency portion of the Contract Price for Goods supplied from outside the Purchaser's Country shall be made to the Supplier through an irrevocable letter of credit opened by an authorized bank in the Supplier's Country and will be payable on presentation of the appropriate documents. It is agreed that the letter of credit will be subject to Article 10 of the latest revision of Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce, Paris.</p>
13. Securities	<p>13.1 Issuance of Securities</p> <p>The Supplier shall provide the securities specified below in favor of the Purchaser at the times and in the amount, manner, and form specified below.</p>
	<p>13.2 Advance Payment Security</p> <p>13.2.1 As specified in the SCC, the Supplier shall provide a security equal in amount and currency to the advance</p>

	<p>payment, and valid until the System is Operationally Accepted.</p> <p>13.2.2 The security shall be in the form provided in the Bidding Documents or in another form acceptable to the Purchaser. The amount of the security shall be reduced in proportion to the value of the System executed by and paid to the Supplier from time to time and shall automatically become null and void when the full amount of the advance payment has been recovered by the Purchaser. The way the value of the security is deemed to become reduced and, eventually, voided is as specified in the SCC. The security shall be returned to the Supplier immediately after its expiration.</p>
	<p>13.3 Performance Security</p> <p>13.3.1 The Supplier shall, within twenty-eight (28) days of the notification of Contract award, provide a security for the due performance of the Contract in the amount and currency specified in the SCC.</p> <p>13.3.2 The security shall be a bank guarantee in the form provided in the Sample Forms Section of the Bidding Documents, or it shall be in another form acceptable to the Purchaser.</p> <p>13.3.3 The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The security shall be returned to the Supplier no later than twenty-eight (28) days after its expiration.</p> <p>13.3.4 Upon Operational Acceptance of the entire System, the security shall be reduced to the amount specified in the SCC, on the date of such Operational Acceptance, so that the reduced security would only cover the remaining warranty obligations of the Supplier.</p>
14. Taxes and Duties	<p>14.1 For Goods or Services supplied from outside the Purchaser's country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country. Any duties, such</p>

	<p>as importation or customs duties, and taxes and other levies, payable in the Purchaser's country for the supply of Goods and Services from outside the Purchaser's country are the responsibility of the Purchaser unless these duties or taxes have been made part of the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to, in which case the duties and taxes will be the Supplier's responsibility.</p>
	<p>14.2 For Goods or Services supplied locally, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods or Services to the Purchaser. The only exception are taxes or duties, such as value-added or sales tax or stamp duty as apply to, or are clearly identifiable, on the invoices and provided they apply in the Purchaser's country, and only if these taxes, levies and/or duties are also excluded from the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to.</p> <p>14.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.</p> <p>14.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the Purchaser's Country (also called "Tax" in this GCC Clause 14.4). If any Tax rates are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of the Contract, which was or will be assessed on the Supplier, its Subcontractors, or their employees in connection with performance of the Contract, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to or reduction from the Contract Price, as the case may be.</p>

D. INTELLECTUAL PROPERTY

15. Copyright	<p>15.1 The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such</p>
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Himachal Pradesh Road & Other Infrastructure Development Corporation

	rights.
	<p>15.2 The Purchaser agrees to restrict use, copying, or duplication of the Standard Software and Standard Materials in accordance with GCC Clause 16, except that additional copies of Standard Materials may be made by the Purchaser for use within the scope of the project of which the System is a part, in the event that the Supplier does not deliver copies within thirty (30) days from receipt of a request for such Standard Materials.</p> <p>15.3 The Purchaser's contractual rights to use the Standard Software or elements of the Standard Software may not be assigned, licensed, or otherwise transferred voluntarily except in accordance with the relevant license agreement or as may be otherwise specified in the SCC.</p> <p>15.4 As applicable, the Purchaser's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software, including any license agreements, and with respect to Custom Materials or elements of the Custom Materials, are specified in the SCC. Subject to the SCC, the Intellectual Property Rights in all Custom Software and Custom Materials specified in Appendices 4 and 5 of the Contract Agreement (if any) shall, at the date of this Contract or on creation of the rights (if later than the date of this Contract), vest in the Purchaser. The Supplier shall do and execute or arrange for the doing and executing of each necessary act, document, and thing that the Purchaser may consider necessary or desirable to perfect the right, title, and interest of the Purchaser in and to those rights. In respect of such Custom Software and Custom Materials, the Supplier shall ensure that the holder of a moral right in such an item does not assert it, and the Supplier shall, if requested to do so by the Purchaser and where permitted by applicable law, ensure that the holder of such a moral right waives it.</p>
	<p>15.5 The parties shall enter into such (if any) escrow arrangements in relation to the Source Code to some or all of the Software as are specified in the SCC and in accordance with the SCC.</p>

16. Software License Agreements	16.1 Except to the extent that the Intellectual Property Rights in the Software vest in the Purchaser, the Supplier hereby grants to the Purchaser license to access and use the Software, including all inventions, designs, and marks embodied in the Software.
	<p>Such license to access and use the Software shall:</p> <ul style="list-style-type: none"> (a) be: <ul style="list-style-type: none"> (i) nonexclusive; (ii) fully paid up and irrevocable (except that it shall terminate if the Contract terminates under GCC Clauses 41.1 or 41.3); (iii) valid throughout the territory of the Purchaser's Country (or such other territory as specified in the SCC); and (iv) subject to additional restrictions (if any) as specified in the SCC. (b) permit the Software to be: <ul style="list-style-type: none"> (i) used or copied for use on or with the computer(s) for which it was acquired (if specified in the Technical Requirements and/or the Supplier's bid), plus a backup computer(s) of the same or similar capacity, if the primary is(are) inoperative, and during a reasonable transitional period when use is being transferred between primary and backup; (ii) as specified in the SCC, used or copied for use on or transferred to a replacement computer(s), (and use on the original and replacement computer(s) may be simultaneous during a reasonable transitional period) provided that, if the Technical Requirements and/or the Supplier's bid specifies a class of computer to which the license is restricted and unless the Supplier agrees otherwise in writing, the replacement computer(s) is(are) within that class; (iii) if the nature of the System is such as to permit such access, accessed from other computers connected to the primary and/or backup

	<p>computer(s) by means of a local or wide-area network or similar arrangement, and used on or copied for use on those other computers to the extent necessary to that access;</p> <p>(iv) reproduced for safekeeping or backup purposes;</p> <p>(v) customized, adapted, or combined with other computer software for use by the Purchaser, provided that derivative software incorporating any substantial part of the delivered, restricted Software shall be subject to same restrictions as are set forth in this Contract;</p> <p>(vi) as specified in the SCC, disclosed to, and reproduced for use by, support service suppliers and their subcontractors, (and the Purchaser may sublicense such persons to use and copy for use the Software) to the extent reasonably necessary to the performance of their support service contracts, subject to the same restrictions as are set forth in this Contract; and</p> <p>(vii) disclosed to, and reproduced for use by, the Purchaser and by such other persons as are specified in the SCC (and the Purchaser may sublicense such persons to use and copy for use the Software), subject to the same restrictions as are set forth in this Contract.</p>
	<p>16.2 The Standard Software may be subject to audit by the Supplier, in accordance with the terms specified in the SCC, to verify compliance with the above license agreements.</p>
<p>17. Confidential Information</p>	<p>17.1 Except if otherwise specified in the SCC, the "Receiving Party" (either the Purchaser or the Supplier) shall keep confidential and shall not, without the written consent of the other party to this Contract ("the Disclosing Party"), divulge to any third party any documents, data, or other information of a confidential nature ("Confidential Information") connected with this Contract, and furnished directly or indirectly by the Disclosing Party prior to or during performance, or following termination, of this Contract.</p>
	<p>17.2 For the purposes of GCC Clause 17.1, the Supplier is also deemed to be the Receiving Party of Confidential Information generated by the Supplier itself in the course of the performance of its obligations under the Contract and</p>

	<p>relating to the businesses, finances, suppliers, employees, or other contacts of the Purchaser or the Purchaser's use of the System.</p> <p>17.3 Notwithstanding GCC Clauses 17.1 and 17.2:</p> <ul style="list-style-type: none"> (a) the Supplier may furnish to its Subcontractor Confidential Information of the Purchaser to the extent reasonably required for the Subcontractor to perform its work under the Contract; and (b) the Purchaser may furnish Confidential Information of the Supplier: (i) to its support service suppliers and their subcontractors to the extent reasonably required for them to perform their work under their support service contracts; and (ii) to its affiliates and subsidiaries, <p>in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and abides by the Receiving Party's obligations under this GCC Clause 17 as if that person were party to the Contract in place of the Receiving Party.</p>
	<p>17.4 The Purchaser shall not, without the Supplier's prior written consent, use any Confidential Information received from the Supplier for any purpose other than the operation, maintenance and further development of the System. Similarly, the Supplier shall not, without the Purchaser's prior written consent, use any Confidential Information received from the Purchaser for any purpose other than those that are required for the performance of the Contract.</p> <p>17.5 The obligation of a party under GCC Clauses 17.1 through 17.4 above, however, shall not apply to that information which:</p> <ul style="list-style-type: none"> (a) now or hereafter enters the public domain through no fault of the Receiving Party; (b) can be proven to have been possessed by the Receiving Party at the time of disclosure and that was not previously obtained, directly or indirectly, from the Disclosing Party; (c) otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of

	<p>confidentiality.</p> <p>17.6 The above provisions of this GCC Clause 17 shall not in any way modify any undertaking of confidentiality given by either of the parties to this Contract prior to the date of the Contract in respect of the System or any part thereof.</p> <p>17.7 The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for three (3) years or such longer period as may be specified in the SCC.</p>
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E. SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM

18. Representatives	<p>18.1 Project Manager</p> <p>If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, the Purchaser shall appoint and notify the Supplier in writing of the name of the Project Manager. The Purchaser may from time to time appoint some other person as the Project Manager in place of the person previously so appointed and shall give a notice of the name of such other person to the Supplier without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the System. Such appointment shall take effect only upon receipt of such notice by the Supplier. Subject to the extensions and/or limitations specified in the SCC (if any), the Project Manager shall have the authority to represent the Purchaser on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Purchaser pursuant to GCC Clause 4.</p>
	<p>18.2 Supplier's Representative</p> <p>18.2.1 If the Supplier's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Supplier shall appoint the Supplier's Representative and shall request the Purchaser in writing to approve the person so appointed. The request must be accompanied by a detailed curriculum vitae for the nominee, as well as a description of any other System or non-System responsibilities the nominee would retain while</p>

	<p>performing the duties of the Supplier's Representative. If the Purchaser does not object to the appointment within fourteen (14) days, the Supplier's Representative shall be deemed to have been approved. If the Purchaser objects to the appointment within fourteen (14) days giving the reason therefor, then the Supplier shall appoint a replacement within fourteen (14) days of such objection in accordance with this GCC Clause 18.2.1.</p> <p>18.2.2 Subject to the extensions and/or limitations specified in the SCC (if any), the Supplier's Representative shall have the authority to represent the Supplier on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Supplier pursuant to GCC Clause 4.</p> <p>18.2.3 The Supplier shall not revoke the appointment of the Supplier's Representative without the Purchaser's prior written consent, which shall not be unreasonably withheld. If the Purchaser consents to such an action, the Supplier shall appoint another person of equal or superior qualifications as the Supplier's Representative, pursuant to the procedure set out in GCC Clause 18.2.1.</p> <p>18.2.4 The Supplier's Representative and staff are obliged to work closely with the Purchaser's Project Manager and staff, act within their own authority, and abide by directives issued by the Purchaser that are consistent with the terms of the Contract. The Supplier's Representative is responsible for managing the activities of its personnel and any subcontracted personnel.</p> <p>18.2.5 The Supplier's Representative may, subject to the approval of the Purchaser (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions, and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Supplier's Representative and shall specify the powers, functions, and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until the notice of it has been</p>
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	<p>delivered.</p> <p>18.2.6 Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with GCC Clause 18.2.5 shall be deemed to be an act or exercise by the Supplier's Representative.</p> <p>18.3 Objections and Removals</p> <p>18.3.1 The Purchaser may by notice to the Supplier object to any representative or person employed by the Supplier in the execution of the Contract who, in the reasonable opinion of the Purchaser, may have behaved inappropriately, be incompetent, or be negligent. The Purchaser shall provide evidence of the same, whereupon the Supplier shall remove such person from work on the System.</p> <p>18.3.2 If any representative or person employed by the Supplier is removed in accordance with GCC Clause 18.3.1, the Supplier shall, where required, promptly appoint a replacement.</p>
19. Project Plan	<p>19.1 In close cooperation with the Purchaser and based on the Preliminary Project Plan included in the Supplier's bid, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract. The contents of the Project Plan shall be as specified in the SCC and/or Technical Requirements.</p>
	<p>19.2 The Supplier shall formally present to the Purchaser the Project Plan in accordance with the procedure specified in the SCC.</p> <p>19.3 If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed and Finalized Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 39 and 40.</p> <p>19.4 The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed and Finalized Project Plan and the Contract.</p> <p>19.5 The Progress and other reports specified in the SCC shall be prepared by the Supplier and submitted to the Purchaser in the format and frequency specified in the Technical</p>

	Requirements.
20. Subcontracting	<p>20.1 Appendix 3 (List of Approved Subcontractors) to the Contract Agreement specifies critical items of supply or services and a list of Subcontractors for each item that are considered acceptable by the Purchaser. If no Subcontractors are listed for an item, the Supplier shall prepare a list of Subcontractors it considers qualified and wishes to be added to the list for such items. The Supplier may from time to time propose additions to or deletions from any such list. The Supplier shall submit any such list or any modification to the list to the Purchaser for its approval in sufficient time so as not to impede the progress of work on the System. The Purchaser shall not withhold such approval unreasonably. Such approval by the Purchaser of a Subcontractor(s) shall not relieve the Supplier from any of its obligations, duties, or responsibilities under the Contract.</p>
	<p>20.2 The Supplier may, at its discretion, select and employ Subcontractors for such critical items from those Subcontractors listed pursuant to GCC Clause 20.1. If the Supplier wishes to employ a Subcontractor not so listed, or subcontract an item not so listed, it must seek the Purchaser's prior approval under GCC Clause 20.3.</p> <p>20.3 For items for which pre-approved Subcontractor lists have not been specified in Appendix 3 to the Contract Agreement, the Supplier may employ such Subcontractors as it may select, provided: (i) the Supplier notifies the Purchaser in writing at least twenty-eight (28) days prior to the proposed mobilization date for such Subcontractor; and (ii) by the end of this period either the Purchaser has granted its approval in writing or fails to respond. The Supplier shall not engage any Subcontractor to which the Purchaser has objected in writing prior to the end of the notice period. The absence of a written objection by the Purchaser during the above specified period shall constitute formal acceptance of the proposed Subcontractor. Except to the extent that it permits the deemed approval of the Purchaser of Subcontractors not listed in the Contract Agreement, nothing in this Clause, however, shall limit the rights and obligations of either the Purchaser or Supplier as they are specified in GCC Clauses 20.1 and 20.2, in the SCC, or in Appendix 3 of the Contract Agreement.</p>
21. Design and Engineering	<p>21.1 Technical Specifications and Drawings</p>

	<p>21.1.1 The Supplier shall execute the basic and detailed design and the implementation activities necessary for successful installation of the System in compliance with the provisions of the Contract or, where not so specified, in accordance with good industry practice.</p>
	<p>The Supplier shall be responsible for any discrepancies, errors or omissions in the specifications, drawings, and other technical documents that it has prepared, whether such specifications, drawings, and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors, or omissions are not because of inaccurate information furnished in writing to the Supplier by or on behalf of the Purchaser.</p> <p>21.1.2 The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification of such design, drawings, specification, or other documents provided or designated by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Project Manager.</p> <p>21.2 Codes and Standards</p> <p>Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of bid submission shall apply unless otherwise specified in the SCC. During Contract execution, any changes in such codes and standards shall be applied after approval by the Purchaser and shall be treated in accordance with GCC Clause 39.3.</p> <p>21.3 Approval/Review of Technical Documents by the Project Manager</p> <p>21.3.1 The Supplier shall prepare and furnish to the Project Manager the documents as specified in the SCC for the Project Manager's approval or review.</p> <p>Any part of the System covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's</p>

	<p>approval of these documents.</p> <p>GCC Clauses 21.3.2 through 21.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.</p> <p>21.3.2 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Clause 21.3.1, the Project Manager shall either return one copy of the document to the Supplier with its approval endorsed on the document or shall notify the Supplier in writing of its disapproval of the document and the reasons for disapproval and the modifications that the Project Manager proposes. If the Project Manager fails to take such action within the fourteen (14) days, then the document shall be deemed to have been approved by the Project Manager.</p> <p>21.3.3 The Project Manager shall not disapprove any document except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good industry practice.</p> <p>21.3.4 If the Project Manager disapproves the document, the Supplier shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Clause 21.3.2. If the Project Manager approves the document subject to modification(s), the Supplier shall make the required modification(s), and the document shall then be deemed to have been approved, subject to GCC Clause 21.3.5. The procedure set out in GCC Clauses 21.3.2 through 21.3.4 shall be repeated, as appropriate, until the Project Manager approves such documents.</p> <p>21.3.5 If any dispute occurs between the Purchaser and the Supplier in connection with or arising out of the disapproval by the Project Manager of any document and/or any modification(s) to a document that cannot be settled between the parties within a reasonable period, then, in case the Contract Agreement includes and names an Adjudicator, such dispute may be referred to the Adjudicator for determination in accordance with GCC Clause 6.1 (Adjudicator). If</p>
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	<p>such dispute is referred to an Adjudicator, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Supplier shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Adjudicator upholds the Supplier's view on the dispute and if the Purchaser has not given notice under GCC Clause 6.1.2, then the Supplier shall be reimbursed by the Purchaser for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Adjudicator shall decide, and the Time for Achieving Operational Acceptance shall be extended accordingly.</p> <p>21.3.6 The Project Manager's approval, with or without modification of the document furnished by the Supplier, shall not relieve the Supplier of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager or inaccurate information furnished in writing to the Supplier by or on behalf of the Purchaser.</p> <p>21.3.7 The Supplier shall not depart from any approved document unless the Supplier has first submitted to the Project Manager an amended document and obtained the Project Manager's approval of the document, pursuant to the provisions of this GCC Clause 21.3. If the Project Manager requests any change in any already approved document and/or in any document based on such an approved document, the provisions of GCC Clause 39 (Changes to the System) shall apply to such request.</p>
22. Procurement, Delivery, and Transport	<p>22.1 Subject to related Purchaser's responsibilities pursuant to GCC Clauses 10 and 14, the Supplier shall manufacture or procure and transport all the Information Technologies, Materials, and other Goods in an expeditious and orderly manner to the Project Site.</p>
	<p>22.2 Delivery of the Information Technologies, Materials, and other Goods shall be made by the Supplier in accordance</p>

	<p>with the Technical Requirements.</p> <p>22.3 Early or partial deliveries require the explicit written consent of the Purchaser, which consent shall not be unreasonably withheld.</p> <p>22.4 Transportation</p> <p>22.4.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during shipment. The packing, marking, and documentation within and outside the packages shall comply strictly with the Purchaser's instructions to the Supplier.</p> <p>22.4.2 The Supplier will bear responsibility for and cost of transport to the Project Sites in accordance with the terms and conditions used in the specification of prices in the Price Schedules, including the terms and conditions of the associated Incoterms.</p> <p>22.4.3 Unless otherwise specified in the SCC, the Supplier shall be free to use transportation through carriers registered in any eligible country and to obtain insurance from any eligible source country.</p> <p>22.5 Unless otherwise specified in the SCC, the Supplier will provide the Purchaser with shipping and other documents, as specified below:</p> <p>22.5.1 For Goods supplied from outside the Purchaser's Country:</p> <p>Upon shipment, the Supplier shall notify the Purchaser and the insurance company contracted by the Supplier to provide cargo insurance by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate, with a copy to the cargo insurance company:</p> <ul style="list-style-type: none"> (a) two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; (b) usual transportation documents;
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	<ul style="list-style-type: none"> (c) insurance certificate; (d) certificate(s) of origin; and (e) estimated time and point of arrival in the Purchaser's Country and at the site. <p>22.5.2 For Goods supplied locally (i.e., from within the Purchaser's country):</p> <p>Upon shipment, the Supplier shall notify the Purchaser by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate:</p> <ul style="list-style-type: none"> (a) two copies of the Supplier's invoice showing the Goods' description, quantity, unit price, and total amount; (b) delivery note, railway receipt, or truck receipt; (c) certificate of insurance; (d) certificate(s) of origin; and (e) estimated time of arrival at the site. <p>22.6 Customs Clearance</p> <ul style="list-style-type: none"> (a) The Purchaser will bear responsibility for, and cost of, customs clearance into the Purchaser's country in accordance the particular Incoterm(s) used for Goods supplied from outside the Purchaser's country in the Price Schedules referred to by Article 2 of the Contract Agreement. (b) At the request of the Purchaser, the Supplier will make available a representative or agent during the process of customs clearance in the Purchaser's country for goods supplied from outside the Purchaser's country. In the event of delays in customs clearance that are not the fault of the Supplier: <ul style="list-style-type: none"> (i) the Supplier shall be entitled to an extension in the Time for Achieving Operational Acceptance, pursuant to GCC Clause 40; (ii) the Contract Price shall be adjusted to
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	compensate the Supplier for any additional storage charges that the Supplier may incur as a result of the delay.
23. Product Upgrades	<p>23.1 At any point during performance of the Contract, should technological advances be introduced by the Supplier for Information Technologies originally offered by the Supplier in its bid and still to be delivered, the Supplier shall be obligated to offer to the Purchaser the latest versions of the available Information Technologies having equal or better performance or functionality at the same or lesser unit prices, pursuant to GCC Clause 39 (Changes to the System).</p>
	<p>23.2 At any point during performance of the Contract, for Information Technologies still to be delivered, the Supplier will also pass on to the Purchaser any cost reductions and additional and/or improved support and facilities that it offers to other clients of the Supplier in the Purchaser's Country, pursuant to GCC Clause 39 (Changes to the System).</p> <p>23.3 During performance of the Contract, the Supplier shall offer to the Purchaser all new versions, releases, and updates of Standard Software, as well as related documentation and technical support services, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Purchaser's Country, and no later than twelve (12) months after they are released in the country of origin. In no case will the prices for these Software exceed those quoted by the Supplier in the Recurrent Costs tables in its bid.</p> <p>23.4 During the Warranty Period, unless otherwise specified in the SCC, the Supplier will provide at no additional cost to the Purchaser all new versions, releases, and updates for all Standard Software that are used in the System, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Purchaser's country, and no later than twelve (12) months after they are released in the country of origin of the Software.</p> <p>23.5 The Purchaser shall introduce all new versions, releases or updates of the Software within eighteen (18) months of receipt of a production-ready copy of the new version, release, or update, provided that the new version, release, or update does not adversely affect System operation or performance or require extensive reworking of the System. In cases where the new version, release, or update adversely</p>

	affects System operation or performance, or requires extensive reworking of the System, the Supplier shall continue to support and maintain the version or release previously in operation for as long as necessary to allow introduction of the new version, release, or update. In no case shall the Supplier stop supporting or maintaining a version or release of the Software less than twenty four (24) months after the Purchaser receives a production-ready copy of a subsequent version, release, or update. The Purchaser shall use all reasonable endeavors to implement any new version, release, or update as soon as practicable, subject to the twenty-four-month-long stop date.
24. Implementation, Installation, and Other Services	24.1 The Supplier shall provide all Services specified in the Contract and Agreed and Finalized Project Plan in accordance with the highest standards of professional competence and integrity.
	24.2 Prices charged by the Supplier for Services, if not included in the Contract, shall be agreed upon in advance by the parties (including, but not restricted to, any prices submitted by the Supplier in the Recurrent Cost Schedules of its Bid) and shall not exceed the prevailing rates charged by the Supplier to other purchasers in the Purchaser's Country for similar services.
25. Inspections and Tests	25.1 The Purchaser or its representative shall have the right to inspect and/or test any components of the System, as specified in the Technical Requirements, to confirm their good working order and/or conformity to the Contract at the point of delivery and/or at the Project Site.
	25.2 The Purchaser or its representative shall be entitled to attend any such inspections and/or tests of the components, provided that the Purchaser shall bear all costs and expenses incurred in connection with such attendance, including but not limited to all inspection agent fees, travel, and related expenses.
	25.3 Should the inspected or tested components fail to conform to the Contract, the Purchaser may reject the component(s), and the Supplier shall either replace the rejected component(s), or make alterations as necessary so that it meets the Contract requirements free of cost to the Purchaser.
	25.4 The Project Manager may require the Supplier to carry out any inspection and/or test not specified in the Contract,

	<p>provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such inspection and/or test shall be added to the Contract Price. Further, if such inspection and/or test impedes the progress of work on the System and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Achieving Operational Acceptance and the other obligations so affected.</p> <p>25.5 If any dispute shall arise between the parties in connection with or caused by an inspection and/or with regard to any component to be incorporated in the System that cannot be settled amicably between the parties within a reasonable period of time, either party may invoke the process pursuant to GCC Clause 6 (Settlement of Disputes), starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.</p>
26. Installation of the System	<p>26.1 As soon as the System, or any Subsystem, has, in the opinion of the Supplier, been delivered, Pre-commissioned, and made ready for Commissioning and Operational Acceptance Testing in accordance with the Technical Requirements, the SCC and the Agreed and Finalized Project Plan, the Supplier shall so notify the Purchaser in writing.</p>
	<p>26.2 The Project Manager shall, within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, either issue an Installation Certificate in the form specified in the Sample Forms Section in the Bidding Documents, stating that the System, or major component or Subsystem (if Acceptance by major component or Subsystem is specified pursuant to the SCC for GCC Clause 27.2.1), has achieved Installation by the date of the Supplier's notice under GCC Clause 26.1, or notify the Supplier in writing of any defects and/or deficiencies, including, but not limited to, defects or deficiencies in the interoperability or integration of the various components and/or Subsystems making up the System. The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies that the Project Manager has notified the Supplier of. The Supplier shall then promptly carry out retesting of the System or Subsystem and, when in the Supplier's opinion the System or Subsystem is ready for Commissioning and Operational Acceptance Testing, notify the Purchaser in writing, in accordance with GCC Clause 26.1. The procedure set out in</p>

	<p>this GCC Clause 26.2 shall be repeated, as necessary, until an Installation Certificate is issued.</p> <p>26.3 If the Project Manager fails to issue the Installation Certificate and fails to inform the Supplier of any defects and/or deficiencies within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, or if the Purchaser puts the System or a Subsystem into production operation, then the System (or Subsystem) shall be deemed to have achieved successful Installation as of the date of the Supplier's notice or repeated notice, or when the Purchaser put the System into production operation, as the case may be.</p>
27. Commissioning and Operational Acceptance	<p>27.1 Commissioning</p> <p>27.1.1 Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 27.2.1) shall be commenced by the Supplier:</p> <ul style="list-style-type: none"> (a) immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 26.2; or (b) as otherwise specified in the Technical Requirement or the Agreed and Finalized Project Plan; or (c) immediately after Installation is deemed to have occurred, under GCC Clause 26.3.
	<p>27.1.2 The Purchaser shall supply the operating and technical personnel and all materials and information reasonably required to enable the Supplier to carry out its obligations with respect to Commissioning.</p> <p>Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing.</p> <p>27.2 Operational Acceptance Tests</p> <p>27.2.1 The Operational Acceptance Tests (and repeats of such tests) shall be the primary responsibility of the Purchaser (in accordance with GCC Clause 10.9), but shall be conducted with the full cooperation of the Supplier during Commissioning of the System (or major components or Subsystem[s] if specified in the</p>

	<p>SCC and supported by the Technical Requirements), to ascertain whether the System (or major component or Subsystem[s]) conforms to the Technical Requirements and meets the standard of performance quoted in the Supplier's bid, including, but not restricted to, the functional and technical performance requirements. The Operational Acceptance Tests during Commissioning will be conducted as specified in the SCC, the Technical Requirements and/or the Agreed and Finalized Project Plan.</p> <p>At the Purchaser's discretion, Operational Acceptance Tests may also be performed on replacement Goods, upgrades and new version releases, and Goods that are added or field-modified after Operational Acceptance of the System.</p> <p>27.2.2 If for reasons attributable to the Purchaser, the Operational Acceptance Test of the System (or Subsystem[s] or major components, pursuant to the SCC for GCC Clause 27.2.1) cannot be successfully completed within the period specified in the SCC, from the date of Installation or any other period agreed upon in writing by the Purchaser and the Supplier, the Supplier shall be deemed to have fulfilled its obligations with respect to the technical and functional aspects of the Technical Specifications, SCC and/or the Agreed and Finalized Project Plan, and GCC Clause 28.2 and 28.3 shall not apply.</p> <p>27.3 Operational Acceptance</p> <p>27.3.1 Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when</p> <ul style="list-style-type: none"> (a) the Operational Acceptance Tests, as specified in the Technical Requirements, and/or SCC and/or the Agreed and Finalized Project Plan have been successfully completed; or (b) the Operational Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to the Purchaser within the period from the date of Installation or any other agreed-upon period as
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	<p>specified in GCC Clause 27.2.2 above; or</p> <p>(c) the Purchaser has put the System into production or use for sixty (60) consecutive days. If the System is put into production or use in this manner, the Supplier shall notify the Purchaser and document such use.</p> <p>27.3.2 At any time after any of the events set out in GCC Clause 27.3.1 have occurred, the Supplier may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate.</p> <p>27.3.3 After consultation with the Purchaser, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall:</p> <p>(a) issue an Operational Acceptance Certificate; or</p> <p>(b) notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or</p> <p>(c) issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.3.1 (b) arises.</p> <p>27.3.4 The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies and/or other reasons for the failure of the Operational Acceptance Test that the Project Manager has notified the Supplier of. Once such remedies have been made by the Supplier, the Supplier shall notify the Purchaser, and the Purchaser, with the full cooperation of the Supplier, shall use all reasonable endeavors to promptly carry out retesting of the System or Subsystem. Upon the successful conclusion of the Operational Acceptance Tests, the Supplier shall notify the Purchaser of its request for Operational Acceptance Certification, in accordance with GCC Clause 27.3.3. The Purchaser shall then issue to the Supplier the Operational Acceptance Certification in accordance with GCC Clause 27.3.3 (a), or shall notify the Supplier of further defects, deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure set out in this GCC Clause 27.3.4 shall be repeated, as necessary, until an</p>
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	<p>Operational Acceptance Certificate is issued.</p> <p>27.3.5 If the System or Subsystem fails to pass the Operational Acceptance Test(s) in accordance with GCC Clause 27.2, then either:</p> <ul style="list-style-type: none"> (a) the Purchaser may consider terminating the Contract, pursuant to GCC Clause 41.2.2; or (b) if the failure to achieve Operational Acceptance within the specified time period is a result of the failure of the Purchaser to fulfill its obligations under the Contract, then the Supplier shall be deemed to have fulfilled its obligations with respect to the relevant technical and functional aspects of the Contract, and GCC Clauses 30.3 and 30.4 shall not apply. <p>27.3.6 If within fourteen (14) days after receipt of the Supplier's notice the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Supplier in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the System or Subsystem shall be deemed to have been accepted as of the date of the Supplier's said notice.</p> <p>27.4 Partial Acceptance</p> <p>27.4.1 If so specified in the SCC for GCC Clause 27.2.1, Installation and Commissioning shall be carried out individually for each identified major component or Subsystem(s) of the System. In this event, the provisions in the Contract relating to Installation and Commissioning, including the Operational Acceptance Test, shall apply to each such major component or Subsystem individually, and Operational Acceptance Certificate(s) shall be issued accordingly for each such major component or Subsystem of the System, subject to the limitations contained in GCC Clause 27.4.2.</p> <p>27.4.2 The issuance of Operational Acceptance Certificates for individual major components or Subsystems pursuant to GCC Clause 27.4.1 shall not relieve the Supplier of its obligation to obtain an Operational Acceptance Certificate for the System as an integrated whole (if so</p>
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	<p>specified in the SCC for GCC Clauses 12.1 and 27.2.1) once all major components and Subsystems have been supplied, installed, tested, and commissioned.</p> <p>27.4.3 In the case of minor components for the System that by their nature do not require Commissioning or an Operational Acceptance Test (e.g., minor fittings, furnishings or site works, etc.), the Project Manager shall issue an Operational Acceptance Certificate within fourteen (14) days after the fittings and/or furnishings have been delivered and/or installed or the site works have been completed. The Supplier shall, however, use all reasonable endeavors to promptly remedy any defects or deficiencies in such minor components detected by the Purchaser or Supplier.</p>
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F. GUARANTEES AND LIABILITIES

28. Operational Acceptance Time Guarantee	<p>28.1 The Supplier guarantees that it shall complete the supply, Installation, Commissioning, and achieve Operational Acceptance of the System (or Subsystems, pursuant to the SCC for GCC Clause 27.2.1) within the time periods specified in the Implementation Schedule in the Technical Requirements Section and/or the Agreed and Finalized Project Plan pursuant to GCC Clause 8.2, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).</p>
	<p>28.2 If the Supplier fails to supply, install, commission, and achieve Operational Acceptance of the System (or Subsystems pursuant to the SCC for GCC Clause 27.2.1) within the time for achieving Operational Acceptance specified in the Implementation Schedule in the Technical Requirement or the Agreed and Finalized Project Plan, or any extension of the time for achieving Operational Acceptance previously granted under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance), the Supplier shall pay to the Purchaser liquidated damages at the rate specified in the SCC as a percentage of the Contract Price, or the relevant part of the Contract Price if a Subsystem has not achieved Operational Acceptance. The aggregate amount of such liquidated damages shall in no event exceed the amount specified in the SCC (“the Maximum”). Once the Maximum is reached, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2.</p>

	<p>28.3 Unless otherwise specified in the SCC, liquidated damages payable under GCC Clause 28.2 shall apply only to the failure to achieve Operational Acceptance of the System (and Subsystems) as specified in the Implementation Schedule in the Technical Requirements and/or Agreed and Finalized Project Plan. This Clause 28.3 shall not limit, however, any other rights or remedies the Purchaser may have under the Contract for other delays.</p> <p>28.4 If liquidated damages are claimed by the Purchaser for the System (or Subsystem), the Supplier shall have no further liability whatsoever to the Purchaser in respect to the Operational Acceptance time guarantee for the System (or Subsystem). However, the payment of liquidated damages shall not in any way relieve the Supplier from any of its obligations to complete the System or from any other of its obligations and liabilities under the Contract.</p>
29. Defect Liability	<p>29.1 The Supplier warrants that the System, including all Information Technologies, Materials, and other Goods supplied and Services provided, shall be free from defects in the design, engineering, Materials, and workmanship that prevent the System and/or any of its components from fulfilling the Technical Requirements or that limit in a material fashion the performance, reliability, or extensibility of the System and/or Subsystems. Exceptions and/or limitations, if any, to this warranty with respect to Software (or categories of Software), shall be as specified in the SCC. Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the provisions of this Contract.</p>
	<p>29.2 The Supplier also warrants that the Information Technologies, Materials, and other Goods supplied under the Contract are new, unused, and incorporate all recent improvements in design that materially affect the System's or Subsystem's ability to fulfill the Technical Requirements.</p> <p>29.3 In addition, the Supplier warrants that: (i) all Goods components to be incorporated into the System form part of the Supplier's and/or Subcontractor's current product lines, (ii) they have been previously released to the market, and (iii) those specific items identified in the SCC (if any) have been in the market for at least the minimum periods specified in the SCC.</p> <p>29.4 The Warranty Period shall commence from the date of</p>

	<p>Operational Acceptance of the System (or of any major component or Subsystem for which separate Operational Acceptance is provided for in the Contract) and shall extend for the length of time specified in the SCC.</p> <p>29.5 If during the Warranty Period any defect as described in GCC Clause 29.1 should be found in the design, engineering, Materials, and workmanship of the Information Technologies and other Goods supplied or of the Services provided by the Supplier, the Supplier shall promptly, in consultation and agreement with the Purchaser regarding appropriate remedying of the defects, and at its sole cost, repair, replace, or otherwise make good (as the Supplier shall, at its discretion, determine) such defect as well as any damage to the System caused by such defect. Any defective Information Technologies or other Goods that have been replaced by the Supplier shall remain the property of the Supplier.</p> <p>29.6 The Supplier shall not be responsible for the repair, replacement, or making good of any defect or of any damage to the System arising out of or resulting from any of the following causes:</p> <ul style="list-style-type: none"> (a) improper operation or maintenance of the System by the Purchaser; (b) normal wear and tear; (c) use of the System with items not supplied by the Supplier, unless otherwise identified in the Technical Requirements, or approved by the Supplier; or (d) modifications made to the System by the Purchaser, or a third party, not approved by the Supplier. <p>29.7 The Supplier's obligations under this GCC Clause 29 shall not apply to:</p> <ul style="list-style-type: none"> (a) any materials that are normally consumed in operation or have a normal life shorter than the Warranty Period; or (b) any designs, specifications, or other data designed, supplied, or specified by or on behalf of the Purchaser or any matters for which the Supplier has disclaimed responsibility, in accordance with GCC Clause 21.1.2. <p>29.8 The Purchaser shall give the Supplier a notice promptly</p>
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	<p>following the discovery of such defect, stating the nature of any such defect together with all available evidence. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect any such defect. The Purchaser shall afford the Supplier all necessary access to the System and the site to enable the Supplier to perform its obligations under this GCC Clause 29.</p> <p>29.9 The Supplier may, with the consent of the Purchaser, remove from the site any Information Technologies and other Goods that are defective, if the nature of the defect, and/or any damage to the System caused by the defect, is such that repairs cannot be expeditiously carried out at the site. If the repair, replacement, or making good is of such a character that it may affect the efficiency of the System, the Purchaser may give the Supplier notice requiring that tests of the defective part be made by the Supplier immediately upon completion of such remedial work, whereupon the Supplier shall carry out such tests.</p> <p>If such part fails the tests, the Supplier shall carry out further repair, replacement, or making good (as the case may be) until that part of the System passes such tests. The tests shall be agreed upon by the Purchaser and the Supplier.</p> <p>29.10 If the Supplier fails to commence the work necessary to remedy such defect or any damage to the System caused by such defect within the time period specified in the SCC, the Purchaser may, following notice to the Supplier, proceed to do such work or contract a third party (or parties) to do such work, and the reasonable costs incurred by the Purchaser in connection with such work shall be paid to the Purchaser by the Supplier or may be deducted by the Purchaser from any monies due the Supplier or claimed under the Performance Security.</p> <p>29.11 If the System or Subsystem cannot be used by reason of such defect and/or making good of such defect, the Warranty Period for the System shall be extended by a period equal to the period during which the System or Subsystem could not be used by the Purchaser because of such defect and/or making good of such defect.</p> <p>29.12 Items substituted for defective parts of the System during the Warranty Period shall be covered by the Defect Liability Warranty for the remainder of the Warranty Period applicable for the part replaced or three (3) months,</p>
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	<p>whichever is greater.</p> <p>29.13 At the request of the Purchaser and without prejudice to any other rights and remedies that the Purchaser may have against the Supplier under the Contract, the Supplier will offer all possible assistance to the Purchaser to seek warranty services or remedial action from any subcontracted third-party producers or licensor of Goods included in the System, including without limitation assignment or transfer in favor of the Purchaser of the benefit of any warranties given by such producers or licensors to the Supplier.</p>
30. Functional Guarantees	<p>30.1 The Supplier guarantees that, once the Operational Acceptance Certificate(s) has been issued, the System represents a complete, integrated solution to the Purchaser's requirements set forth in the Technical Requirements and it conforms to all other aspects of the Contract. The Supplier acknowledges that GCC Clause 27 regarding Commissioning and Operational Acceptance governs how technical conformance of the System to the Contract requirements will be determined.</p>
	<p>30.2 If, for reasons attributable to the Supplier, the System does not conform to the Technical Requirements or does not conform to all other aspects of the Contract, the Supplier shall at its cost and expense make such changes, modifications, and/or additions to the System as may be necessary to conform to the Technical Requirements and meet all functional and performance standards. The Supplier shall notify the Purchaser upon completion of the necessary changes, modifications, and/or additions and shall request the Purchaser to repeat the Operational Acceptance Tests until the System achieves Operational Acceptance.</p> <p>30.3 If the System (or Subsystem[s]) fails to achieve Operational Acceptance, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2, and forfeiture of the Supplier's Performance Security in accordance with GCC Clause 13.3 in compensation for the extra costs and delays likely to result from this failure.</p>
31. Intellectual Property Rights Warranty	<p>31.1 The Supplier hereby represents and warrants that:</p> <ul style="list-style-type: none"> (a) the System as supplied, installed, tested, and accepted; (b) use of the System in accordance with the Contract; and (c) copying of the Software and Materials provided to the

	<p>Purchaser in accordance with the Contract</p> <p>do not and will not infringe any Intellectual Property Rights held by any third party and that it has all necessary rights or at its sole expense shall have secured in writing all transfers of rights and other consents necessary to make the assignments, licenses, and other transfers of Intellectual Property Rights and the warranties set forth in the Contract, and for the Purchaser to own or exercise all Intellectual Property Rights as provided in the Contract. Without limitation, the Supplier shall secure all necessary written agreements, consents, and transfers of rights from its employees and other persons or entities whose services are used for development of the System.</p>
32. Intellectual Property Rights Indemnity	<p>32.1 The Supplier shall indemnify and hold harmless the Purchaser and its employees and officers from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability), that the Purchaser or its employees or officers may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights by reason of:</p> <ul style="list-style-type: none"> (a) installation of the System by the Supplier or the use of the System, including the Materials, in the country where the site is located; (b) copying of the Software and Materials provided the Supplier in accordance with the Agreement; and
	<ul style="list-style-type: none"> (c) sale of the products produced by the System in any country, except to the extent that such losses, liabilities, and costs arise as a result of the Purchaser's breach of GCC Clause 32.2.
	<p>32.2 Such indemnity shall not cover any use of the System, including the Materials, other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the System, or any products of the System produced thereby in association or combination with any other goods or services not supplied by the Supplier, where the infringement arises because of such association or combination and not because of use of the System in its own right.</p> <p>32.3 Such indemnities shall also not apply if any claim of</p>

	<p>infringement:</p> <ul style="list-style-type: none"> (a) is asserted by a parent, subsidiary, or affiliate of the Purchaser's organization; (b) is a direct result of a design mandated by the Purchaser's Technical Requirements and the possibility of such infringement was duly noted in the Supplier's Bid; or (c) results from the alteration of the System, including the Materials, by the Purchaser or any persons other than the Supplier or a person authorized by the Supplier.
	<p>32.4 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Clause 32.1, the Purchaser shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.</p> <p>If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify the Purchaser within the twenty-eight (28) days, the Purchaser shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.</p>
	<p>32.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided to the Supplier in connection with this Contract by the Purchaser or any persons (other than the Supplier) contracted by the</p>

	Purchaser, except to the extent that such losses, liabilities, and costs arise as a result of the Supplier's breach of GCC Clause 32.8.
	<p>32.6 Such indemnity shall not cover</p> <ul style="list-style-type: none"> (a) any use of the design, data, drawing, specification, or other documents or materials, other than for the purpose indicated by or to be reasonably inferred from the Contract; (b) any infringement resulting from the use of the design, data, drawing, specification, or other documents or materials, or any products produced thereby, in association or combination with any other Goods or Services not provided by the Purchaser or any other person contracted by the Purchaser, where the infringement arises because of such association or combination and not because of the use of the design, data, drawing, specification, or other documents or materials in its own right. <p>32.7 Such indemnities shall also not apply:</p> <ul style="list-style-type: none"> (a) if any claim of infringement is asserted by a parent, subsidiary, or affiliate of the Supplier's organization; (b) to the extent that any claim of infringement is caused by the alteration, by the Supplier, or any persons contracted by the Supplier, of the design, data, drawing, specification, or other documents or materials provided to the Supplier by the Purchaser or any persons contracted by the Purchaser. <p>32.8 If any proceedings are brought or any claim is made against the Supplier arising out of the matters referred to in GCC Clause 32.5, the Supplier shall promptly give the Purchaser notice of such proceedings or claims, and the Purchaser may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Purchaser fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless the Purchaser has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be</p>

	prejudicial to the defense of any such proceedings or claim. The Supplier shall, at the Purchaser's request, afford all available assistance to the Purchaser in conducting such proceedings or claim and shall be reimbursed by the Purchaser for all reasonable expenses incurred in so doing.
33. Limitation of Liability	33.1 Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law:
	<p>(a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and</p> <p>(b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify the Purchaser with respect to intellectual property rights infringement.</p>

G. RISK DISTRIBUTION

34. Transfer of Ownership	34.1 With the exception of Software and Materials, the ownership of the Information Technologies and other Goods shall be transferred to the Purchaser at the time of Delivery or otherwise under terms that may be agreed upon and specified in the Contract Agreement.
	<p>34.2 Ownership and the terms of usage of the Software and Materials supplied under the Contract shall be governed by GCC Clause 15 (Copyright) and any elaboration in the Technical Requirements.</p> <p>34.3 Ownership of the Supplier's Equipment used by the Supplier and its Subcontractors in connection with the Contract shall remain with the Supplier or its Subcontractors.</p>
35. Care of the System	35.1 The Purchaser shall become responsible for the care and custody of the System or Subsystems upon their Delivery. The Purchaser shall make good at its own cost any loss or damage that may occur to the System or Subsystems from

	<p>any cause from the date of Delivery until the date of Operational Acceptance of the System or Subsystems, pursuant to GCC Clause 27 (Commissioning and Operational Acceptance), excepting such loss or damage arising from acts or omissions of the Supplier, its employees, or subcontractors.</p> <p>35.2 If any loss or damage occurs to the System or any part of the System by reason of:</p> <ul style="list-style-type: none"> (a) (insofar as they relate to the country where the Project Site is located) nuclear reaction, nuclear radiation, radioactive contamination, a pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance taken out under GCC Clause 37; (b) any use not in accordance with the Contract, by the Purchaser or any third party; (c) any use of or reliance upon any design, data, or specification provided or designated by or on behalf of the Purchaser, or any such matter for which the Supplier has disclaimed responsibility in accordance with GCC Clause 21.1.2, <p>the Purchaser shall pay to the Supplier all sums payable in respect of the System or Subsystems that have achieved Operational Acceptance, notwithstanding that the same be lost, destroyed, or damaged. If the Purchaser requests the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Supplier shall make good the same at the cost of the Purchaser in accordance with GCC Clause 39. If the Purchaser does not request the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Purchaser shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the System thereby lost, destroyed, or damaged, or, where the loss or damage affects a substantial part of the System, the Purchaser shall terminate the Contract pursuant to GCC Clause 41.1.</p>
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	<p>35.3 The Purchaser shall be liable for any loss of or damage to any Supplier's Equipment which the Purchaser has authorized to locate within the Purchaser's premises for use in fulfillment of Supplier's obligations under the Contract, except where such loss or damage arises from acts or omissions of the Supplier, its employees, or subcontractors.</p>
<p>36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification</p>	<p>36.1 The Supplier and each and every Subcontractor shall abide by the job safety, insurance, customs, and immigration measures prevalent and laws in force in the Purchaser's Country.</p> <p>36.2 Subject to GCC Clause 36.3, the Supplier shall indemnify and hold harmless the Purchaser and its employees and officers from and against any and all losses, liabilities and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Purchaser or its employees or officers may suffer as a result of the death or injury of any person or loss of or damage to any property (other than the System, whether accepted or not) arising in connection with the supply, installation, testing, and Commissioning of the System and by reason of the negligence of the Supplier or its Subcontractors, or their employees, officers or agents, except any injury, death, or property damage caused by the negligence of the Purchaser, its contractors, employees, officers, or agents.</p>
	<p>36.3 If any proceedings are brought or any claim is made against the Purchaser that might subject the Supplier to liability under GCC Clause 36.2, the Purchaser shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify the Purchaser within the twenty-eight (28) day period, the Purchaser shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.</p>

	<p>36.4 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of the death or personal injury of any person or loss of or damage to property of the Purchaser, other than the System not yet achieving Operational Acceptance, that is caused by fire, explosion, or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 37 (Insurances), provided that such fire, explosion, or other perils were not caused by any act or failure of the Supplier.</p>
	<p>36.5 If any proceedings are brought or any claim is made against the Supplier that might subject the Purchaser to liability under GCC Clause 36.4, the Supplier shall promptly give the Purchaser notice of such proceedings or claims, and the Purchaser may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Purchaser fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless the Purchaser has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Supplier shall, at the Purchaser's request, afford all available assistance to the Purchaser in conducting such proceedings or claim and shall be reimbursed by the Purchaser for all reasonable expenses incurred in so doing.</p>
	<p>36.6 The party entitled to the benefit of an indemnity under this GCC Clause 36 shall take all reasonable measures to mitigate any loss or damage that has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.</p>
37. Insurances	<p>37.1 The Supplier shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurance set forth below. The identity of the insurers and the form of the policies shall be subject to the approval of the Purchaser, who should not unreasonably withhold such approval.</p>

	<p>(a) Cargo Insurance During Transport</p> <p>as applicable, 110 percent of the price of the Information Technologies and other Goods in a freely convertible currency, covering the Goods from physical loss or damage during shipment through receipt at the Project Site.</p> <p>(b) Installation “All Risks” Insurance</p> <p>as applicable, 110 percent of the price of the Information Technologies and other Goods covering the Goods at the site from all risks of physical loss or damage (excluding only perils commonly excluded under “all risks” insurance policies of this type by reputable insurers) occurring prior to Operational Acceptance of the System.</p> <p>(c) Third-Party Liability Insurance</p> <p>On terms as specified in the SCC, covering bodily injury or death suffered by third parties (including the Purchaser’s personnel) and loss of or damage to property (including the Purchaser’s property and any Subsystems that have been accepted by the Purchaser) occurring in connection with the supply and installation of the Information System.</p> <p>(d) Automobile Liability Insurance</p> <p>In accordance with the statutory requirements prevailing in the Purchaser’s Country, covering use of all vehicles used by the Supplier or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.</p> <p>(e) Other Insurance (if any), as specified in the SCC.</p> <p>37.2 The Purchaser shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1, except for the Third-Party Liability, and the Supplier’s Subcontractors shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1 except for Cargo Insurance During Transport. All insurer’s rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such</p>
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	<p>policies.</p> <p>37.3 The Supplier shall deliver to the Purchaser certificates of insurance (or copies of the insurance policies) as evidence that the required policies are in full force and effect.</p> <p>37.4 The Supplier shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Supplier.</p> <p>37.5 If the Supplier fails to take out and/or maintain in effect the insurance referred to in GCC Clause 37.1, the Purchaser may take out and maintain in effect any such insurance and may from time to time deduct from any amount due the Supplier under the Contract any premium that the Purchaser shall have paid to the insurer or may otherwise recover such amount as a debt due from the Supplier.</p> <p>37.6 Unless otherwise provided in the Contract, the Supplier shall prepare and conduct all and any claims made under the policies effected by it pursuant to this GCC Clause 37, and all monies payable by any insurers shall be paid to the Supplier. The Purchaser shall give to the Supplier all such reasonable assistance as may be required by the Supplier in connection with any claim under the relevant insurance policies. With respect to insurance claims in which the Purchaser's interest is involved, the Supplier shall not give any release or make any compromise with the insurer without the prior written consent of the Purchaser. With respect to insurance claims in which the Supplier's interest is involved, the Purchaser shall not give any release or make any compromise with the insurer without the prior written consent of the Supplier.</p>
38. Force Majeure	<p>38.1 "Force Majeure" shall mean any event beyond the reasonable control of the Purchaser or of the Supplier, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected and shall include, without limitation, the following:</p>
	<p>(a) war, hostilities, or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy, and civil war;</p>

	<p>(b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, and terrorist acts;</p> <p>(c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler, or any other act or failure to act of any local state or national government authority;</p> <p>(d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague;</p> <p>(e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves, or other natural or physical disaster;</p> <p>(f) failure, by the Supplier, to obtain the necessary export permit(s) from the governments of the Country(s) of Origin of the Information Technologies or other Goods, or Supplier's Equipment provided that the Supplier has made all reasonable efforts to obtain the required export permit(s), including the exercise of due diligence in determining the eligibility of the System and all of its components for receipt of the necessary export permits.</p> <p>38.2 If either party is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen (14) days after the occurrence of such event.</p> <p>38.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered, or delayed. The Time for Achieving Operational Acceptance shall be extended in accordance with GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).</p>
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	<p>38.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under GCC Clause 38.6.</p> <p>38.5 No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall:</p> <p>(a) constitute a default or breach of the Contract;</p> <p>(b) (subject to GCC Clauses 35.2, 38.3, and 38.4) give rise to any claim for damages or additional cost or expense occasioned by the delay or nonperformance,</p> <p>if, and to the extent that, such delay or nonperformance is caused by the occurrence of an event of Force Majeure.</p> <p>38.6 If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the time period covered by the Contract, the parties will attempt to develop a mutually satisfactory solution, failing which, either party may terminate the Contract by giving a notice to the other.</p> <p>38.7 In the event of termination pursuant to GCC Clause 38.6, the rights and obligations of the Purchaser and the Supplier shall be as specified in GCC Clauses 41.1.2 and 41.1.3.</p> <p>38.8 Notwithstanding GCC Clause 38.5, Force Majeure shall not apply to any obligation of the Purchaser to make payments to the Supplier under this Contract.</p>
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H. CHANGE IN CONTRACT ELEMENTS

39. Changes to the System	<p>39.1 Introducing a Change</p> <p>39.1.1 Subject to GCC Clauses 39.2.5 and 39.2.7, the Purchaser shall have the right to propose, and subsequently require, the Project Manager to order the Supplier from time to time during the performance of the Contract to make any change, modification, addition, or deletion to, in, or from the</p>
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	<p>System (interchangeably called “Change”), provided that such Change falls within the general scope of the System, does not constitute unrelated work, and is technically practicable, taking into account both the state of advancement of the System and the technical compatibility of the Change envisaged with the nature of the System as originally specified in the Contract.</p>
	<p>A Change may involve, but is not restricted to, the substitution of updated Information Technologies and related Services in accordance with GCC Clause 23 (Product Upgrades).</p>
	<p>39.1.2 The Supplier may from time to time during its performance of the Contract propose to the Purchaser (with a copy to the Project Manager) any Change that the Supplier considers necessary or desirable to improve the quality or efficiency of the System. The Purchaser may at its discretion approve or reject any Change proposed by the Supplier.</p> <p>39.1.3 Notwithstanding GCC Clauses 39.1.1 and 39.1.2, no change made necessary because of any default of the Supplier in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Achieving Operational Acceptance.</p> <p>39.1.4 The procedure on how to proceed with and execute Changes is specified in GCC Clauses 39.2 and 39.3, and further details and sample forms are provided in the Sample Forms Section in the Bidding Documents.</p> <p>39.1.5 Moreover, the Purchaser and Supplier will agree, during development of the Project Plan, to a date prior to the scheduled date for Operational Acceptance, after which the Technical Requirements for the System shall be “frozen.” Any Change initiated after this time will be dealt with after Operational Acceptance.</p> <p>39.2 Changes Originating from Purchaser</p>

	<p>39.2.1 If the Purchaser proposes a Change pursuant to GCC Clauses 39.1.1, it shall send to the Supplier a “Request for Change Proposal,” requiring the Supplier to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following:</p> <ul style="list-style-type: none"> (a) brief description of the Change; (b) impact on the Time for Achieving Operational Acceptance; (c) detailed estimated cost of the Change; (d) effect on Functional Guarantees (if any); (e) effect on any other provisions of the Contract. <p>39.2.2 Prior to preparing and submitting the “Change Proposal,” the Supplier shall submit to the Project Manager an “Change Estimate Proposal,” which shall be an estimate of the cost of preparing the Change Proposal, plus a first approximation of the suggested approach and cost for implementing the changes. Upon receipt of the Supplier’s Change Estimate Proposal, the Purchaser shall do one of the following:</p> <ul style="list-style-type: none"> (a) accept the Supplier’s estimate with instructions to the Supplier to proceed with the preparation of the Change Proposal; (b) advise the Supplier of any part of its Change Estimate Proposal that is unacceptable and request the Supplier to review its estimate; (c) advise the Supplier that the Purchaser does not intend to proceed with the Change. <p>39.2.3 Upon receipt of the Purchaser’s instruction to proceed under GCC Clause 39.2.2 (a), the Supplier shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GCC Clause 39.2.1. The Supplier, at its discretion, may specify a validity period for the Change Proposal, after which if the Purchaser and Supplier has not reached agreement in accordance</p>
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	<p>with GCC Clause 39.2.6, then GCC Clause 39.2.7 shall apply.</p> <p>39.2.4 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If the nature of the Change is such that the Contract rates and prices are inequitable, the parties to the Contract shall agree on other specific rates to be used for valuing the Change.</p> <p>39.2.5 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate impact of compliance with the Request for Change Proposal and with all other Change Orders that have already become binding upon the Supplier under this GCC Clause 39 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen (15) percent, the Supplier may give a written notice of objection to this Request for Change Proposal prior to furnishing the Change Proposal. If the Purchaser accepts the Supplier's objection, the Purchaser shall withdraw the proposed Change and shall notify the Supplier in writing of its acceptance.</p> <p>The Supplier's failure to so object to a Request for Change Proposal shall neither affect its right to object to any subsequent requested Changes or Change Orders, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Supplier represents.</p> <p>39.2.6 Upon receipt of the Change Proposal, the Purchaser and the Supplier shall mutually agree upon all matters contained in the Change Proposal. Within fourteen (14) days after such agreement, the Purchaser shall, if it intends to proceed with the Change, issue the Supplier a Change Order. If the Purchaser is unable to reach a decision within fourteen (14) days, it shall notify the Supplier with details of when the Supplier can expect a decision. If the Purchaser decides not to proceed with the Change for whatever reason, it shall, within the said</p>
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	<p>period of fourteen (14) days, notify the Supplier accordingly. Under such circumstances, the Supplier shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Supplier in its Change Estimate Proposal submitted in accordance with GCC Clause 39.2.2.</p> <p>39.2.7 If the Purchaser and the Supplier cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Achieving Operational Acceptance, or any other matters identified in the Change Proposal, the Change will not be implemented. However, this provision does not limit the rights of either party under GCC Clause 6 (Settlement of Disputes).</p> <p>39.3 Changes Originating from Supplier</p> <p>If the Supplier proposes a Change pursuant to GCC Clause 39.1.2, the Supplier shall submit to the Project Manager a written “Application for Change Proposal,” giving reasons for the proposed Change and including the information specified in GCC Clause 39.2.1. Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GCC Clauses 39.2.6 and 39.2.7. However, should the Purchaser choose not to proceed or the Purchaser and the Supplier cannot come to agreement on the change during any validity period that the Supplier may specify in its Application for Change Proposal, the Supplier shall not be entitled to recover the costs of preparing the Application for Change Proposal, unless subject to an agreement between the Purchaser and the Supplier to the contrary.</p>
40. Extension of Time for Achieving Operational Acceptance	<p>40.1 The time(s) for achieving Operational Acceptance specified in the Schedule of Implementation shall be extended if the Supplier is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:</p>
	<p>(a) any Change in the System as provided in GCC Clause 39 (Change in the Information System);</p> <p>(b) any occurrence of Force Majeure as provided in GCC</p>

	<p>Clause 38 (Force Majeure);</p> <p>(c) default of the Purchaser; or</p> <p>(d) any other matter specifically mentioned in the Contract;</p> <p>by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Supplier.</p> <p>40.2 Except where otherwise specifically provided in the Contract, the Supplier shall submit to the Project Manager a notice of a claim for an extension of the time for achieving Operational Acceptance, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, the Purchaser and the Supplier shall agree upon the period of such extension. In the event that the Supplier does not accept the Purchaser's estimate of a fair and reasonable time extension, the Supplier shall be entitled to refer the matter to the provisions for the Settlement of Disputes pursuant to GCC Clause 6.</p> <p>40.3 The Supplier shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.</p>
41. Termination	41.1 Termination for Purchaser's Convenience
	<p>41.1.1 The Purchaser may at any time terminate the Contract for any reason by giving the Supplier a notice of termination that refers to this GCC Clause 41.1.</p> <p>41.1.2 Upon receipt of the notice of termination under GCC Clause 41.1.1, the Supplier shall either as soon as reasonably practical or upon the date specified in the notice of termination</p> <p>(a) cease all further work, except for such work as the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and</p>

	<p>safe condition;</p> <p>(b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.1.2 (d) (ii) below;</p> <p>(c) remove all Supplier's Equipment from the site, repatriate the Supplier's and its Subcontractors' personnel from the site, remove from the site any wreckage, rubbish, and debris of any kind;</p> <p>(d) in addition, the Supplier, subject to the payment specified in GCC Clause 41.1.3, shall</p> <p>(i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;</p> <p>(ii) to the extent legally possible, assign to the Purchaser all right, title, and benefit of the Supplier to the System, or Subsystem, as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;</p> <p>(iii) deliver to the Purchaser all nonproprietary drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.</p> <p>41.1.3 In the event of termination of the Contract under GCC Clause 41.1.1, the Purchaser shall pay to the Supplier the following amounts:</p> <p>(a) the Contract Price, properly attributable to the parts of the System executed by the Supplier as of the date of termination;</p> <p>(b) the costs reasonably incurred by the Supplier in the removal of the Supplier's Equipment from the site and in the repatriation of the Supplier's and its Subcontractors' personnel;</p> <p>(c) any amount to be paid by the Supplier to its Subcontractors in connection with the termination of any subcontracts, including any</p>
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	<p>cancellation charges;</p> <p>(d) costs incurred by the Supplier in protecting the System and leaving the site in a clean and safe condition pursuant to GCC Clause 41.1.2 (a); and</p> <p>(e) the cost of satisfying all other obligations, commitments, and claims that the Supplier may in good faith have undertaken with third parties in connection with the Contract and that are not covered by GCC Clauses 41.1.3 (a) through (d) above.</p> <p>41.2 Termination for Supplier's Default</p> <p>41.2.1 The Purchaser, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefore to the Supplier, referring to this GCC Clause 41.2:</p> <p>(a) if the Supplier becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Supplier is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Supplier takes or suffers any other analogous action in consequence of debt;</p> <p>(b) if the Supplier assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 42 (Assignment); or</p> <p>(c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, including but not limited to willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the owner to offer, the hardware, software, or materials provided under this Contract.</p>
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	<p>For the purposes of this Clause:</p> <ul style="list-style-type: none"> (i) “corrupt practice”¹ is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party; (ii) “fraudulent practice”² is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation; (iii) “collusive practice”³ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party; (iv) “coercive practice”⁴ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party; (v) “obstructive practice” is <ul style="list-style-type: none"> (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating
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¹ “Another party” refers to a public official acting in relation to the procurement process or contract execution]. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

² A “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution.

³ “Parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

⁴ A “party” refers to a participant in the procurement process or contract execution.

	<p>any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or</p> <p>(bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under Sub-Clause 9.8.</p> <p>41.2.2 If the Supplier:</p> <p>(a) has abandoned or repudiated the Contract;</p> <p>(b) has without valid reason failed to commence work on the System promptly;</p> <p>(c) persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause;</p> <p>(d) refuses or is unable to provide sufficient Materials, Services, or labor to execute and complete the System in the manner specified in the Agreed and Finalized Project Plan furnished under GCC Clause 19 at rates of progress that give reasonable assurance to the Purchaser that the Supplier can attain Operational Acceptance of the System by the Time for Achieving Operational Acceptance as extended;</p> <p>then the Purchaser may, without prejudice to any other rights it may possess under the Contract, give a notice to the Supplier stating the nature of the default and requiring the Supplier to remedy the same. If the Supplier fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Purchaser may terminate the Contract forthwith by giving a notice of termination to the Supplier that refers to this GCC Clause 41.2.</p> <p>41.2.3 Upon receipt of the notice of termination under GCC Clauses 41.2.1 or 41.2.2, the Supplier shall, either immediately or upon such date as is specified in the notice of termination:</p> <p>(a) cease all further work, except for such work as</p>
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	<p>the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the System already executed or any work required to leave the site in a clean and safe condition;</p> <p>(b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.2.3 (d) below;</p> <p>(c) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;</p> <p>(d) to the extent legally possible, assign to the Purchaser all right, title and benefit of the Supplier to the System or Subsystems as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;</p> <p>(e) deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as at the date of termination in connection with the System.</p> <p>41.2.4 The Purchaser may enter upon the site, expel the Supplier, and complete the System itself or by employing any third party. Upon completion of the System or at such earlier date as the Purchaser thinks appropriate, the Purchaser shall give notice to the Supplier that such Supplier's Equipment will be returned to the Supplier at or near the site and shall return such Supplier's Equipment to the Supplier in accordance with such notice. The Supplier shall thereafter without delay and at its cost remove or arrange removal of the same from the site.</p> <p>41.2.5 Subject to GCC Clause 41.2.6, the Supplier shall be entitled to be paid the Contract Price attributable to the portion of the System executed as at the date of termination and the costs, if any, incurred in protecting the System and in leaving the site in a clean and safe condition pursuant to GCC Clause 41.2.3 (a). Any sums due the Purchaser from the Supplier accruing prior to the date of termination shall be deducted from the amount to be paid to the</p>
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	<p>Supplier under this Contract.</p> <p>41.2.6 If the Purchaser completes the System, the cost of completing the System by the Purchaser shall be determined. If the sum that the Supplier is entitled to be paid, pursuant to GCC Clause 41.2.5, plus the reasonable costs incurred by the Purchaser in completing the System, exceeds the Contract Price, the Supplier shall be liable for such excess. If such excess is greater than the sums due the Supplier under GCC Clause 41.2.5, the Supplier shall pay the balance to the Purchaser, and if such excess is less than the sums due the Supplier under GCC Clause 41.2.5, the Purchaser shall pay the balance to the Supplier. The Purchaser and the Supplier shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.</p> <p>41.3 Termination by Supplier</p> <p>41.3.1 If:</p> <p>(a) the Purchaser has failed to pay the Supplier any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause pursuant to the SCC, or commits a substantial breach of the Contract, the Supplier may give a notice to the Purchaser that requires payment of such sum, with interest on this sum as stipulated in GCC Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Purchaser to remedy the same, as the case may be. If the Purchaser fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Supplier's notice; or</p> <p>(b) the Supplier is unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser, including but not limited to the Purchaser's failure to provide possession of or access to the site or other areas</p>
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	<p>or failure to obtain any governmental permit necessary for the execution and/or completion of the System;</p> <p>then the Supplier may give a notice to the Purchaser of such events, and if the Purchaser has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Supplier is still unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser within twenty-eight (28) days of the said notice, the Supplier may by a further notice to the Purchaser referring to this GCC Clause 41.3.1, forthwith terminate the Contract.</p> <p>41.3.2 The Supplier may terminate the Contract immediately by giving a notice to the Purchaser to that effect, referring to this GCC Clause 41.3.2, if the Purchaser becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Purchaser takes or suffers any other analogous action in consequence of debt.</p> <p>41.3.3 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, then the Supplier shall immediately:</p> <ul style="list-style-type: none"> (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition; (b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to Clause 41.3.3 (d) (ii); (c) remove all Supplier's Equipment from the site and repatriate the Supplier's and its Subcontractor's personnel from the site.
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	<p>(d) In addition, the Supplier, subject to the payment specified in GCC Clause 41.3.4, shall:</p> <ul style="list-style-type: none"> (i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination; (ii) to the extent legally possible, assign to the Purchaser all right, title, and benefit of the Supplier to the System, or Subsystems, as of the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors; (iii) to the extent legally possible, deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System. <p>41.3.4 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, the Purchaser shall pay to the Supplier all payments specified in GCC Clause 41.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Supplier arising out of, in connection with, or in consequence of such termination.</p> <p>41.3.5 Termination by the Supplier pursuant to this GCC Clause 41.3 is without prejudice to any other rights or remedies of the Supplier that may be exercised in lieu of or in addition to rights conferred by GCC Clause 41.3.</p> <p>41.4 In this GCC Clause 41, the expression “portion of the System executed” shall include all work executed, Services provided, and all Information Technologies, or other Goods acquired (or subject to a legally binding obligation to purchase) by the Supplier and used or intended to be used for the purpose of the System, up to and including the date of termination.</p> <p>41.5 In this GCC Clause 41, in calculating any monies due from the Purchaser to the Supplier, account shall be taken of any sum previously paid by the Purchaser to the Supplier under the Contract, including any advance payment paid pursuant</p>
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	to the SCC.
42. Assignment	42.1 Neither the Purchaser nor the Supplier shall, without the express prior written consent of the other, assign to any third party the Contract or any part thereof, or any right, benefit, obligation, or interest therein or thereunder, except that the Supplier shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.

SECTION V. SPECIAL CONDITIONS OF CONTRACT (SCC)

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Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions of the SCC shall prevail over those in the General Conditions of Contract. For the purposes of clarity, any referenced GCC clause numbers are indicated in the left column of the SCC.

A. CONTRACT AND INTERPRETATION

1. Definitions (GCC Clause 1)

GCC 1.1 (a) (ix)	The applicable edition of the Procurement Guidelines is dated: January 2011 and Revised July 2014
GCC 1.1 (b) (i)	The Purchaser is: Himachal Pradesh Road & Other Infrastructure Development Corporation
GCC 1.1 (b) (ii)	The Project Manager is “Nodal Officer (IT) HPPWD”
GCC 1.1 (e) (i)	The Purchaser’s Country is: India
GCC 1.1 (e) (iii)	The Project Site(s) is/are: Office of Himachal Pradesh Road & Other Infrastructure Development Corporation and All the PWD Offices in State of Himachal Pradesh including HO, Zone, Circles, Divisions, Sub Divisions, Secretary Office & PWD Minister Office
GCC 1.1 (e) (x)	<p>Contract Period:</p> <p style="padding-left: 40px;">a) Development Phase- 1 Year</p> <p style="padding-left: 40px;">b) Service Delivery Phase/Managed IT Phase – 3 Years from the date of System Go-Live sign off, inclusive of three years of the warranty period.</p> <p>“The Contract shall continue in force until the Information System and all the Services as per scope have been provided unless the Contract is terminated earlier in accordance with the terms set out in the Contract.”</p>
GCC 1.1. (e) (xii)	The Post-Warranty Services Period is 2 years starting with the completion of the Warranty Period.

2. Contract Documents (GCC Clause 2)

GCC 2	“There are no Special Conditions of Contract applicable to GCC Clause 2.”
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3. Interpretation (GCC Clause 3)

GCC 3.1.1	The Contract's governing language is English
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4. Notices (GCC Clause 4)

GCC 4.3	<p>Address of the Project Manager:</p> <p>Chief Engineer-cum-Project Director, HPRIDC HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla – 171 002 Tel: 0177 – 2627602, 2620663 Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p>
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5. Governing Law (GCC Clause 5)

GCC 5.1	The Contract shall be interpreted in accordance with the laws of Indian Union
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6. Settlement of Disputes (GCC Clause 6)

GCC 6.1.4	<p>Disputes shall be settled by arbitration in accordance with the following provisions:</p> <p>Selection of Arbitrators in case of Indian Supplier: A dispute with an Indian Supplier shall be finally settled by arbitration in accordance with the Arbitration & Conciliation Act, 1996, or any statutory amendment thereof. The arbitral tribunal shall consist of 3 (Three) Arbitrators, one each to be appointed by the Employer and the Contractor. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding Arbitrator. In case of failure of the two Arbitrators, appointed by the parties to reach upon a consensus with a period of 30 days from the appointment of the arbitrator appointed in the last, the Presiding arbitrator shall be appointed by the Appointing Authority i.e. Govt. of Himachal Pradesh. For the purpose of this sub-Clause, the term “Indian Supplier” means a Supplier who is registered in</p>
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	India and is a juridical firm created under Indian law as well as a joint venture between such a Supplier and a Foreign Supplier.
GCC 6.2.3	Foreign Supplier: In case of dispute with a Foreign Supplier, the dispute shall be finally settled in accordance with the provisions of United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules. For the purpose of this Subclause, the term “Foreign Supplier” means a Supplier who is not registered in India and is not a juridical person created under Indian Law.

B. SUBJECT MATTER OF CONTRACT

7. Scope of the System (GCC Clause 7)

GCC 7.3	<p>The Supplier’s obligations under the Contract will also include the recurrent cost items, as identified in the Recurrent Cost tables in the Supplier’s Bid</p> <p>The Supplier agrees to supply spare parts and technical services required for the operation and maintenance of the System, as stated, for a period of Three (3) years beginning with the Go-Live of system. Moreover, the price of such spare parts and technical services shall be those specified in the price schedule submitted by the Supplier as part of its bid. These prices shall include the purchase price for such spare parts, technical services and all other costs and expenses (including the Supplier’s fees).</p>
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8. Time for Commencement and Operational Acceptance (GCC Clause 8)

GCC 8.1	The Supplier shall commence work on the System within Fifteen (15) days from the Effective Date of the Contract.
GCC 8.2	Operational Acceptance will occur on or before: One year of effective date of contract (As per the implementation schedule)

9. Supplier’s Responsibilities (GCC Clause 9)

GCC 9.9	<p>The Supplier shall have the following additional responsibilities: The Supplier</p> <p>(i) shall keep accurate and systematic accounts and records in respect of the Services rendered, in accordance with internationally accepted accounting principles and in such form</p>
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	<p>and detail as will clearly identify all relevant time changes and costs, and the bases thereof, and</p> <p>(ii) shall periodically permit the Purchaser or its designated representative, up to two years from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Purchaser, if so required by the Purchaser as the case may be</p>
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10. Purchaser's Responsibilities (GCC Clause 10)

GCC 10.12	The Purchaser shall have the following additional responsibilities : None
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C. PAYMENT

11. Contract Price (GCC Clause 11)

GCC 11.2 (b)	Adjustments to the Contract Price shall be as follows: None
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12. Terms of Payment (GCC Clause 12)

GCC 12.1

Subject to the provisions of GCC Clause 12 (Terms of Payment), the Purchaser shall pay the Contract Price to the Supplier according to the categories and in the manner specified below.

Sr. No.	Payment Milestone	Payment Formula linked to Pricing Form
Scope of Design, Development & Implementation phase		
1..	Advance Payment against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2.	5 % of Grand Total of Grand Summary Cost Table
2.	SRS sign-off (including Use cases, ER Diagram, Data Flow diagram, Alerts, Notifications, Dashboards,	5 % of Grand Total of Grand Summary Cost Table

		Output Reports, Interface Design)	
	3.	<p>1.System User Acceptance Testing (UAT)</p> <p>2.Submission & Approval of Following Reports/Documents</p> <ul style="list-style-type: none"> • User Acceptance Testing (UAT) Report and Sign off on Report • Application Architecture/design 	10 % of Grand Total of Grand Summary Cost Table
	4.	<p>1.Hardware Delivery, Installation (DR) and Operational Acceptance</p> <p>2.Submission & Approval of Following Reports/Documents</p> <ul style="list-style-type: none"> • Security Architecture/IT policy • Network connectivity solution Architecture 	5 % of Grand Total of Grand Summary Cost Table
	5.	Data digitalization/ Migration Sign-off	10 % of Grand Total of Grand Summary Cost Table
	6.	<p>1. System Operational Acceptance Testing (OAT)</p> <p>2. Submission & Approval of Following Reports/Documents</p> <ul style="list-style-type: none"> • Operational Acceptance Report and Sign-off on Reports • Procedural Design, Low Level Design & High level design • Domain Migration Report 	10 % of Grand Total of Grand Summary Cost Table

	7.	Training and change management Execution Report and Sign off	10 % of Grand Total of Grand Summary Cost Table
	8.	1. System Go-Live 2. Submission & Approval of Following Reports/Documents <ul style="list-style-type: none"> • Roll-out/Go-live Report & Sign off • Administration/technical Manual • User Manual • Installation Manual 	15 % of Grand Total of Grand Summary Cost Table
	Managed IT/Service Delivery Phase		
	9.	Twelve quarterly instalments over three (3) years from the “Go-Live” date depending upon the quarterly performance level assessed on the basis of SLAs defined in this Bidding Document (Quarterly payment will be made after the submission & approval of quarterly progress reports specified in SCC of GCC 19.5)	30 % of Grand Total of Grand Summary Cost Table
GCC 12.3	The Purchaser shall pay to the Supplier interest @ 8% per annum on the delayed payments		
GCC 12.4	For Goods and Services supplied locally, the Purchaser will pay the Supplier in Indian Rupees		
GCC 12.5	Payment for Goods supplied from outside the Purchaser’s Country shall only be in the form of Direct Transfer/RTGS/ Letter of credit/Cheque payments		

13. Securities (GCC Clause 13)

GCC 13.2.1	The Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security in the amount and currency of the Advance Payment specified in SCC for
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Himachal Pradesh Road & Other Infrastructure Development Corporation

	GCC Clause 12.1 above and in the currency of INR/USD or in any freely convertible currency and will be valid until the System is Operationally Accepted.
GCC 13.3.1	Selected Bidder needs to submit three separate Performance Security, denominated in the currency of the contract for an amount equal to 3%, 3% and 4% of the contract price respectively. The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period.
GCC 13.3.4	Performance Security will be returned to the selected bidder in following manner: <ol style="list-style-type: none"> 1. Performance Security of 3% will be returned to selected bidder after successful completion of 1st year O & M. 2. Performance Security of 3% will be returned to selected bidder after successful completion of 2nd year O & M. 3. Performance Security of 4% will be returned to selected bidder after successful completion of 3rd year O & M and as per clause GCC 13.3.3.

14. Taxes and Duties (GCC Clause 14)

GCC 14	<p>Substitute in entirety with the following:</p> <ol style="list-style-type: none"> i. For Goods or Services supplied from outside the Purchaser's country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country. Any duties, such as importation or customs duties, and taxes and other levies, payable in the Purchaser's country for the supply of Goods and Services from outside the Purchaser's country shall also be the responsibility of the Supplier and these duties or taxes shall be part of the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to ii. For Goods or Services supplied locally, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods or Services to the Purchaser. The taxes or duties, such as value-added or sales tax or stamp duty as applicable, on the invoices in the Purchaser's country shall be the responsibility of Supplier and shall be included in the Contract Price in Article 2 of the
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	<p>Contract Agreement and the Price Schedule it refers to.</p> <p>iii. Bidders may like to ascertain availability of excise/custom duty exemption benefits available in India to the contracts financed under World Bank loan/credits. The bidders are solely responsible for obtaining such benefits which they have considered in their bid and in case of failure to receive such benefits for reasons whatsoever, the employer will not compensate the bidder (Contractor). Where the bidder has quoted taking into account such benefits, he must give all information required for issue of certificates in terms of such notifications as per form attached to the Sample Forms. To the extent the employer determines the quantity indicated therein are reasonable keeping in view the bill of quantities, construction programme and methodology, the certificates will be issued and no subsequent changes will be permitted. Any delay in procurement of the information technology/materials/goods as a result of the above shall not be entertained as a reason for granting any extension of time</p> <p>Further, if any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.</p> <p>iv. For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the Purchaser's Country (also called "Tax" in this GCC Clause 14.4). If a new Tax is introduced in the course of the performance of the Contract, which was or will be assessed on the Supplier, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to the Contract Price, as the case may be.</p>
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D. INTELLECTUAL PROPERTY

15. Copyright (GCC Clause 15)

GCC 15.3	The Purchaser may assign, license, or otherwise voluntarily transfer its contractual rights to use the Standard Software or elements of the
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	<p>Standard Software, without the Supplier's prior written consent, under the following circumstances:</p> <ul style="list-style-type: none"> a) To a third party to assist PWD/ RIDC, HP in making a transition from its existing system (s) to the new system (s) b) For use of any department of state Govt./ Govt. of India in similar initiation after approval by competent authority c) if directed, in writing, by the Government of India or any statutory agency to comply with any audit, legal or special investigative proceedings that may arise
GCC 15.4	<p>The Purchaser's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software are as follows</p> <ul style="list-style-type: none"> a) The Purchaser will hold the Intellectual Property Right on the Source code for all software system and sub system <p>The Purchaser has the right for</p> <ul style="list-style-type: none"> a. Duplicating and using the software on different equipment, such as back-ups, additional computers, replacements, upgraded units, etc. b. Transferring the license or sublicensing the software for other entities to use, modify, develop, commercialize etc. c. Sharing proprietary information regarding the Custom Software with various parties b) The Supplier's rights in relation to the Custom Software is limited to use in order to support the Purchaser c) The Supplier's rights in relation to the Custom Software can be extended to commercial exploitation by re-licensing to third party customers by the written permission of the Purchaser d) The Supplier will be required to pay royalties to the Purchaser when it licenses third parties to use the Custom Software as decided by mutual consultation with the Purchaser
GCC 15.5	No software escrow contract is required for the execution of the Contract

16. Software License Agreements (GCC Clause 16)

GCC 16.1 (a) (iii)	The Standard Software license shall be valid throughout the territory of the Purchaser's Country
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GCC 16.1 (a) (iv)	Use of the software shall be subject to the following additional restrictions: None
GCC 16.1 (b) (ii)	The Software license shall permit the Software to be used or copied for use or transferred to a replacement computer provided the replacement computer falls within approximately the same class of machine and maintains approximately the same number of users, if a multi-user machine
GCC 16.1 (b) (vi)	The Software license shall permit the Software to be disclosed to and reproduced for use (including a valid sublicense) by support service suppliers or their subcontractors, exclusively for such suppliers or subcontractors in the performance of their support service contracts subject to the same restrictions set forth in this Contract
GCC 16.1 (b) (vii)	In addition to the persons specified in GCC Clause 16.1 (b) (vi), the Software may be disclosed to, and reproduced for use by, any department, stakeholders and other institutional authorities recognized by the Purchaser subject to the same restrictions as are set forth in this Contract.
GCC 16.2	<p>The Supplier's right to audit the Standard Software will be subject to the following terms:</p> <ul style="list-style-type: none"> a) The Purchaser will make available to the Supplier on receiving a written request and accurate and up-to-date records of the number and location of copies, the number of authorized users, or any other relevant data required to demonstrate use of the Standard Software as per the license agreement. b) As on-site audits are acceptable, the Purchaser would specify from time to time, conditions on the duration and number of audits per year; the hours or days during which audits may be conducted; the categories of software subject to audit; the procedures for access to Purchaser's hardware or software; the number and affiliation of individual auditors; the timing and terms of advance notice; the indemnity by Supplier for losses, liabilities, and costs incurred by the Purchaser as a direct result of the audit

17. Confidential Information (GCC Clause 17)

GCC 17.1	No information including that classified as 'confidential' shall be shared
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	by the supplier without prior written permission from the purchaser.
GCC 17.7	The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for the period specified in the GCC.

E. SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM

18. Representatives (GCC Clause 18)

GCC 18.1	The Purchaser's Project Manager shall have the following additional powers and / or limitations to his or her authority to represent the Purchaser in matters relating to the Contract <i>"no additional powers or limitations."</i>
GCC 18.2.2	The Supplier's Representative shall have the following additional powers and / or limitations to his or her authority to represent the Supplier in matters relating to the Contract <i>"no additional powers or limitations."]</i> .

19. Project Plan (GCC Clause 19)

GCC 19.1	<p>Chapters in the Project Plan shall address the following subject:</p> <ul style="list-style-type: none"> a) Project Organization, implementation and Management Plan; b) Procurement Plan c) Delivery and Installation Plan d) Training Plan e) Quality Assurance Plan f) Risk Management Plan g) Communication Plan h) Change Management Plan i) Network Connectivity requirement Report j) Pre-commissioning and Operational Acceptance Testing Plan k) Warranty Service Plan l) Task, Time, and Resource Schedules
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	<p>m) Technical Support Plan</p> <p>n) Exist management Plan</p> <p>o) Data digitization plan</p> <p><i>Further details regarding the required contents of each of the above chapters are contained in the Technical Requirements, Section VI.</i></p>
GCC 19.2	<p>Within 10 days from the Effective Date of the Contract, the Supplier shall present a Project Plan to the Purchaser. The Purchaser shall, within 15 days of receipt of the Project Plan, notify the Supplier of any respects in which it considers that the Project Plan does not adequately ensure that the proposed program of work, proposed methods, and/or proposed Information Technologies will satisfy the Technical Requirements and/or the SCC (in this Clause 19.2 called “non-conformities” below). The Supplier shall, within 15 days of receipt of such notification, correct the Project Plan and re-submit to the Purchaser. The Purchaser shall, within 10 days of resubmission of the Project Plan, notify the Supplier of any remaining non-conformities. This procedure shall be repeated as necessary until the Project Plan is free from non-conformities. When the Project Plan is free from non-conformities, the Purchaser shall provide confirmation in writing to the Supplier. This approved Project Plan (“the Agreed and Finalized Project Plan”) shall be contractually binding on the Purchaser and the Supplier</p>
GCC 19.5	<p>The Supplier shall submit to the Purchaser the following reports:</p> <p>a) Monthly (Quarterly) progress reports, summarizing:</p> <ul style="list-style-type: none"> (i) results accomplished during the prior period; (ii) cumulative deviations to date from schedule of progress milestones as specified in the Agreed and Finalized Project Plan; (iii) corrective actions to be taken to return to planned schedule of progress; proposed revisions to planned schedule; (iv) other issues and outstanding problems; proposed actions to be taken; (v) resources that the Supplier expects to be provided by the Purchaser and/or actions to be taken by the Purchaser in the next reporting period; (vi) other issues or potential problems the Supplier foresees that could impact on project progress and/or effectiveness.

	<p>(vi) Plan for the Next Month</p> <p>b) inspection and quality assurance reports</p> <p>c) training participants test results</p> <p>d) monthly log of service calls and problem resolutions</p> <p>e) Weekly report on raising the issues/concern for faster implementation as per scope of the project</p>
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20. Subcontracting (GCC Clause 20)

GCC 20	<p>Details and roles of “Sub-Contractors”</p> <p>1. The bidder shall not propose sub-contracting for Application Components.</p> <p>The following services MUST NOT be subcontracted:</p> <p>i. Procurement of Hardware/System Software</p> <p>ii. Training & Change Management.</p> <p>iii. Data Digitization & Migration.</p> <p>Any Appointment/ changes in subcontractors would require explicit approval from Purchaser.</p>
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21. Design and Engineering (GCC Clause 21)

GCC 21.2	“As specified in the GCC”
GCC 21.3.1	<p>The Supplier shall prepare and furnish to the Project Manager the following documents for which the Supplier must obtain the Project Manager’s approval before proceeding with work on the System or any Subsystem covered by the documents</p> <p>Key Deliverable – I (Requirement Gathering)</p> <p>1. Detailed Project Plan</p> <p>2. Procurement Schedule</p> <p>3. Acceptance Criteria</p>

	<ol style="list-style-type: none"> 4. Updated Risk Management Plan 5. Communication Strategy 6. Change Management Plan 7. Change Management Workshop(s) Execution Report – 1 8. Detailed Business Blueprint (including business scenarios, business processes and process steps are organized in a hierarchical structure) 9. System Requirement Specification Document (including Use cases, ER Diagram, Data Flow diagram, Alerts, Notifications, Dashboards, Output Reports) 10. Gap Fit Document 11. Network Connectivity requirement Report 12. Data digitization plan 13. Procedural Design, Low Level Design & High level design 14. Data Design & Data Modelling <p>Note : In Case of COTS solution only technical document is required</p> <p>Key Deliverable – II (Solution Design)</p> <ol style="list-style-type: none"> 15. Application Architecture 16. Security Architecture 17. Interface Design 18. Network connectivity solution Architecture <p>Key Deliverable – III (DR site Readiness)</p> <ol style="list-style-type: none"> 19. Installation Report - DR equipment 20. Installation Report - System Software(s) 21. Domain Migration Report 22. Security Policy
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	<p>23. Security Policy compliance Report</p> <p>Key Deliverable – IV (Pre-Commissioning Testing)</p> <p>24. Test Plan Report</p> <p>25. Test Cases Report</p> <p>26. Change Management Workshop(s) Execution Report – 2</p> <p>27. Pre-commissioning Test issue sheet</p> <p>28. Sign-off on Reports</p> <p>29. Sign-off on Pre-commissioning Test</p> <p>Key Deliverable – V (User Training)</p> <p>30. Training Plan</p> <p>31. Training Execution Reports</p> <p>32. CBT Application sign-off</p> <p>33. CBT Application Manual</p> <p>Key Deliverable – VI (Operational Acceptance)</p> <p>34. Installation Roll-out Plan</p> <p>35. Data Migration Strategy</p> <p>36. Data Migration Sign-off</p> <p>37. Operational Acceptance Plan</p> <p>38. Administration/ technical Manual</p> <p>39. User Manual</p> <p>40. Installation Manual</p> <p>Any other documents not mentioned here but necessary for concluding the documentation requirement of scope definition of the Bid Document in Section VI</p>
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22. Procurement, Delivery, and Transport (GCC Clause 22)

GCC 22.4.3	The Supplier shall be free to use transportation through carriers registered in any eligible country and shall obtain insurance from any eligible source country
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23. Product Upgrades (GCC Clause 23)

GCC 23.4	With all new versions, releases, and updates to all Standard Software during the Warranty Period, for free, as specified in the GCC
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24. Implementation, Installation, and Other Services (GCC Clause 24)

GCC 24	Supplier is required to render services as defined in the Section VI: Technical Requirements of this Bid Document.
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25. Inspections and Tests (GCC Clause 25)

GCC 25	<p>Inspections and tests shall be conducted by the Supplier as defined in Section VI: Technical requirement of this bid document.</p> <p>Additionally the Supplier is also required to provide third party testing certificates for the application developed.</p> <p>Supplier to co-ordinate with a Third party testing agency via the Purchaser.</p> <p>Supplier needs to get the approval of the Purchaser over the appointment of Third Party Testing Agency</p>
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26. Installation of the System (GCC Clause 26)

GCC 26	There are no Special Conditions of Contract applicable to GCC Clause 26
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27. Commissioning and Operational Acceptance (GCC Clause 27)

GCC 27.2.1	Operational Acceptance Testing for the entire system shall be conducted in accordance with Section VI: Technical Requirements (D. Testing and Quality Assurance Requirements) .
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GCC 27.2.2	If the Operational Acceptance Test of the System, or Subsystem(s), cannot be successfully completed within 90 days from the date of Installation or any other period agreed upon by the Purchaser and the Supplier, then GCC Clause 27.3.5 (a) or (b) shall apply, as the circumstances may dictate.
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F. GUARANTEES AND LIABILITIES

28. Operational Acceptance Time Guarantee (GCC Clause 28)

GCC 28.2	Liquidated damages shall be assessed at 0.5% of Contract Price per week of default. The maximum liquidated damages shall be 10 percent of the Contract Price, or equivalent to the cost of the relevant part of the Contract Price, whichever is higher, if the liquidated damages apply to a Subsystem.
GCC 28.3	Liquidated damages shall be assessed at the Pre-commissioning Test (Key Deliverable – IV), Operational Acceptance Test (Key Deliverable – VI) and Agreed Finalized Project Plan.

29. Defect Liability (GCC Clause 29)

GCC 29.1	For Software, exceptions or limitations to the Supplier's warranty obligations shall be as follows: equal to two times the cost incurred by the purchaser on the software
GCC 29.3 (iii)	The Supplier warrants that the items have been released to the market for the specific minimum time periods: No specific minimum time requirements are established for this Contract other than that the Information Technologies must have been previously released to the market.
GCC 29.4	The Warranty Period (N) shall begin from the date of “Go-Live” of the System or Subsystem and extend for 36months.
GCC 29.10	During the Warranty Period, the Supplier must commence the work necessary to remedy defects or damage within 4 hours of notification

30. Functional Guarantees (GCC Clause 30)

GCC 30	"There are no Special Conditions of Contract applicable to GCC Clause
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31. Intellectual Property Rights Warranty (GCC Clause 31)

GCC 31	There are no Special Conditions of Contract applicable to GCC Clause 31.
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32. Intellectual Property Rights Indemnity (GCC Clause 32)

GCC 32	There are no Special Conditions of Contract applicable to GCC Clause 32
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33. Limitation of Liability (GCC Clause 33)

GCC 33	Pursuant to GCC Clause 33, the Limitation of Liability to the SI shall be equivalent to the total value of the contract, including all the components of the project.
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G. RISK DISTRIBUTION

34. Transfer of Ownership (GCC Clause 34)

GCC 34	There are no Special Conditions of Contract applicable to GCC Clause 34.
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35. Care of the System (GCC Clause 35)

GCC 35	There are no Special Conditions of Contract applicable to GCC Clause 35
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36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification (GCC Clause 36)

GCC 36	There are no Special Conditions of Contract applicable to GCC Clause 36.
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37. Insurances (GCC Clause 37)

GCC 37.1 (c)	The Supplier shall obtain Third-Party Liability Insurance as per IRDA prevailing insurance laws in the country. . The Insurance shall cover the period of the complete Contract including the O & M period also.
GCC 37.1 (e)	<p>The Supplier shall obtain Worker's Compensation Insurance in accordance with the statutory requirements of Purchaser's Country requirements. The Insurance shall cover the period from beginning date, relative to the Effective Date of the Contract until expiration date, relative to the Effective Date of the Contract or its completion.</p> <p>The Supplier shall obtain Employer's Liability Insurance in accordance with the statutory requirements of India. The Insurance shall cover the period from beginning date, relative to the Effective Date of the Contract until expiration date, relative to the Effective Date of Contract or its completion.</p>

38. Force Majeure (GCC Clause 38)

GCC 38	There are no Special Conditions of Contract applicable to GCC Clause 38
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H. CHANGE IN CONTRACT ELEMENTS

39. Changes to the System (GCC Clause 39)

GCC 39	There are no Special Conditions of Contract applicable to GCC Clause 39
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40. Extension of Time for Achieving Operational Acceptance (GCC Clause 40)

GCC 40	There are no Special Conditions of Contract applicable to GCC Clause 40.
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41. Termination (GCC Clause 41)

GCC 41	There are no Special Conditions of Contract applicable to GCC Clause 41
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42. Assignment (GCC Clause 42)

GCC 42	There are no Special Conditions of Contract applicable to GCC Clause 42.
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SECTION VI. TECHNICAL REQUIREMENTS (INCLUDING IMPLEMENTATION SCHEDULE)

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Technical Requirements

A. BACKGROUND

0.1 The Purchaser

Himachal Pradesh Road and Other Infrastructure Development Corporation Limited (HPRIDC) is the Purchaser and implementer of the project.

Overview of Organization

Public Works Department (PWD) & State Roads Project (HPRIDC) is a premier department of the Himachal Government responsible for planning, developing, designing, construction, operation and maintenance of roads, bridges and buildings in the State (which constitutes basic infrastructure) with finances being provided by State Government, grant-in-aid / assistance from Central Government or raising loans from Financial Institutions. Over the period under impetus of infrastructure development number of roads, bridges and building projects being undertaken by the Department have been on an increase every year. However, the human resources in the department to handle these projects have been declining every year. The working of department is both elaborate and exhaustive in terms of:

- Project proposals and preparation of estimates
- Arranging approval of project proposal and allocation of funds
- Tendering for award of work to contracting agencies having previous experience of executing similar works and meeting eligibility criteria.
- Execution of works – requiring detailed measurements of executed quantities and preparation of running-account and final bills.
- Payments for executed work and fund flow
- Monitoring and review of work and administering the Contract for work
- Inspection of works by Engineers at various levels, exercise of quality control
- Completion report, monitoring during defects liability period, handing over and maintenance
- Incidental works e.g. Arbitration, audit by Accountant General
- Other administrative works i.e. human resource management

Organization Structure

HPWPD at Government level is headed by Additional Chief Secretary (PWD) to the Govt. of Himachal Pradesh, who holds Administrative responsibility for HPWPD. The Pr. Secretary physically located in the Secretariat and operates as the senior liaison between Government and HPPWD.

HPPWD at Directorate level is headed by a position of the Engineer-in-Chief (EnC) with Headquarters at Shimla. Works and matters regarding Codes, Specifications, Planning & Monitoring, Inter-State Connectivity for the entire State and also the entire establishments of HPPWD are controlled by the Engineer-in-Chief. Engineer-in-Chief is responsible for all technical functions of the HPPWD. Engineer-in-Chief reports to Pr. Secretary (PW) to the Govt. of Himachal Pradesh.

In HPPWD there are one EnC (QC & D), 8 Chief Engineers (CE-cum-Project Director HPRIDC, CE Shimla Zone, CE Mandi Zone, CE Hamirpur Zone, CE Kangra Zone, CE PMGSY, CE (NH) who report to the EnC. Each Chief Engineers are responsible for each unit called 'wing'/zone.

Engineer-in-Chief (Quality & Design) acts as State Level Quality Coordinator for achieving quality parameters of works in the State. Material Testing Laboratories at State level and Zonal Laboratories are under his control. He conducts quality control checks throughout the State. He is the in-charge for Standardization of Designs and Drawings for Buildings, Bridges and Assurance of common Technical Instructions, Manual of Order, Codes & Specifications, Schedule of Rates, Training Programs, Workshops and allied fields etc.

On administrative and functional considerations, the department has been divided into four zones namely Mandi Zone, Hamirpur Zone, Shimla Zone and Kangra Zone at Dharmshala.

Each zone is being headed by Chief Engineers and they are called as Zonal Chief Engineers. Zonal Chief Engineers deals with all works related to PMGSY, State Budget, RIDF, Annual plan, Maintenance, etc. They are responsible for all works relating to DPR / Estimate preparation, tendering, allotment of works, reviewing progress, monitoring, maintenance and expenditure.

The Zones (Buildings, Roads & Bridges), Electrical, Mechanical, Quality Control & Design and National Highways wing have filed offices called circles, which are headed by Superintending Engineers (SE) who reports to the concerned Chief Engineers for the administration and general professional controls of the public works being executed by officers of the department within their circles. There are 14 B & R circle, 2 Electrical circles, 1 Mechanical circle, 1 Arbitration circle, 2 NH circle, 1 Land Acquisition Office, 1 Chief Architect Office. Each circle further divided into number of divisions, each headed by Executive Engineer.

There are 60 R&B divisions, 5 Electrical divisions, 2 Mechanical divisions, 5 NH divisions, 1 Land Acquisition office, 1 Architect Office. Each division further divided into sub-divisions, each headed by Assistant Engineers. There are 284 sub-divisions, 11 field offices viz. Arbitration office, Land Acquisition office, Architect office & Quality Control office.

Complete information about the organization structure is available at www.hppwd.gov.in

Himachal Pradesh Road Infrastructure Development Corporation (HPRIDC)

Himachal Pradesh Road & Other Infrastructure Development Corporation Limited was incorporated in 10.06.1999 under the Companies Act, 1956, and it is wholly owned Company of Government of Himachal Pradesh. The main objective of HPRIDC is;

- Construction of Roads/Bridges/Other infrastructure in the State of Himachal Pradesh
- Maintenance of Roads/Bridges/Other infrastructure in the State of Himachal Pradesh
- To act as a special purpose vehicle for resource mobilization on behalf of the State Government for all infrastructures projects and also discharge obligations on this account on behalf of the State Government from revenue other receipts accruing to the State Government from such projects

HPRIDC is headed by the rank of Chief Engineer and called as Project Director-cum-Chief Engineer HPRIDC.

Complete information about the organization structure is available at <http://hppwd.gov.in/>

Role and Responsibilities of the Department

Public Works Department of Himachal Pradesh is primarily responsible for executing following different types of development works;

- Construction and maintenance of new roads, national highways & bridges
- Construction and maintenance of residential and non-residential buildings
- Construction of roads under centrally sponsored schemes
- Undertaking deposit contribution works relating to different government departments as well as of other local bodies
- Resettlement works due to natural calamities like flood, earth quakes etc.
- Construction of roads under employment guarantee scheme
- Fixation of rent of private premises requisitioned for housing government offices
- Developing parks and gardens in the vicinity of important public buildings and landscaping of grounds
- Providing reservation facility of government rest houses and circuit houses
- To permit construction of approaches on both sides of roads to private individual, other institutions, factories, petrol pumps etc.
- Making provisions for irrigation drains, electricity lines, telephone duct cables etc. Along and across the roads
- Facilitating evacuation of encroachment along the road sides
- Landscaping along road sides
- Construction of flyovers and airstrips
- PWD undertakes two kinds of repairs for maintenance of buildings, viz., ordinary repairs and special repairs. Ordinary repairs are carried out annually and include activities like white washing, color washing, repairs of patches, replacement of small broken parts, painting of doors, etc. Special repairs are less frequent and include repairs to the damaged portions of the building, floors, doors and windows and replacement of water supply and sanitary fittings.

Detailed Functions performed by various wings of HP PWD & HPRIDC is as below;

Road & Bridges Wing

Head of Road & Bridges wing is a Chief Engineer in each of the four Zones who looks after the functions of the wing which are listed below;

- Construction and maintenance of State buildings and their transfer from one department to another
- Construction and maintenance of building on behalf of other departments (except for the Police Department)
- Acquisition of land for construction of buildings and roads

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- Settlement of claims of contractors
- Construction and maintenance of National Highways on behalf of Government of India
- Construction and maintenance of all roads in the State (except those owned by the local bodies within municipal limits), bridges, ferries, tunnels, ropeways, causeways, strategic roads, tactical roads, border area roads etc.
- Toll levied by the State Government in connection with State subjects other than toll levied by the Local bodies
- Follow with Ministry of Railways with regard to development of railways and other facilities provided by the Ministry of Railways
- Construction of roads and bridges with funds made available by State Government from budget allocations, by raising loan from Financial Institutions, by raising Bonds and allocation under Central Road Funds (CRF)
- Construction of Rural links and development of Core networks through village roads under PMGSY sponsored by Ministry of Rural Development, Govt. of India
- Construction and maintenance of buildings of State Government departments with funds provided under budget allocation, grant-in-aid/matching grant from Govt. of India
- Construction and maintenance of National Highways in the State with funds provided by Ministry of Road Transport & Highways, Govt. of India
- All aspects of tendering process right from the pre-qualification stage to the opening of bids and its evaluation

Quality Control & Design Wing

Quality Check & Control Wing is headed by the rank of Engineer-in-Chief. It performs the following functions;

- Quality control wings monitors, manages and tracks all processes relevant to quality assurance along with the entire execution of work.
- Coordinates inspection processing and initiates corrective measures.
- Create and maintain Quality Register
- Capture test results/build test lab at sites
- Constitute National Quality Monitor/ State Quality Monitor
- Track Action & Take report from site
- To do inspection of site after complaint by any stakeholder of project.

National Highway Wing

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Chief Engineer, National Highways with headquarters at Shimla controls the Planning and Execution of works of National Highways traversing through the State.

There are 2 NH circle and 5 NH divisions who reports to CE. The CE-NH reports to E-in-C.

The functions of this wing are as follows;

- Reduce the line of communication between the GoI and state authorities
- Achieve efficiency in implementation by avoiding cumbersome and outdated delegations for administrative and technical sanction which limit the ability of the HPPWD to respond quickly
- Achieve uniform maintenance & construction standard on National Highways

Architecture Wing

Head of Architecture wing is Chief Architect who looks after the activities of the wing listed below;

- Generate Building Designs
- Generate Preliminary Sketch/Concept Note/Master Plan/ Working Drawing/Detail Drawing
- It helps to maintain building designs/drawings and make them available centrally
- It also assists to provide drawings for the estimate preparation
- Generate feasibility report for any project undertaken by PWD or RIDC
- Coordinates with other department (such as electrical, water & sanitation) for Planning and estimate preparation

Arbitration Wing

Superintending Engineer Arbitration Circle Solan deals with the entire arbitration cases of the Department viz.

- Assists the department to address dispute between the parties under the contract.
- Decision making or disposal of arbitration case on the basis of Statement of facts, claims Submitted by contractor and reply received
- Keeps track on the status of all arbitration cases and provide the information to concerned parties
- Acts as neutral party between PWD & Contractor for faster dispute settlement

PMGSY Wing

Chief Engineer (PMGSY) looks after the activities of the wing listed below;

- Planning, Monitoring and day-to-day interaction with Govt. of India (MoRD) for the works of PMGSY and PMGSY (World Bank) funded projects through National Rural Road Development Agency (NRRDA)

Electrical Wing

Superintending Engineer (Electrical) controls the works related to electrical installation, central heating, air conditioning, lifts, fire-fighting, fire alarm system, L.T. Sub-Station, Public Address system and CCTV systems in all Govt. residential & non-residential buildings. There are two electrical circles and 5 electrical divisions.

Mechanical Wing

Superintending Engineer (Mechanical) controls the works related to this wing. SE (Mechanical) reports to CE (Road & Bridges). There are one mechanical circle and two mechanical divisions.

Stakeholders

It is an accepted paradigm that e-Governance interventions should bear its inception from the needs of the stakeholders. As a result, all efforts of streamlining the processes of the department to improve the service standards through IT enablement should take due cognizance of the expectations of the stakeholders. The other dimension of e-Governance is the G2G element where the department aims to benefit from e-Governance by increasing its own efficiency and competency to elevate its service delivery standards. The objective behind introducing e-Governance is to effectively increase efficiency and transparency and concomitantly increases its own internal efficiencies.

The key stakeholders are identified and assessed the importance of key people, groups of people and institutions which are significantly influencing the activities of Public Works Department. The major stakeholders of Public Works Department are categorized as:

1. Employees
2. Government
3. Other Govt. Department and local bodies
4. Private organizations
5. Contractors

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6. Citizens

The following are the expectations of the stakeholders of Public Works Department:

Employees

1. Simplification of procedures, avoidance of duplication of work at various levels.
2. Quick sharing of data and information among each other and higher/lower offices.
3. Simplification and efficiency in the Human Resource management in all respects.
4. Upgrade the current software for greater user friendliness.
5. Strengthen the head count in the service delivery front to avoid backlog and delivery of services in front line offices.
6. Capacity Building of the Key Resource Persons through extensive training on Technical lines and strengthening the institutional capacity building framework.
7. Track record of files and applications from the employees as regard their grievances.
8. Performance incentives for motivation of the Project Team and the Operational Team.
9. Payment of salary, travel expenses, medical bills and other payments in an efficient manner.
10. Provident Fund payments: advances, recoveries and final payments.
11. Group Insurance Scheme: deduction and final payment.
12. Release of Pension and Gratuity.
13. On-line personnel information System.
14. Convenient ways of grievance redressal.

Government

1. Efficient administration of internal offices procedures and functioning in an open and transparent manner.
2. Efficient administration and enforcement of Acts, Rules, Procedures, Regulations and applicable laws.
3. Centralized maintenance of records for administrative convenience
4. Integration with internal department for seamless and quick sharing of information.
5. Optimum use of manpower thus reduction in expenditure on establishment.

6. Tamper proof data, information and records to reduce disputes.
7. Portability and easy accessibility of data and information among various offices.
8. Immediate issue of computerized information to requisitioning offices/officer and the citizens.
9. Seamless information sharing and exchange with other departments.
10. Integration of data with GIS to facilitate easy, effective access, retrieval and planning.
11. Savings in contingency expenditure in terms of exchange of information/correspondence by travel copies.

Contractors

1. Minimum physical interface with the department at various levels and helps in concentration at work site.
2. On-line mechanisms to make the procedures convenient, hassle free and time saving.
3. Provision of correct, updated, reliable data and information.
4. Simplified and convenient procedures for quality service delivery mechanism and payment arrangements.
5. Speedy and quick disposal of correspondence with department at all levels.
6. Speedy adjudication of disputes and disposal of cases.
7. On-time/ faster & convenient methods for releasing of payments.

Citizens

8. Access to all necessary information of PWD with minimum physical interaction.
9. Faster turnaround time of queries.
10. Transparency in the process.
11. Efficiency in execution of works as public is subjected to inconvenience during construction period of works.
12. Early availability of a facility as result of timely completion of work

0.2 Business Objectives of the Purchaser**Project Objective**

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1. Modernization of Existing Infrastructure
2. Increased Work Force Productivity
3. Capacity Building and Sensation of various stake holders
4. Well Informed and faster decision making
5. Streamlining of Road maintenance activities
6. Efficient Monitoring of complex projects
7. Improve in cross functional communications channels and protocols
8. Integration of core activities of Department
9. Implementation of an electronic workflow system to improve internal administrative efficiency and transparency
10. To improve the business processes/functions of department through use of Information Communication and Technology (ICT)
11. To improve productivity and responsiveness of employees and reduce cycle time through introduction of ICT based processed like workflow automation, personnel management, financial management, asset management
12. To improve department operations through continuous monitoring, review framework and provide information support to senior management, thereby improving the overall efficiency and effectiveness at the department

Project Scope

The project scope has been divided into two parts as mentioned below:

- Design, Development & Implementation phase
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- Managed IT/Service Delivery Phase

Scope of Design, Development & Implementation phase

The table below provides details of the project scope during Design, Development and Implementation Phase

S. No	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
1	General	Design, Develop, Customize, Deliver, Install, Configure and provide necessary support software on servers and/or desktops that will cater to the English language requirements of application system.
2	Requirement Gathering & Analysis	The bidder MUST clearly understand the requirements of the stakeholders and propose solution to meet all the specific business functional requirements and ICT (hardware and software) requirements. The bidder MUST carry out assessment of existing IT system and the proposed solution to arrive on Gap analysis. If required, the relevant documents like AS-IS, TO-BE, FRS shall be made available by the Purchaser.
3	Solution Design & Solution Architecture	<p>The selected bidder will develop the following deliverables (Indicative but not exclusive) on the basis of the provided Functional Requirement Specification in the Bidding Document. The SI will Review the AS-IS, TO-BE, FRS prepared by PMC, suggest changes to the Department and finalize the FRS before implementation. The Departments can also add or remove processes/modules/functionalities/items/ sub-items before or during SRS finalization to achieve the overall goal the Project modules. Deliverables to be submitted include:</p> <ul style="list-style-type: none"> - Development of System Requirement Specifications (SRS) using Unified Modelling Language (UML) - Design of Application Architecture - Design of Security Architecture - Design of Workflow with well-defined business rule for the solution - Design of Overall IT Infrastructure - Design of Logical and Deployment Architecture - Design of Integration methodology - Design of Quality Assurance Plan & Methodology - Design of Transition policy and Plan, during and at the end of the tenure of the agreement or

		<p>termination of the agreement</p> <p>The COTS/Packaged Application/Application Development solution should have a proven track record in the Government Sector.</p> <p>Design a portal and the content to be displayed on the portal which will include but not limited to:</p> <ul style="list-style-type: none"> - Information About Departments/ Branches - Services Offered - Citizen Charter - Dashboards - Login Components - Search Engine - Other generic portal features - Design data purging and optimization policies - Design reports as required by the Departments <p>Important Consideration</p> <p>HPRIDC is a wing of HPPWD having different objective and business work flow from HPPWD so modules need to be customized accordingly to suit their requirement (HPPWD/HPRIDC)</p> <p>The SI will have to install the servers at the DR site in consultation with the Purchase</p> <p>SI will have to comply with the security policies and procedures as developed by the Departments. Below is the indicative list of security policies that need to followed:</p> <ul style="list-style-type: none"> - Information Security Policy - Business Continuity Plan - IT Risk Management Policy - Information Security Organization - Information Classification - Third Party Service provider (if applicable) - Access Control - User ID and Password Management - Use of Internet - Asset Management - Physical and environmental security - Incident Management
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		<ul style="list-style-type: none"> - E-mail Security training - Business Continuity plan and Disaster Recovery - Backup and archival <p>Deliverable Documents:</p> <ul style="list-style-type: none"> - System Requirement Specifications - Design Documents: - Data Flow Diagram - System Design Diagram - Entity Relationship Diagrams <p>Other relevant Documents relevant to project as and when needed by the Departments.</p> <ul style="list-style-type: none"> - All Policy, Plan & Methodology Documents - Final Bill of Material (BOM) for Implementation without pricing
4	Solution Development	<p>Develop the solution on the specifications finalized through the System Requirement Specifications and Solution design. SI should ensure and plan well in advance about the increase in data volume and therefore should keep provisions in the hardware and software. Developed solution/Application will be hosted on State Data Center (Shimla) Cloud. So developed solution should be compatible with the State Data Center (Shimla) Cloud.</p> <p>Important Consideration</p> <p>HPRIDC is a wing of HPPWD having different objective and business work flow from HPPWD so modules need to be customized accordingly to suit their requirement (HPPWD/HPRIDC)</p> <p>Deliverables:</p> <ul style="list-style-type: none"> - Solution Software, Operational/ Technical manual, library files, setup programs etc., Sign-off from Purchaser. - Procurement of hardware as proposed by the bidder in the Bill of Material (BOM) as per the requirements of the project - Details of IT infrastructure required for PWD. - Infrastructure Delivery Certificates and sign-off from Purchaser.
5	Develop Mobile	SI will Develop mobile platform and identify services that can be develop through mobile devices, Facilitating ease of

	Platform	use and faster adoption
6	Develop Data Warehouse	SI will Develop Data Warehouse for consolidation of transaction data across the system on a common platform and provide tool for analyzing data and facilitate informed decision making
7	Develop Document management system	SI will Develop Document management system as per the specification. Data Digitalization of Existing manual data as per the Bill of Material (BOM)
8	Solution Implementation & Go-Live	<p>With respect to Solution Development the SI needs to perform (but not limited to) the following activities :</p> <ul style="list-style-type: none"> - Deployment of Portal & Applications on SDC (Shimla) Cloud - Deployment of required Servers, Storage, as proposed by the Purchaser in the Bill of Material (BOM) as per the requirements. - Creation of logical and physical Security Plans for Application, Data Networks and Desktops - Arrange for a Disaster Recovery services - SI should provide a web based interface for data entry - Security Policy Implementation. - Generate graphical and statistical reports for Go-Live <p>Go-Live</p> <p>The “Go-live” means that the system is ready in all respects i.e. design, development, testing & implementation and can be used by all the concerned Stakeholders together as per the defined scope of the project. This would mean completion of roll out of the system at all the designated locations such that all application users at these locations are able to use the centralized application, to the satisfaction of the users and purchasers and confirming to the application response time parameters as defined in the Standard Document.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> - All the relevant documents related to Implementation - Sign-off / Completion certificate from Purchaser

9	Testing & Acceptance	<p>The SI must build up an overall plan for testing and acceptance of system, in which specific methods and steps should be clearly indicated and approved by Department. The acceptance test plan will be defined by the SI, agreed and approved by PWD and will include all the necessary steps to ensure complete functionality, operation and performance of the system.</p> <p>Testing must demonstrate that the new systems satisfy the operational and technical performance criteria. All test cases will have to be approved by the Purchaser and the Department.</p> <p>It is SI's responsibility during the tests to evaluate and recommend any further changes to the application, at no extra cost to Purchaser. Any recommendations for change will be discussed with Purchaser and the Department.</p> <p>The SI must :</p> <ul style="list-style-type: none"> - SI will Outline and provide testing methodology that will be used for testing. Define the various levels or types of testing that will be performed - Provide necessary checklist/documentation that will be required for testing. The SI must describe how the testing methodologies will conform to requirements - Indicate how one will demonstrate to Purchaser and the Departments that all functions in the new system installed have been tested.
10	External Tie Ups & Certification Support, Security	<p>SI shall facilitate and co-ordinate:</p> <p>Agreements between Purchaser and the External Service providers as and when required to meet the needs of the Project With third party and Government agency for security audit and certification through the entire process of certification. This should include but not limited to the following:</p> <ul style="list-style-type: none"> ▪ Physical Security ▪ Network Security ▪ Protocols / Services ▪ User Security ▪ Data Storage Security ▪ Passwords ▪ System Administration <p>• In case of any changes suggested by Third Party</p>

		<p>Auditors, the SI shall implement the changes in consultation with the Purchaser.</p> <ul style="list-style-type: none"> • The SI will get the third party certification from an external agency (Approved by the department) and will submit the testing certificate to the SI. On receiving the certificate, the Purchaser will itself conduct operational acceptance test and provide SI its feedback. • The SI shall host only the pre-audited and certified, defect-free application/upgrades patches at State Data Centre (Shimla) cloud/ Disaster Recovery Centre. • The system shall be audited through a STQC empaneled audit agency.
11	Assessing Network Connectivity requirement	<p>The SI shall assess the network connectivity requirement at all HPPWD/HPRIDC location and propose the most feasible solution. SI shall facilitate/co-ordinate between purchaser and Network Provider (If required) to establish the network connectivity at HPPWD/HPRIDC location.</p> <p>Responsibility of SI</p> <ul style="list-style-type: none"> - Network connectivity requirement report (including network hardware) - Feasibility study to analysis all the available network provider and map there offer with the purchaser requirement - Cost detail and Technical report - Design of LAN/WAN and Internet connectivity - Network Architecture - Site Assessment Report - Installation Report - Preparation and signing of agreement between purchaser and network provider <p>Responsibility of Purchaser</p> <ul style="list-style-type: none"> - Purchaser will provide all necessary detail and approval to SI for Assessing Network Connectivity requirement. - Purchaser will also assist SI in coordinating with

		government agency for providing subsidize rate
12	Comprehensive Training and Change Management	<p>The SI is required to carry out the following activities:</p> <p>Train/retrain if required the designated technical and end-user staff to enable them to effectively operate the system and shall undertake Change Management interventions as necessary to achieve project objectives.</p> <p>Re-training the operators whenever changes are made in the solution.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> - Change Management interventions - Advance Administration training for Server Room - Administrators to perform required tasks - User Training for officers/employees in PWD, in batch sizes not exceeding 30 for the deployed system - During the training it should be ensured that the man to machine ratio does not exceeds 1:2 - Syllabus and Manual for Training plan for the departmental users to be approved by the Departments beforehand in English - Issue supporting documentation such as Training material, User Manuals, Maintenance Manuals, etc. - Sign-off from Purchaser and the Departments on Training
13	Solution Documentation	<p>Preparation of documents including Technical and User Manuals, Operational Manual, Maintenance Manuals. SI shall obtain the sign-off from Purchaser and the Departments for all the documents submitted for the solution.</p> <p>Deliverables:</p> <ul style="list-style-type: none"> - Technical, Operational and User Manuals for operation of the deployed solution in English and Hindi - Policy Documents - Technical documentation to explain Source Code and solution design, Maintenance manuals hardware - Documentation of IP and Subnet Addressing Scheme, Routing Tables and ACL deployed for Intranet

Scope of Service Delivery / Managed IT Phase

This phases of the project include Warranty/Management IT respectively. The Supplier shall hand over the System in full running condition (both hardware and software) along with all the requisite documentations, code, manuals, guides and operational measures after the completion of the O&M phase or as directed by purchaser.

The scope of work for these phases includes the following:

S. No	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
1	Operational Support and Maintenance (O and M)	<p>The SI will provide the Operational Maintenance and Support for providing on-going assistance for a period of 3 years for the project and its users once the system is implemented.</p> <p>The support phase will include the three major activities and the SI will need to perform the following activities under these phases:</p> <p>Perform Maintenance Activities: Service, support & fix existing errors, improve the system operations and conduct post implementation system review both for the proposed hardware & software</p> <p>Monitor system performance: Checking system efficiency and reliability</p> <p>Assess system security : Checking threat impact on hardware, software, data, people and procedures besides securing the system from external and internal threats</p>
2	Solution Warranty	The SI MUST warrant that the systems hardware infrastructure and overall solution supplied shall have no defects arising from design or workmanship or any act or omission of the service provider. The warranty including post warranty shall remain valid for a period of 36 months from the “Go-Live” date.
3	Help Desk	The SI will set up the help Desk immediately after the Go-Live of Phase I. The System Integrator will set up a Help Desk on a 7 hrs x 6 days from 9:30 hrs to 18:00 hrs on all working days per week (All days except Sunday and Government Holidays) in E IN C office Shimla. However department may ask SI for extra helpdesk working hours as per requirements.SI will provide three helpdesk executive

		for helpdesk activities <ul style="list-style-type: none"> - SI will procure all hardware/ equipment to setup the helpdesk in E-in-C office Shimla. - Supplier has to put in place a complaint logging system (Portal, Voice and E-Mail) for the Help Desk - Department will only provide required space to SI for setting Help Desk
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Overview of Current Business Processes

Sr. No.	Name of the Process
A	Execution Process

1.	Preparation of estimate for Road work and its Administrative Approval(State Budget)
2.	Preparation of Estimate for Bridge Works (Original Work) and its Administrative Approval (State Budget)
3.	Preparation of estimate for Original Building Work & its Administrative Approval
4.	Preparation of detail estimate and its technical Sanction
5.	Checking of Estimations / DPR(State Budget)
6.	Preparation and Approval of Structural Design
7.	Revision of Estimate & Approval(State Budget)
8.	Time Extension request under contract(State Budget/PMGSY/NABARD)
9.	Execution of Deposit Work
10.	Progress monitoring (Physical and Financial)
11.	Annual Maintenance Plan(Roads)
12.	Preparation of Annual Plan
13.	Enlistment of Contractor (C & D level)
14.	Enlistment of Contract(A & B level)
15.	Tendering and Contract Management
16.	Deviation in work(State Budget, NABARD)
17.	Approval of works under CRF, ISC, EI scheme (Ministry of Roads, Transport & Highway)
18.	Release of funds under CRF / Interstate Connectivity / Economical Important scheme
19.	Approval of works under NABARD(Rural Infrastructure Development Fund – RIDF)
20.	Release of funds by NABARD under RIDF
21.	Approval of work under PMGSY
22.	Payment under PMGSY
23.	Release of fund under PMGSY

24.	Purchase Plan
25.	Purchase Of Material
26.	Issue of material
27.	Approval for repair of Government vehicles / Machinery
28.	Preparation of estimate for Bridge work and its approval (Mechanical work)
29.	Purchase of Machinery/Vehicles
30.	Annual maintenance Plan for Electrical Work
31.	Preparation of Estimate for electrical installation at site and its approval
32.	Preparation of estimate for NH works
33.	Billing & Payments(NH)
34.	Annual Plan for NHs(Ministry of Road & Highway, GOI)
35.	NOC for retail outlet / access to private properties / construction of new buildings
36.	Land Acquisition process of National Highway(Under the National highway act,1956)
37.	Release of NOC(Other than NH)
38.	Estate Office
39.	Revision of SOR
40.	Issue of MBs
41.	Processing of complaints- Vigilance Cell
42.	Requisition of Vehicles
43.	Requisition of IT equipment
44.	Process of Arbitration
45.	Meetings Management
B	Financial Process
1.	Budget Allotment
2.	Billing and Payment

3.	Audit of Records
4.	Release of LOC
5.	Reconciliation of expenses
6.	Payment under establishment(other than salary)
C	Common Process
1.	File Movement in PWD Office
2.	RTI processing
3.	Assembly Question
4.	Procedure to defend court cases in subordinate courts
5.	Procedure to defend court cases in High court / Supreme Court
6.	Process of E-Samadhan
7.	Petty Purchase
8.	Purchase of items through DGSND
D	Quality Control Process
1.	Technical testing of material
2.	Inspection of Work
3.	Inspection of work based on complaints
4.	Inspection of PMGSY Work
E	HPRIDC Process
1.	Approval of Project under HPRIDC
2.	Approval of DPR under HPRIDC
3.	Tendering & Contract agreement of Consultant under HPRIDC
4.	Tendering & contract agreement of Contractors under HPRIDC(up gradation work)
5.	Billing & payment of contractor under HPRIDC
6.	Time Extension based on Variation under HPRIDC

7.	Approval Of variation Quantity
8.	Approval of Black spot work under HPRIDC
9.	Periodic Maintenance work under HPRIDC
10.	Billing & Payment of periodic Maintenance Work
11.	Dispute Management under HPRIDC
12.	Complete work flow of up gradation work under HPRIDC
F	Human Resource Process
1.	Service Record Book
2.	Earned Leave
3.	Transfer of Employee
4.	Sanction of Leave other than Earned Leave
5.	Promotion(Group C Employees)
6.	GPF Management
7.	Loan/Withdrawal through GPF
8.	Promotion (Group A&B Employees)
9.	Release of Pension- Payment Order (Gratuity, Pension, Commutation of Pension)
10.	No objection Certificate for Pensioner Benefits
11.	GPF – Payment on Retirement
12.	GPF Number Allotment

Overview of Proposed Business Processes

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
Work Execution	This module	1. Preparation of estimate	COTS/Packaged

<ul style="list-style-type: none"> ▪ Estimation Preparation ▪ Technical sanction & approval ▪ Architecture Design Process ▪ Tender Management ▪ Work Allocation & Agreement ▪ Progress Monitoring of Work ▪ Work Deviation ▪ Time Extension 	<p>takes care of all the work execution related activities of Department like estimation and DPR preparation, technical sanction and approval of competent authorities.</p>	<p>for Road work and its Administrative Approval(State Budget)</p> <ol style="list-style-type: none"> 2. Preparation of Estimate for Bridge Works (Original Work) and its Administrative Approval (State Budget) 3. Preparation of estimate for Original Building Work & its Administrative Approval 4. Preparation of detail estimate and its technical Sanction 5. Checking of Estimations / DPR(State Budget) 6. Preparation and Approval of Structural Design 7. Revision of Estimate & Approval(State Budget) 8. Time Extension request under contract(State Budget/PMGSY/NABARD) 9. Execution of Deposit Work 10. Progress monitoring (Physical and Financial) 11. Preparation of Annual Plan 12. Deviation in work(State Budget, NABARD) 13. Approval of works 	<p>Application/Application Development</p>
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		<p>under CRF, ISC, EI scheme (Ministry of Roads, Transport & Highway)</p> <p>14. Approval of works under NABARD(Rural Infrastructure Development Fund – RIDF)</p> <p>15. Approval of work under PMGSY</p> <p>16. Approval for repair of Government vehicles / Machinery</p> <p>17. Preparation of estimate for Bridge work and its approval (Mechanical work)</p> <p>18. Preparation of Estimate for electrical installation at site and its approval</p> <p>19. Preparation of estimate for NH works</p> <p>20. Annual Plan for NHs(Ministry of Road & Highway, GOI)</p> <p>21. NOC for retail outlet / access to private properties / construction of new buildings</p> <p>22. Land Acquisition process of National Highway(Under the National highway act,1956)</p> <p>23. Release of NOC(Other than NH)</p>	
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		24. Issue of MBs 25. Meetings Management 26. Approval of Project under HPRIDC 27. Approval of DPR under HPRIDC 28. Time Extension based on Variation under HPRIDC 29. Approval Of variation Quantity 30. Approval of Black spot work under HPRIDC 31. Periodic Maintenance work under HPRIDC	
Asset management <ul style="list-style-type: none"> ▪ Annual maintenance plan ▪ Tools and Machinery ▪ Routine maintenance System ▪ Road and Bridge Asset Register (GIS based) ▪ Traffic Information system 	This module shall handle the roads inventory of the state. It shall store data pertaining to roads inventory, roads surface condition, pavement, deterioration, condition of bridges, etc. in respect of all the roads in the state. It shall provide comprehensive MIS in	1. Annual Maintenance Plan(Roads) 2. Purchase of Machinery/Vehicles 3. Annual maintenance Plan for Electrical Work 4. Estate Office 5. Requisition of Vehicles 6. Requisition of IT equipment	COTS/Packaged Application/Application Development

	respect of the roads in the state. The outputs shall be viewable on textual and map interfaces		
Project Planning <ul style="list-style-type: none"> ▪ Activity Planner ▪ Work Flow Management ▪ Resource Allocation ▪ MIS reporting 	This module will take care planning of project activities and define deliverables and further workflow / resource required for completion of activities.	1. File Movement in PWD Office	COTS/Packaged Application/Application Development
Financial & Accounts Management <ul style="list-style-type: none"> ▪ Budget Planning ▪ Budget Approval Process ▪ Budget Allocation System ▪ Budget Monitoring and payment to Contractor ▪ Billing and payments 	This Module will improve governance by providing real – time financial information that can be used to administer programmes effectively, formulate budgets and manage resources. Financial and Accounts Management System will	1. Budget Allotment 2. Billing and Payment 3. Audit of Records 4. Release of LOC 5. Reconciliation of expenses 6. Payment under establishment(other than salary) 7. Billing & Payments(NH) 8. Release of funds under CRF / Interstate Connectivity / Economical Important scheme	COTS/Packaged Application/Application Development

	computerize the key aspects of budgeting and accounting operations	9. Release of funds by NABARD under RIDF 10. Payment under PMGSY 11. Release of Fund under PMGSY 12. Billing & payment of contractor under HPRIDC 13. Billing & Payment of periodic Maintenance	
Purchase & Store	The purchase and Store Management System should consist of computerized database of the store inventory, including records of receipts & issues, stock-in-hand etc.	1. Purchase Plan 2. Purchase Of Material 3. Issue of material 4. Petty Purchase 5. Purchase of items through DGSND	COTS/Packaged Application/Application Development
Quality and Control	This module will help in working of quality and control cell like testing of material and test report generation	1. Technical testing of material 2. Inspection of Work 3. Inspection of work based on complaints 4. Inspection of PMGSY Work	COTS/Packaged Application/Application Development
Scheme Management	Scheme Management System	To manage Scheme wise database like	COTS/Packaged Application/Applic

	will comprise of Master Data for various Scheme PMGSY and Scheme Codes	<ol style="list-style-type: none"> 1. Scheme Codes 2. Start and End Date 3. Budget 4. Approval and Authorization 5. Physical and Financial Reports 	ation Development
Digitization of SOR	This module shall manage the detail of category wise and item wise schedule rates of all construction items being followed by the department of PWD or any other engineering wing	<ol style="list-style-type: none"> 1. Revision of SOR 	COTS/Packaged Application/Applic ation Development
Contract Management	This module shall manage the inventory of all the approved contractors PWD and RIDC, registration of new contractors etc.	<ol style="list-style-type: none"> 1. Enlistment of Contractor (C & D level) 2. Enlistment of Contract(A & B level) 3. Tendering and Contract Management 4. Tendering & Contract agreement of Consultant under HPRIDC 5. Tendering & contract agreement of Contractors under HPRIDC(up gradation 	COTS/Packaged Application/Applic ation Development

		work)	
Legal and Arbitration		<ol style="list-style-type: none"> 1. Procedure to defend court cases in subordinate courts 2. Procedure to defend court cases in High court / Supreme Court 3. Dispute Management under HPRIDC 4. Process of Arbitration 5. RTI Processing 6. Processing of complaints- Vigilance Cell 	COTS/Packaged Application/Application Development

0.3 Acronyms Used in These Bidding Document

Abbreviation	Meaning
CA	Competent Authority
CBT	Computer Based Training
DC	Data Centre
DR	Data Recovery
BOM	Bill of Material
SI	System Integrator
FRS	Functional Requirement Specification
GIS	Geographical Information System
GoI	Government of India
GUI	Graphical User Interface
HQ	Head Quarter
HR	Human Resource
OEM	Original Equipment Manufacturer
MoU	Memorandum of understanding
IST	India Standard Time
VAT	Value Added Tax
GST	Goods and Service Tax
AMC	Annual Maintenance Charge
INR	Indian Rupees
ER	Entity Relationship
DR	Disaster Recovery
O&M	Operation and Maintenance
SRS	Software Requirements Specification
WAN	Wide Area Network
DIT	Department of Information and Technology
Deity	Department of Electronics and Information Technology
SDC	State Data Centre
STQC	Standardization testing and quality certification
SAN	Storage Area network
NIC	National Informatics Centre
ASP	Active Server Pages
SQL	Structured Query Language
NOC	No Objection Certificate
AG	Accountant General
COTS	Commercial off the shelf

TA	Travelling Allowance
DPR	Detailed Project Report
API	Application Programmable Interface
SLA	Service Level Agreement
RDBMS	Relational Data Base Management System
OS	Operating System
AV	Antivirus
UPS	Uninterrupted Power Supply
VPN	Virtual Private Network
GB	Giga Byte
MB	Mega Byte
GHz	Giga Hertz
MHz	Mega Hertz
PD	Project Director
EMS	Enterprise Management System
RTI	Right to Information
GoHP	Government of Himachal Pradesh
SMS	Short Message Service
CMMi	Conceptual Maturity Model Integration
IT	Information and Technology
ITES	Information Technology Enabled Service

B. BUSINESS FUNCTION AND PERFORMANCE REQUIREMENTS

1.1 Business Requirements to Be Met by the System

The sections below provides only brief of the business requirements to be made by the system.

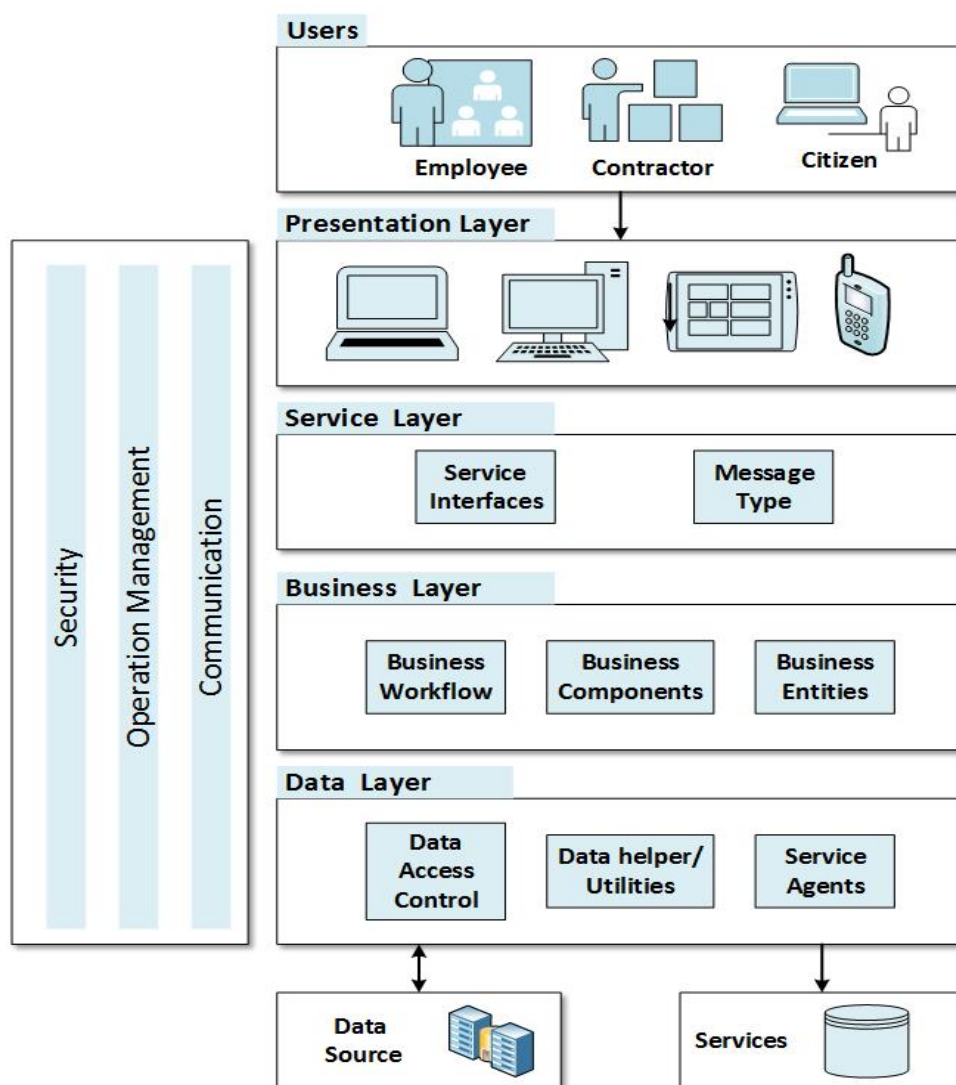
- The Product implemented by the Supplier has to be backed up with functional & technical support for the duration of O&M period.
- The Application should be capable enough to be hosted on cloud environment provided by State Data Center (Shimla)
- The Application capability to have an in-memory, column-oriented, relational database management capability is desirable.
- Web based graphical user interface (GUI) for all the business functionality which would comply with major web browsers like Internet Explorer, Chrome, Netscape, and Mozilla.
- Solution should be based upon Open Standards and SOA Compliant.
- Business services will be designed and developed using component based solution which the Supplier would able to customize and extend.
- Unicode Standard based multi-language interface with the support of Hindi and English.
- Security layer will be designed and developed for authentication of users at presentation level and only an authorized user would be accessing the business services.
- Horizontal / vertical scalability can be ensured to achieve high performance even with increase load.
- Provides Consistent and Timely intelligence for informed business decisions.

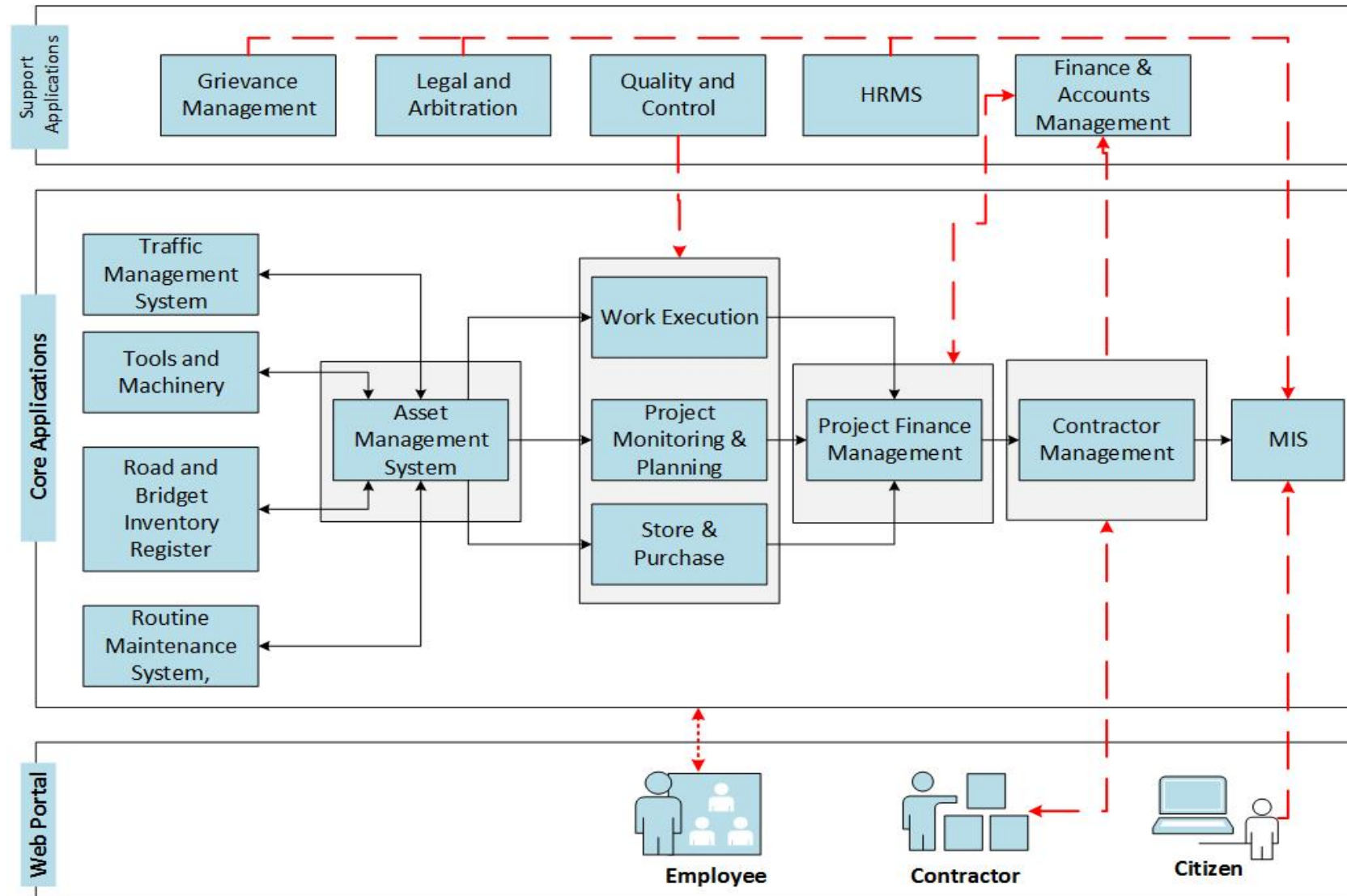
Integration with:

- Following Legacy Application need to be integrated with proposed solution
 1. Personnel MIS
 2. IFMS (HIMKOSH)
 3. E- Tendering (PMGSY & Non PMGSY)
 4. OMMAS (Online Management Monitoring and Accounting)
 5. GRIMMS (GIS-based Road Information Management and Monitoring System)
 6. RMMS (Road Maintenance Management System)
 7. E-Samadhan
 8. ARS (Attendance Recording System)
- External Agency application available on the same network using SOA / Web services / API based.
- External Agency application hosted on different network using file exchange (txt/ xml / excel / etc.)
- External Devices (if available) like Biometric using APIs.

For the details Business Requirements, please see “**Functional Requirement Specification**” section of this Document. It may be noted that the Business Requirement mentioned may not be sufficient and complete. Hence the SI is expected to carry out a Requirement Gathering & Analysis exercise as part of their scope of work in the Project to ensure comprehensive coverage of the system.

The diagram below depicts the indicative solution architecture envisaged for PWD System. The solution architecture for PWD defines various components of the system and the integration between them. The architecture describes the components involved from functional and non-functional perspective such as security, data access, database, external system:





(a) Freeware

Bidder is not permitted to supply any freeware. To our understanding freeware is software that can be downloaded for free from Internet at no cost and no future obligation to buyer.

(b) Document Management System

The solution should offer a comprehensive range of cost-effective services for Document Management System. This solution should manage various files formats like JPEG, TIFF, PDF, XML PDF, HTML etc. DMS shall have 500 users with the concurrency of 100 users. The system should have following elements

1. Scanning: A good scanning system for putting paper files into computer.
2. Storage: The storage system should provide long-term and reliable storage for documents and should accommodate changing documents, growing volumes and advancing technology.
3. Indexing: The index system should create an organized document filing system and make retrieval simple and efficient.
4. Retrieval: A retrieval system should retrieve right documents fast and easy. With e-book feature, documents should be stored in html, xml or pdf format.
5. Access: Document viewing should be readily available to those who need it, with the flexibility to control access rights to the system and should be accessible in the office or at different locations over the Intranet, or over the Internet.

The Document Management system should have following features

Inward Receipt:

- Complete solution for inward receipts at all locations

File Creation should provide fully functional:

- Unique Numbering of File
- Stores File Name, Subject, Creators Notes
- Priority Indication (Immediate/Normal/Later)
- Nature Indication (Confidential/Normal)
- Files should be Version Numbered
- Metadata Capturing ability for input whenever applicable/possible for fast search

Work Flow Creation & Assignment: Should support

- Multiple Work Flows
- Create a New Work Flow at Run-Time
- Create Inter-Departmental & Intra-Departmental Work Flows (Assignments)

Action on File:

- Pending File Reminders
- Receipt Acknowledgement
- Noting
- Attachments - Any type of Attachment (incl. PDF, HTMS, JPEG, Docs, Excel Sheets,
- Audio/Video files etc. in correct and recoverable format)
- Add/Update/Delete/View (Linked File) References facility
- Tasks Assignments

Outward Generation & Dispatch Should Provide

- Auto Disposal by Different Disposal Modes
- Outward Entry module should generate Two Copies – Fair Copy and Office Copy and send it to the Dispatch Section for delivery to the intended users/senders
- Carry Forward of Non-Disposed Files

Query / Views on Following Should Provide

- Text Based, Keyword based, Wild Cards based search options
- Subject-wise Generalized Summery
- Inward number v/s. Outward number

User Creation & Other Security Features

- History of Positions held with Timeline
- Security Features like Password Complexity & Encryption, Audit Trails
- Database Triggers to Stop Direct Updates.

Indexing Documents

The indexing methodologies used, should be easy to use and understood by the user who retrieve the documents, as well as those who file them.

Index Fields

An imaging system should allow users to customize index templates, create multiple templates and have different types of index field data within each

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template, such as date, number and alphanumeric characters. Index fields should be used to categorize documents, track creation or retention dates, or record subject matter, among other uses. In addition, an imaging system should allow pull down boxes to speed index field entry and have tools available to help automate entering index information.

Folder/File Structure

An imaging system should provide a visual method of finding documents. An imaging system should have the ability to electronically re-create this filing system through multiple levels of nested folders.

Retrieving Documents

Whatever the method, document retrieval should be simple and user-friendly. The system should provide easy, fast and efficient retrieval of relevant documents.

Controlling Access

The system should provide appropriate levels of access, without compromising confidentiality or security.

Broad Availability

The system should provide a client-based user interface that enables the scanning, indexing & retrieval of documents. Users should be able to search, retrieve and view documents with any web browser.

Comprehensive Security

The system should allow the system administrator to control what folders and documents users can see, and what actions they can perform on those documents (edit, copy, delete, etc.) The system should control access to folders, documents and even redacted images and text in a simple and complete manner.

Bi-lingual Operation

The system should offer Bi-lingual operations i.e. Hindi and English both. User should be able to select the language by a simple menu driven option.

(c) Data Digitization

- Software for data entry – SI has to suggest & bring the Software for Data Entry based on the study on data digitization carried out in HPPWD & HPRIDC
- Unbinding of the documents
- Physical numbering each page of the document as per predefined scheme (Preferably Meta type)
- Scanning & indexing each page & document. It shall be ensured during scanning that content searching shall be possible in all documents scanned
- Submission of the scanned documents to Centralized DMS Server.
- Binding of the documents
- Storage of numbered documents at Head Office/Zonal Office/Circle Office in specified location
- Sign-off from Department Head/Zonal Head/Circle Office Head.
- Support for Bulk Scanning
- Support for Web Scanning / Distributed Scanning
- Support platform independent scanning
- Image Assisted Indexing of Scanned Documents
- Direct upload of Scanned Document to DMS Server.
- Automatic file and document separation using blank page separator, barcode separator and fix page
- Provide Image processing libraries that support image enhancements such as changing contrast, zoom in/out, cleaning etc. and other imaging features like compression and extraction etc.
- Facility to upload scanned batches from different field offices with Auto folder/Subfolder creation document filing & indexing on user defined fields.
- System ability to provide Compression of scanned image files in any format as desired by the Department.
- Data Digitization process – SI need to strategize data digitization Plan and get approval from purchaser before stating Digitization work
- Language of data entry – Hindi/English
- Back-up responsibility –SI would be responsible for the data back-up and need to strategize the data backup plan with HPPWD & HPRIDC
- SI should take good care of all Government records and will be responsible for security of the record from time of receipt to time of delivery
- Penalty for per record will be charged against the loss or damage of record

- The bidder should not accept illegible record. Non-readable record at the time of returning of the data will be considered as damaged record
- Process to ensure Data integrity - SI is responsible for the digitized data integrity; however individual department will be given the ownership
- The bidder should ensure 100% data accuracy
- Random checking will be conducted by the officer appointed by the department
- Autocorrect software and logics to be used
- Place/Location of data entry – as directed by the HPPWD, Head Office. Bidder has to arrange all necessary facilities not limited to electricity, power back up, water, cleaner, computers & other hardware at its own to carry out the data digitization activity at agreed location/site.
- Manner in which the records would be handed over and taken back – as directed by the HPPWD & HPRIDC
- Infrastructure Facilities and the Hardware services required for effective data digitization
- The bidder has to deploy the required sets of workable set of computers and data entry operators for completing the data entry assigned to them with in mentioned timeline.

(d) Points to be considered before quoting the prices for line items

1. The System Integrator has to perform the detailed study and suggest the number of licenses required. Considering the above and the growth in operations of HPPWD and HPRIDC during project period, the bidder shall propose the most appropriate licensing policy considering the scalability
2. All software licenses shall be in the name of HPRIDC.
3. For any version change in the software license, Supplier shall have to deliver operational training to designated staff for making changes in the adapter.
4. Certified and licensed copies in the name of the application software, RDBMS and any other software required, shall be supplied.
5. Any item (Hardware and / or software) found short or not quoted but required for successful implementation in terms of specifications and performance requirement has to be supplied free of cost at the earliest, so that committed implementation schedule shall not get affected. In case the implementation schedule is affected, Liquidity charges will be applied as mentioned above in Warranty & AMC as well as in SLAs.
6. In case this situation of any hardware / software found short or not quoted but required to meet the tender conditions, arises during warranty and AMC period, the supplies, installation and commissioning of the relevant hardware and software shall have to be made free of cost and completed within 15 weeks from the date of detection of such shortfall / inadequacy.
7. The Application should be capable enough to be hosted on cloud environment provided by State Data Center (Shimla)

Minimum Application User Requirements

Sr.no	Core Modules	Head Office	Zone Office	Circle Office	Division Office	Sub Division	Section Office	National Highway	RIDC	Quality Control	GM Finance	Sect .	Total
1	Work Execution	10	20	40	154	294	1265	0	10	0	0	3	1796
2	Project Planning	5	5	40	77	294			5			1	421
3	Asset Management	5	8	40	77	0	0	3	5	0	0	3	141
4	Legal and Arbitration	5	5	40	77	0	0	3	3	0	1	2	136
5	Finance and Accounts Management	10	8	40	77	294	0	0	1	0	1	2	433
6	Quality and Control	2	4	40	77	294	0	0	0	5	0	2	424
7	Store and Purchase	2	4	40	77	0	100	0	1	0	0	0	224
8	Contract Management	3	8	40	77	0	0	0	2	0	0	0	130

1.2 Functional Performance Requirements of the System

1.2.1 Performances of the application system will be one of the important factors in the success of the project. Purchaser expects that bidders MUST provide details as to how it plans to deal with the performance issues that usually occur with the centralized system. The bidder MUST propose at the minimum.

- Tools and techniques which will be used to measure the relevant performance Parameters of the new system
- Response time of the developed/customized application, techniques to meet the expected performance parameters
- Standard Bandwidth for analyzing response time of the developed/ customized application will be 128 Kbps
- The application should have proper data archiving facility depending on the requirements of various modules.
- Scanned Document Upload time should be 30 seconds considering average 5 scanned documents of .5 Mb over 128kbps speed

1.2.2 The Business Applications to be implemented as part of this engagement must meet the functional performance as per the table mentioned below.

Sr. No.	Core Application	Response Time	Control Condition Number of Concurrent Users
1.	Web Portal	< 5 Seconds	200
2.	Workflow and document Management	< 7 Seconds	100
3.	Work Execution	< 7 Seconds	100
4.	Contract Management	< 5 Seconds	50

5.	Finance and Accounts Management	< 7 Seconds	50
6.	Quality and Control	< 7 Seconds	30
7.	Purchase and Store	< 7 Seconds	30
8.	Asset Management System	< 10 Seconds	30
9.	Legal and Arbitration	< 7 Seconds	30
10.	Project Planning	< 7 Seconds	100

Note The above mentioned functional performance requirement shall be applicable for the purpose of “Go-Live” of application and the same shall be tested during the User Acceptance Testing

1.2 Proposed Infrastructure

1.2.1 DR Site Infrastructure

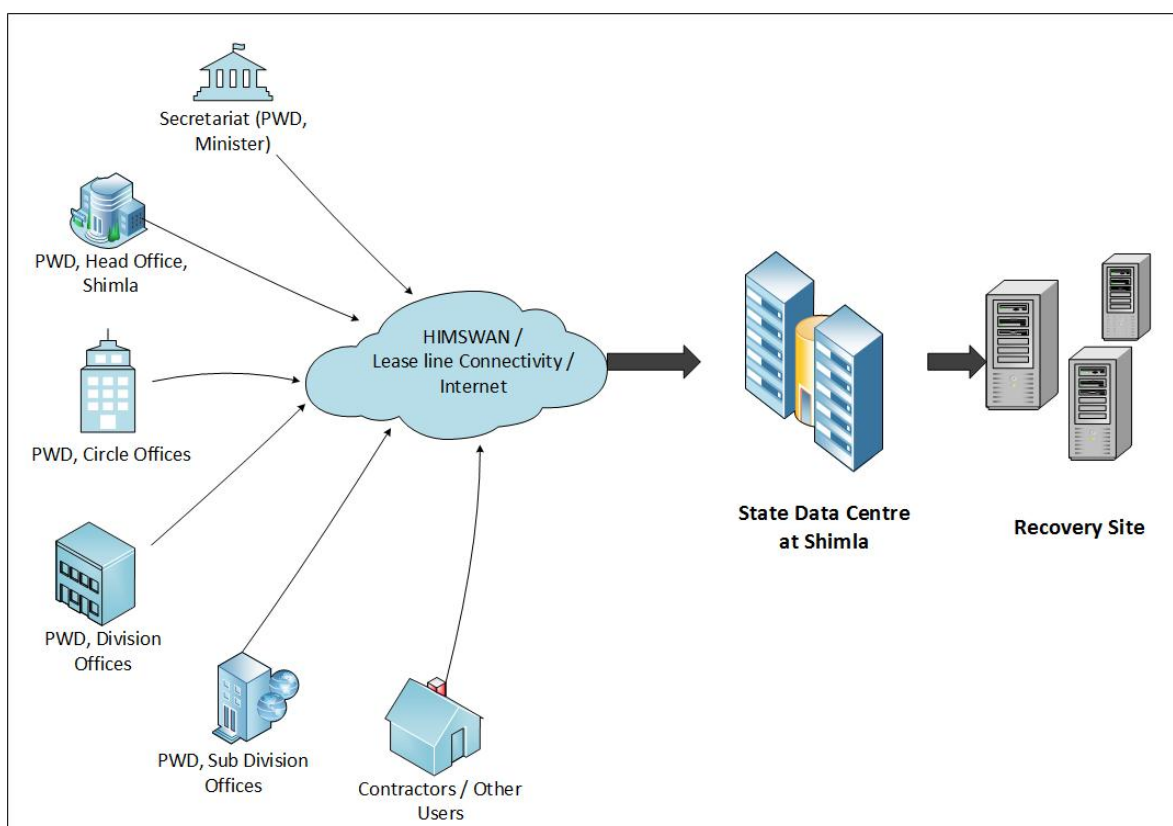
1	Licenses & Software	
a	Server OS	4
b	RDBMS	1
c	HIPS	4
2	Hardware	
a	Web Server	1
b	Application Server	1
c	Database Server	1
d	Backup Server	1

The IT Infrastructure proposed should be compatible with infrastructure at SDC, SSDG, HIMSWAN, State Portal, etc.

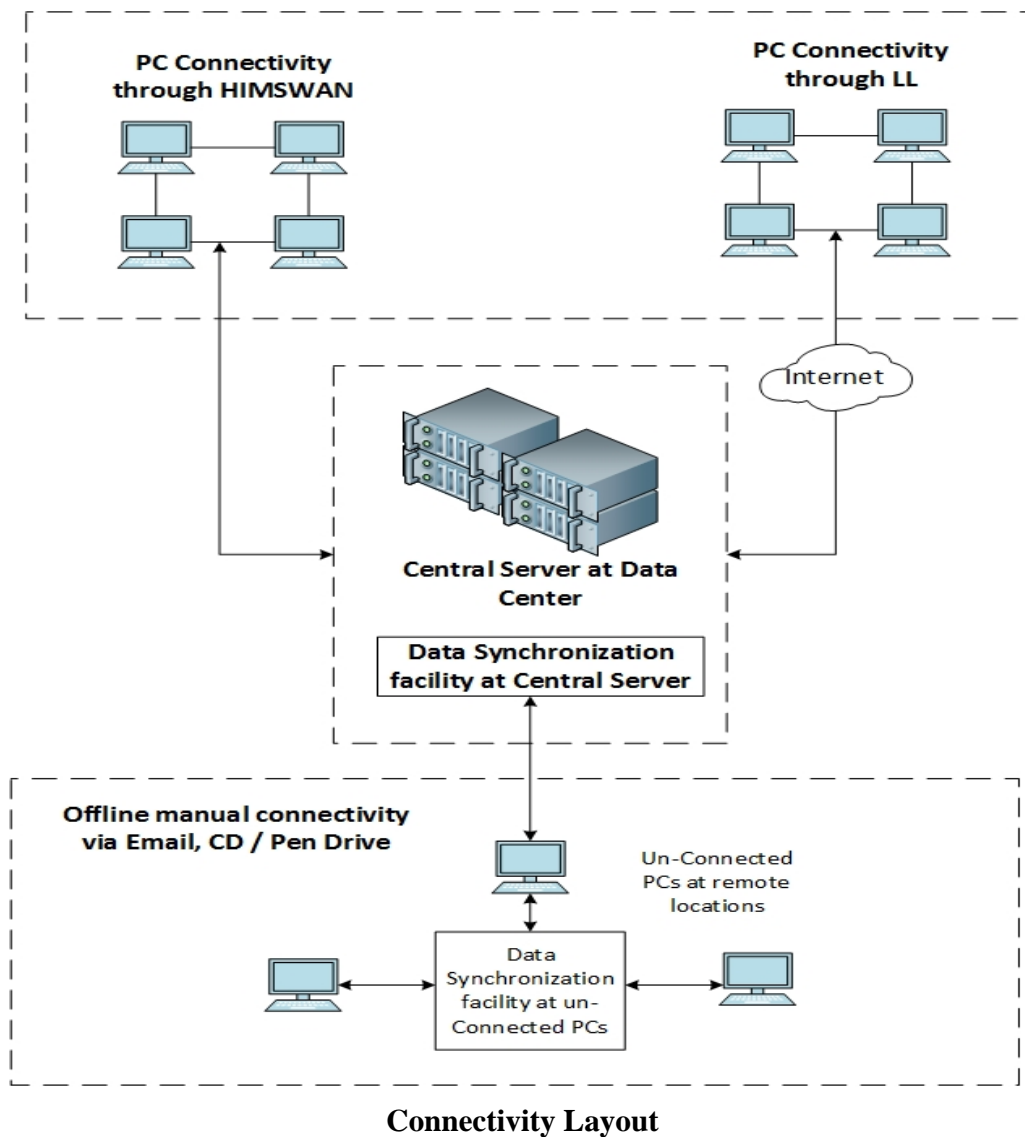
1.2.2 Network & Connectivity

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Networking forms the back-bone of any IT infrastructure setup in the current period. Data and functional integrity between the applications installed at different locations depends on the networking connectivity between the locations. Reliable and high bandwidth connectivity between all the offices of PWD will make a centralized architecture feasible that will remove duplicate data entry and make the information flow across the hierarchy smooth. However, it is important to note that the implementation of a state-wide network infrastructure is a part of national e-Governance programme, therefore PWD shall use HIMSWAN for the implementation its proposed solution. HIMSWAN should be utilized as the communication backbone for connecting HPPWD offices (up to Divisional Office level). Offices outside the span of HIMSWAN Point of Presence (POP) can be connected through optimal connectivity means like Optical Fiber Cable (OFC) or leased lines as per requirement and availability. However, wherever, it is not possible to have network connectivity using these options, department can consider using broadband connection over VPN



But, looking at the pace of implementation and connectivity problem at the offices located at remote locations, it is therefore suggested that all the proposed solution shall have the architecture that works in both offline and online mode with the central server at the State Data Centre. The architecture should be such that it supports the synchronization of data with centralized database when the systems work in offline mode to consolidate the data at the central database (refer Figure). The offline and online mode is dictated by the reliability and bandwidth of the connectivity between the office and the central server. The offline mode shall be case only when the required reliability and bandwidth is not available. It is hoped that when the HIMSWAN implementation is fully implemented all the offices of PWD shall be functioning in online mode.



1.2.3 Bandwidth Requirements

Both Horizontal & Vertical Connectivity will be taken from HIMSWAN. The State and Districts are assumed to be connected through a HIMSWAN.

1.3 Proposed Training/Change Management & Capacity Building Intervention

- The SI shall conduct Training Needs Analysis of all the concerned staff and draw up a systematic Training Plan in line with the overall Project Plan. The SI shall provide a change management plan to PWD which addresses the various aspects of capacity building and training.
- The SI shall propose different training modules for different user profiles at appropriate timelines and provide such additional training as they deem necessary in order to ensure that the training imparted is comprehensive and complete.
- The SI must impart training to all PWD staff to make them well conversant with the functionalities, features and processes built in the System. This is aimed to ensure smooth operations enabled through System. The SI shall train all such employees and provide relevant training materials to them.
- The training pedagogy will be designed to impart hands-on experience with adequate usage of cases and scenarios to the extent feasible
- Training schedule shall be so designed in batches that the ongoing/ regular operations are not affected seriously
- During the training it should be ensured that the man to machine ratio does not exceeds 1:2
- The SI shall also be responsible for retraining the staff whenever changes are made in the System and it is the responsibility of the SI to ensure that the staff from PWD involved in the operations until they are familiar with new versions of the implemented changes
- Training content will focus on scenarios and case studies with respect to each type of transaction with the purpose of giving a realistic approach to the trainee on how to handle a particular case
- There will be additional emphasis on imparting as much hands-on experience as required to make the trainees fully conversant and able to work effortlessly on the System

Technical Training

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Training Type	Objective of Training
Basic Computer Training	The purpose of this training is to acquaint and aware PWD employees with computer systems (hardware, internet browsing, using email and basic software tools like MS Office, adobe etc.). The effort will be concentrated towards providing exposure to computers especially to ground level functionaries like JEs, draftsman, head draftsman etc.
Application Specific Training	The training of application to be developed under this project is envisaged compulsory for PWD official. Basic Users' Training, and Sensitization with and hands-on awareness of application – its functionalities and different modules, familiarity with the screen, fields and features, reporting functionality
Advance Computer Training & Process Related Trainings	To ensure successful e-Governance in the PWD, it is suggested that employees in the department be identified as e-champion. The e-Champions should be equipped with advance skill like; Project Management, System Administration ,Maintenance and Management, Data Security & Disaster Recovery Management
Management Dashboard Training	This entails training provided to Senior Management to be able to access and extract reports and other relevant analytical data for quick decision making
Application and Module Champions Training	This entails providing a detailed step by step training to the identified and nominated participants so as to enable them for future maintenance of the system and addressing of functional queries if any.

Change Management Interventions

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Training Type	Objective of Training
Leadership Workshop	The purpose of this engagement is to sensitise and prepare the organisational leadership at various levels for the impending change and understand how their own roles will change from Managers to Leaders.
Sensitisation & Awareness Workshops	Applicable to all the employees, these workshops are designed in creating an awareness about the project, its implications, its benefits and the changes the project shall bring in the work ethos and culture. These workshops shall be designed to gain commitment from the employees to participate and contribute to the success of project implementation
Communication Strategies Workshop	Focussed workshops to define, design and develop adequate, regular and continuous communication strategies and plans throughout the period of project implementation and in sync with the project lifecycle

- **Training Program**
 - **Application/Usage**

S.No	Training Type	Audience	Batch	Location
1.	Basic Computer Training	500 Users (Nominated)	25 participants per workshop	All HPPWD/HPRI DC Offices
2.	Application Specific Training	500 Users (Nominated)	25 participants per workshop	All HPPWD/HPRI DC Offices
3.	Management Dashboard Training	300 Users (ALL Head of departments e.g. E-in-C, CE, SE and EE, etc.)	20 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices
4.	Application Champions	200 User (Nominated)	15 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices
5.	Module Champions	200 User (Nominated)	20 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices

6.	Advance Computer Training	200 User (Nominated)	25 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices
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○ **Change Management**

S.No	Training Type	Audience	Batch	Location
7.	Leadership Workshop	200 User (Nominated) Senior Leadership (From level EE and upwards)	20 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices
8.	Communication Workshops	100 User (Nominated) Senior Leadership (From level SE and upwards)	20 participants per workshop	HQ and Zone Offices, Circle offices,
9.	Sensitisation & Awareness Workshops	200 User (Nominated)	25 participants per workshop	HQ and Zone Offices, Circle offices, Division Offices

Assumptions and Dependencies

- All workshops participants' list shall be drawn up by the SI and shall be presented to Purchaser for approval
- SI shall prepare and present a detailed Training Plan detailing the sessions, schedules, locations, and the time-table of the Change management/Training Workshops at least a fortnight prior to roll-out
- All presentation related hardware like Laptops, Projectors, White/Black boards, Markers, etc. to be arranged by the SI
- All trainers to be provided by the SI.
- SI will provide training to field level technical support manpower appointed by HPPWD/HPRIDC
- All expenses of the workshop trainers and facilitators to be borne by the SI
- SI shall make adequate arrangements in consultation and accordance with Purchaser to inform the participants about such trainings at least a week in advance
- The course material shall be in both English and Hindi
- The course material shall be first approved by PWD and then only be handed over to the trainees

- The System Integrator shall maintain daily based attendance registers for the trainees and shall submit a copy to the concerned PWD official
- All arrangements pertaining to venue, workshop infrastructure like LCD Projectors, PA system, Computers, LAN/WAN/Dial-up connectivity (wherever required), whiteboards etc. shall be made arranged and paid for, by the SI
- The SI shall be free to use Purchaser infrastructure where available, with prior approval and sanction of Purchaser, however, this does not bind Purchaser for providing it. Purchaser shall be free to turn down such requests without assigning any reason
- SI to make all necessary travel, lodging and boarding arrangements of the trainers/facilitators at no cost to Purchaser
- SI shall mandatorily conduct the following in respect of all trainings:
 - Pre-workshop knowledge/skills assessment of the participants (duly approved by purchaser in advance)
 - Post-workshop knowledge/skills assessment of the participants (duly approved by purchaser in advance)
 - Participants' feedback on workshop quality and relevance, effectiveness, trainer effectiveness and training skills (duly approved by Purchaser in advance)

C. TECHNICAL SPECIFICATIONS

1. Data Base Server

S. No.	Features	Specifications
1	Form Factor	Rack (2U/4U)
2	Processor	Minimum 2 No. of Eight Core Processor with minimum 1.86 GHz or above with 1066 Mhz with minimum 4MB L3 cache per processor. The processor should be of latest series generation for the server models being quoted.
3	Processor Scalability	Scalable to 4 processor within same chassis
4	Architecture	RISC/EPIC/X86 as per OEM architecture
5	RAM	Minimum 256 GB (ECC) using 8 GB or higher module scalable to 512 GB (ECC). Minimum 2 slots should be free for future expansion
6	HDD	4 X 300GB SAS minimum 10K or higher rpm with Raid 1 with disk mirroring features.
7	Industry Benchmarking	Should have published benchmarks for TPC-C or TPC-H or Qph-H or TPC-E or SPEC available. If no published benchmark result for the offered server & processor is available then the performance offered by the server will be estimated by linear extrapolation of a published result on a higher server model or a lower server model (with the same processor).
8	Clustering	Server should be configured to support for OS level clustering
9	HBA	2 X dual port 8 Gbps Fibre Channel Adapter with external fiber ports for redundant connectivity to external storage.

S. No.	Features	Specifications
10	Optical Drive	DVD ROM
11	Power Supply	Hot Pluggable/Swappable Dual Redundant Power Supply
12	Fans	Hot Pluggable/Swappable Dual Redundant Fans
13	Operating System	System should support Windows Server Datacenter Edition, Enterprise Linux, VMware ESX Operating systems
14	Networking	dual port 10 Gbps Ethernet Adapter, with no single point of failure
15	Ports	2XUSB 2.0 support
16	Hot Swap Component	Hard Disk Drives, Power supplies and fans
17	RAID	RAID 0,1 & 5 with 512 MB battery backed cache
18	Bus Slots	Minimum Four PCI-Express slots
19	Industry Standard Compliance	PCI 2.0 Compliant, PCIe 3.0 Compliant, USB 2.0 Support
20	Server Management	Firmware Update, Dynamic resource management & utilization capability, Real time System Monitoring
21	Warranty	3 Year on-site Comprehensive warranty & Maintenance

2. Application Server / Web Server/ Backup Server (all Other Server)

S. No.	Features	Specifications
1	Form Factor	Full/Half height Blade
2	Processor	Minimum 2 No. of Quad Core processor with minimum 2.0 GHz or above with 12 MB or higher shared L3 Cache with 1066 MHz speed. The processor should be of latest series generation for all the server models being quoted.
3	Architecture	RISC/EPIC/X86 as per OEM architecture
4	RAM	Minimum 128 GB (ECC) using 8 GB or higher module scalable to 256 GB (ECC). Minimum 2 slots should be free for future expansion
5	HDD	2 X 300GB SAS hot plug HDD minimum 10K or higher rpm with Raid 0, 1 with disk mirroring features.
6	HBA/SAN Connectivity	Dual port 8 Gbps Fibre Channel Adapter with external fiber ports for redundant connectivity to external storage.
7	Operating System	System should support heterogeneous OS platform such as Windows Server Datacenter Edition, Enterprise Linux, Suse Linux etc.
8	Networking	dual port 10 Gbps Ethernet Adapter, with no single point of failure
9	RAID	RAID 0,1 & 5
10	Disk Bays	Integrated Four hot swap bays supporting SAS HDD
11	Industry Standard Compliance	Latest generation PCI/PCIe Compliant,

S. No.	Features	Specifications
12	Server Management	Firmware Update, Dynamic resource management & utilization capability, Real time System Monitoring
13	Warranty	3 Year on-site Comprehensive warranty & Maintenance

3. Host Based Intrusion Prevention System

S. No.	Specification
1.	Should offer protection against entire classes of attacks, including port scans, buffer overflows, Trojan horses, malformed packets, malicious HTML requests, and e-mail worms.
2.	Should provide automated, real-time intrusion detection and protection by analyzing events, operating system logs and inbound/outbound network traffic on enterprise servers
3.	There should be a separate Management Centre for Server Security Agents which will provide all management functions for all agents in a centralized manner.
4.	The HIPS should offer an enterprise-scalable architecture; the HIPS should be scalable to thousands of agents per manager
5.	The HIPS should use the HTTP and SSL protocols for the management interface and for the communication between the HIPS and management centre
6.	The HIPS should reside between the applications and the kernel, enabling maximum application visibility with minimal impact to the stability and performance of the underlying operating system.
7.	When an application attempts an operation, the HIPS should check the operation against the application's security policy, making a real-time allow or deny decision on its continuation and determining if logging the request is appropriate
8.	By combining security policies implementing distributed firewall, operating system lockdown and integrity assurance, malicious mobile code protection, and audit event collection capabilities in default policies for servers, the HIPS should provide defence-in-depth protection for exposed systems
9.	Correlation should be performed on the Management Center console. The Management Center for HIPS should provide all management functions for all

	HIPS agents in a centralized manner from the security management software (to be provided)
10.	<p>The HIPS should be supported on the following platforms:</p> <p>Microsoft Windows</p> <ul style="list-style-type: none"> • Solaris (SPARC) • Red Hat Enterprise Linux • SuSE Linux Server • HP-UX • AIX
11.	All necessary power cords, adapters, data cables, connectors, CDs, manuals, brackets accessories, wire managers, etc. should be provided to install HIPS

4. Relational Data Base Management System (RDBMS)

S. No.	Specification
1.	The Relational Database Management System should support or run on Multiple Operating Systems like UNIX, Windows and Linux
2.	It must have ability to define & store Large Objects in tables and retrieve them with the flexibility to place Large Objects separately from the Rest of the Data in Tables and queried using simple SQL functions
3.	GUI Tool to Visually Explain the Path taken by the Query during execution.
4.	Database should support Full parallelism & determine dynamically the optimum level of parallelism.
5.	Database should have a cost-based and rule-based optimizer as well as query Optimizer to provide most optimum access path.
6.	Database should offer large I/O operations & optional data placement (large objects) for storage fine-tuning.
7.	The Database Licenses should be full use and unrestricted.
8.	Database should have capability to compress and store data onto low cost storage partitions for faster performance. Partitioning of data will enhance the manageability, performance, and availability of the application.
9.	The database should provide native active-active high availability clustering with objectives of scalability, load balancing and high availability. The database cluster should be deployed in the load balancing mode and provide vertical and horizontal scalability without repartitioning or changes to the database objects or 3rd party transaction routing mechanisms. All the nodes in the database cluster should be able to do concurrently read-write the

	underlying database image. Bidders may choose from world leading database such as Oracle/Microsoft SQL Server/IBM DB2.
10.	This proposed clustering solution should have previous successful deployments in departments of States or Central Government of India.
11.	Database should provide High availability & Disaster recovery using cost effective option of automatically synchronizing the transaction logs to disaster site, which in case of fail over the other node provides the availability of all data.
12.	Inbuilt snapshot Replication support with log based Change Capture mechanism to facilitate high performance.
13.	Database should provide continuous availability features to address hardware failures, instance failures, human errors like accidental deletion of data, tables, able to repair at block level. These features should be available on all the platforms like Unix, Windows and Linux.
14.	Database should be able to provide database level storage management mechanism, which should enable the availability by means of creating redundancy, automatically balance the data files across the available disks, i/o balancing across the available disks for the database for performance, availability and management.
15.	Parallel execution of DML and Index scan to be possible for Database
16.	Database should support the separation of security functionality from application functionality and database administration functionality.
17.	Database should Provide controls over who, when, where and how applications, data and databases can be accessed.
18.	Database should provide multi-factor authentication based controls and policies taking account of IP addresses, application context etc.”
19.	Database should help in addressing regulatory compliance requirements by protecting sensitive data whether in transit or at rest from unauthorized disclosure.
20.	Data should be encrypted before it is written to disk and decrypted before it is returned to the application. The encryption and decryption process should be completely transparent to applications and users. Subsequent backups of the database files to disk or tape will have the sensitive application data encrypted.
21.	Database should support native optional database level encryption on the

	table columns, tables and backups.
22.	A centrally Monitored & Browser Based GUI Administration Tool should be available with the RDBMS to Create, Delete & Manipulate different Database Objects and also Schedule Queries priorities centrally.
23.	Database Performance Monitoring & Tuning Tools - Tools must be able to monitor performance of CPU Usage, Cache Hit Ratio, I/O Usage, and also automatically Tune the Parameters for Optimum Performance of the System.
24.	The database should provide integrated tools for analyzing SQLs, managing, monitoring, maintaining and administering the database.
25.	Database backend development tools should be included in RDBMS.
26.	Should allow users to store XML document in database in its native format
27.	Database should support creation of an index on the column of the table which stores XML in its native format.
28.	Database should have the ability to support 64-bit support for Windows, Linux distributions, and UNIX

5. Helpdesk Management System/Tools

S. No.	Functional Requirement
1.	Solution should be scalable and open to third party integration
2.	Provide flexibility of logging incident manually via windows GUI and web interface
3.	The web interface console of the incident tracking system would allow viewing, updating and closing of incident tickets.
4.	Provide seamless integration to events/incident automatically from third party NMS / EMS available at HPSDC/HIMSWAN
5.	Allow categorization on the type of incident being logged
6.	Provide classification to differentiate the criticality of the incident via the priority levels, severity levels and impact levels
7.	Each incident could be able to associate multiple activity logs entries manually or automatically events / incidents from other security tools or EMS or NMS
8.	Provide audit logs and reports to track the updating of each incident ticket

9.	Provide audit logs and reports to track the updating of each incident ticket
10.	It should integrate with third party Enterprise Management System and support automatic problem registration, based on predefined policies
11.	It should be able to log and escalate user interactions and requests
12.	It should provide status of registered calls to end-users over email, SMS and through web
13.	Should generate the SLA reports based on various category defined in the tender document

D. TESTING AND QUALITY ASSURANCE REQUIREMENTS

3.1 Inspections

3.1.1 Factory Inspections: Not applicable

Himachal Pradesh Road & Other Infrastructure Development Corporation

3.1.2 Inspections following delivery:

The inspection of the goods shall be carried out to check whether the goods are in conformity with the technical specifications attached to the purchase-order form and shall be in line with the inspection/test procedures laid down in the technical specifications and the General Conditions of contract. The supplier will dispatch the goods to the ultimate consignee after internal inspection testing along with the supplier's inspection report, manufacturer's warranty certificate.

The Supplier shall ensure that all the products are delivered at the sites in good condition and are free from physical damage including but not limited to crushed or broken equipment, missing seals, opened packages and incomplete shipments. Purchaser reserves the right to return the products to the Supplier at the Supplier's expense. This equipment will only be acceptable when each received item corresponds with the checklist that will be prepared by the Supplier prior to shipment. Any shortfalls in terms of number of items received may render the delivered equipment incomplete.

The purchaser will test the equipment after completion of the installation and commissioning at the site of the installation. For site preparation, the supplier should furnish all details to the purchaser sufficiently in advance so as to get the works completed before receipt of the equipment. Complete hardware and software should be supplied, installed and commissioned properly by the supplier prior to commencement of performance tests.

3.2 Pre-commissioning Tests

- 3.2.0 In addition to the Supplier's standard check-out and set-up tests, the Supplier (with the assistance of the Purchaser) must perform the following tests on the System and its Subsystems before Installation will be deemed to have occurred and the Purchaser will issue the Installation Certificate(s) (pursuant to GCC Clause 26 and related SCC clauses).

The Supplier MUST carry out the following activities on obtaining approval from the Purchaser:

- The Supplier MUST outline the methodology that will be used for testing the software and hardware.
- The Supplier MUST define the various levels or types of testing that will be performed for software and hardware.
- The Supplier MUST provide necessary checklist/documentation that will be required for testing the software and hardware
- The Supplier MUST describe any technique that will be used for testing for software and hardware
- The Supplier MUST describe how the testing methodology will confirm to requirements of each functional area
- The Supplier MUST indicate how one will demonstrate to Purchaser that all applications installed in the system have been tested.

- 3.2.1 The Entire System: Supplier MUST define and obtain approval from the Purchaser in accordance with the defined Performance levels for each of the installed System/Subsystem

- Test
- Test Conditions
- Success Criteria

3.3 Operational Acceptance Tests

- 3.3.0 Pursuant to GCC Clause 28 and related SCC clauses, the Purchaser (with the assistance of the Supplier) will perform the following tests on the System and its Subsystems following Installation to determine whether the System and the Subsystems meet all the requirements mandated for Operational Acceptance.

The SI MUST carry out the following activities on obtaining approval from the Purchaser

- The SI MUST outline the testing methodology/technique to conduct User Acceptance Testing, Application Security testing (vulnerability testing and penetration testing) and Infrastructure Security
- The SI MUST outline the testing methodology/technique to conduct following Test

- Database Test
- Functionality Test
- Module Test (Unit Test)
- System Test
- Reliability Testing
- Performance Testing
- Consistency Testing
- Recovery Testing
- Multi-User Capability
- System Integration Test
- Compatibility and Configuration Testing
- Graphical User interface (GUI) Test
- Manual Procedures Testing
- User Information Testing
- The SI should ensure that the system meets requirements, standards, and specifications as set out in this bid document and as needed to achieve. The SI should outline the approach with clear and quantifiable metrics for accountability of following review elements:
 - Functional requirements
 - Test cases and Requirements Mapping
 - Infrastructure Compliance Review
 - Availability of Services in the defined locations
 - Performance and Scalability
 - Security / Digital Signatures
 - Manageability and Interoperability
 - SLA Reporting System
 - Project Documentation
 - Data Quality Review

3.3.1 The Operational Acceptance test will be conducted by the purchaser/their consultant or any other person nominated by the purchaser, at its option. The acceptance will involve trouble-free operation for not less than 90 calendar days. There shall not be any additional charges for carrying out acceptance tests. No malfunction, partial or complete failure of any part of hardware or excessive heating of motors attached to printers, drivers etc. or bugs in the software should occur. All the software should be complete and no missing modules/sections will be allowed. The supplier shall maintain necessary log in respect of the results of the tests to establish to the entire satisfaction of the purchaser, the successful completion of the test specified. The Supplier has to adhere to Functional Performance Requirements and Service Performance Levels as described in Attachment H2: Service Performance Levels.

E. IMPLEMENTATION SCHEDULE

The HP PWD department has over 300 office locations across Himachal Pradesh and therefore the implementation of solution shall be done in phased manner. Initially the solution shall be implemented at some selected offices as part of phase I. Based on the experiential learning's, the solution shall be implemented in other offices across the state in staggered manner.

The implementation of the IT road map for PWD from the functional, networking and office hierarchy perspective are discussed in the following sections.

Functional Coverage

Phase I

A. Primary Applications

- Work Execution
- Project Planning
- Finance and Accounts Management

B. Base Application

- Web Portal
- Digitization of SOR
- User Dashboard and Profile
- MIS
- User Management Module

Phase II

- Quality and Control
- Asset Management
- Store and Purchase
- Legal and Arbitration
- Contract Management System
- Integration with PMIS, IFMS and other legacy Application

Physical Coverage

Phase I

- Head Office Shimla
- Shimla Zone, Circles, Divisions, Subdivisions Offices

Phase II

- All remaining PWD Offices

4.1 Implementation Schedule Table

Activity / Weeks (T= Contract Signing date)	T+1	T+4	T+8	T+12	T+16	T+18	T+22	T+26	T+30	T+32	T+34	T+36	T+38	T+40	T+42	T+46	T+48	36 Months
Project Inception																		
Project Kick Off																		
SI Team Mobilization																		
Project Plan Document and Communication Plan																		
Application Development and Implementation																		
Phase-I																		
Completion of Requirement Study at HO, CO, DO and SDO																		
Preparation and Finalization of SRS (Module wise Sign- Off)																		
Detail Design Architecture																		
Application Development (After Module wise SRS Sign-Off)																		
Phase-II																		
Completion of Requirement Study at HO, CO, DO and SDO																		
Preparation and Finalization of SRS (Module wise Sign- Off)																		
Detail Design Architecture																		
Application Development (After Module wise SRS Sign-Off)																		
Final Preparation																		
Phase-I																		
System Integration and Testing																		
Preparation of User Manual																		
User Acceptance Testing and other tests																		
Training and Change Management																		
Data Digitization																		
Security Audit																		

Go Live Phase –I																		
Phase-II																		
System Integration and Testing																		
Preparation of User Manual																		
User Acceptance Testing and other tests																		
System updation based on Phase-I testing and feedback																		
Security Audit																		
Go Live Phase -II																		
Deployment of Hardware																		
Phase-I																		
Installation of Hardware and Software DR																		
Connectivity and Deployment of User Infrastructure under Phase – I																		
Connectivity and Deployment of User Infrastructure under Phase - II																		
System Go-Live																		
Phase- III																		
Maintenance Phase of 36 months																		
Development																		Maintenance

Note: -The hardware delivery should be closer to operational acceptance or at the time of UAT

4.2 Site Table(s)

CE	SE	EE	AE
Shimla Zone	3rd Circle Solan	Solan Division	Sub-Division, Solan
			Sub-Division, Oachghat
			Sub-Division, Kandaghat
			Sub-Division, Solan (Horticulture)
			Sub-Division, Dharampur (Mechanical)
		Kasauli Division	Sub-Division, Kasauli
			Sub-Division, Sabathu
			Sub-Division, Parwanoo
		Nalagarh Division	Sub-Division, Nalagarh
			Sub-Division, Ramshehar
			Sub-Division, Baddi
		Arki Division	Sub-Division, Arki
			Sub-Division, Kunihar
			Sub-Division, Darlaghat
	4th Circle Shimla	Division No-I, Shimla	Sub-Division No-I, Shimla
			Sub-Division, Shoghi
			Sub-Division, Junga
		Division No-II, Shimla	Sub-Division, Jatog
			Sub-Division, Vidhan Sabha
			Sub-Division No. VII, Shimla
			Medical College Sub Division, Shimla
		Division No-III, Shimla	Sub-Division No-II, Shimla
			Sub-Division No-V, Shimla
			Sub-Division No-VII, Shimla
			Sub-Division No-IX, Shimla

	11th Circle Rampur	Theog Division	Sub-Division, Theog
			Sub-Division, Matiana
			Sub-Division, Sainj
		Rampur Division	Sub-Division No-I, Rampur
			Sub-Division, Nankhari
			Sub-Division, Taklech
			Sub-Division, Sarahan
			Hort. Sub-Division, Nirath
			Project Sub-division, Rampur
		Kumarsain Division	Sub-Division, Kumarsain
			Sub-Division, Thanedhar
			Sub-Division, Suni
			Sub-Division, Jalog
		Kalpa Division	Sub-Division, Kalpa
			Sub-Division, Peo
			Sub-Division, Pooh
			Sub-Division, Moorang
		Karcham Division at Bhavnager	Sub-Division, Tapri
			Sub-Division, Ponda
			Sub-Division, Sangla
			Project Sub-Division, Bhawanagar
		Spiti Division Kaza	Sub-Division, Kaza
			Sub-Division, Hurling
			Sub-Division, Sichling
			Sub-Division, Lossar
		Outer Seraj Division Nirmand	Sub-Division, Nirmand
			Sub-Division, Ani
			Sub-Division, Nither
			Sub-division No-II, Brow
			Project Sub-division Dalash

		Mechanical Division Rampur	Sub-Division, Rampur
			Sub-Division, Bhawanagar
			Sub-Division, Kaza
			Sub-Division, RecongPeo
			Sub-Division, Kumarsain
	12th Circle, Nahan	Nahan Division	Sub-Division, Nahan
			Sub-Division, Dadahu
			Mechanical Sub-Division, Nahan
		Paonta Division	Sub-Division No-I Paonta
			Sub-Division No-II Paonta
			Sub-Division, Dholakuan
		Rajgarh Division	Sub-Division, Rajgarh
			Sub-Division, Habban
			Sub-Division, Sarahan
			Sub-Division, Dilman
			Project Sub-division, Rajgarh
		Sangrah Division	Sub-Division, Haripurdhar
			Sub-Division, Renuka
			Sub-Division, Nohradhar
			Project Sub-Division, Sangrah
		Shillai Division	Sub-Division, Shillai
			Sub-Division, Kamrau
			Sub-Division, Meenus
			Sub-Division, Sataun
			Project Sub-division, Shillai
	14th Circle, Rohru	Rohru Division	Sub-Division, Rohru
			Sub-Division, Tikkar
			Project Sub Division No.1 Rohroo
			Sub-Division, Chirgaon

Section VI. Technical Requirements

		Jubbal Division	Sub-Division, Jubbal
			Sub-Division, Kotkhai
			Sub-Division, Kalbog
			Sub Division, Sarswatinagar
		DodraKawar Division	Sub-Division No-I, DodraKawar
			Project Sub Division, Larot
		Chopal Division	Sub-Division, Chopal
			Sub-Division, Nerwa
			Sub-Division, Kupvi
			Project Sub-Division, Nerwa
			Project Sub-Division, Chopal
		Mechanical Division Rohru	Mech. Sub-Division, Rohru
			Mech. Sub-Division, Nerwa
			Mech. Sub-Division, Kotkhai
Kangra Zone	5th Circle, Palampur	Dharamshala Division	Sub-Division, Dharamshala No-I
			Sub-Division, Dharamshala No-II
			Sub-Division, NagrotaBhagwan
			Project Sub-Division, Dharamshala
		Kangra Division	Sub-Division, Kangra
			Sub-Division, Shahpur
			Sub-Division, Lanj
			Sub-Division Gagal Project Sub division, Kangra
			Medical College Sub Division, Tanda
		Palampur Division	Sub-Division, Palampur
			Sub-Division, Bhawarna
			Sub-Division, Dhria
			Project Sub-division, Darang

			(Kangra)
		Mech. Division Dharamshala	Sub-Division No-I, Palampur
			Sub-Division No-II, Dharamshala
			Sub-Division, Nurpur
		Balakrupi Division	Sub Division, Jaisinghpur
			Sub Division, Thural
			Sub Division, Balakrupi
	7th Circle, Dalhousie	Chamba Division	Sub-Division No-I, Chamba
			Sub-Division No-II, Chamba
			Sub-Division, Tissa
			Sub Division tarela at Bairagarh
			Project Sub-Division Chamba,
			Mech. Sub-Division, Chamba
		Salooni Division	Sub-Division, Salooni
			Sub-Division, Koti
			Sub-Division, Bhalei
			Project Sub division, Salooni
		Dalhousie Division	Sub-Division, Sihunta
			Sub-Division, Dalhousie
			Sub-Division, Chowari
			Sub-Division, Banikhet
			Project Sub-division, Dalhousie
		Pangi Division(Killar)	Sub-Division No-I, Killar
			Sub-Division, Sach
			Sub-Division, Shour
		Bharmour Division	Sub-Division, Bharmour
			Sub-Division, Garola
			Sub-Division, Holi
			Sub-Division, Rakh

	9th Circle, Nurpur	Nurpur Division	Sub-Division, Nurpur
			Sub-Division, Rehan
			Sub-Division, Sulyali
		Fathepur Division	Sub-Division, Fathepur
			Sub-Division, Indora
			Sub-Division, Dhemta
			Sub-Division, Badukhar
		Dehragopipur Division	Sub-Division, Dehra
			Sub-Division, Jwalamukhi
			Sub-Division, Dadasiba
			Sub-Division, Paragpur
		Jawali Division	Sub-Division, Jawali
			Sub-Division, Kotla
			Sub-Division, NagrotaSuriyan
Mandi Zone	1st Circle Mandi	Gohar Division	Sub-Division, Gohar
			Sub-Division, Janjehli
			Sub-Division, Balichowki
		Mandi Division No. II	Sub-Division, Kotli
			Sub-Division No. IV, Mandi
			Sub-Division, Rewalsar
			Sub-Division, Chakkar
			Sub-Division No. III, Mandi
		Karsog Division	Sub-Division, Karsog
			Sub-Division, Churag
			Sub-Division, Pangna
			Sub-Division, Chattri
			Project Sub Division, Karsong
		Sundernagar Division	Sub-Division, Suket
			Project Sub-Division
			Sundernagar
			Engineering College Sub

			Division
			Sub-Division, Dhanotu
	Jogindernagar Circle	Baijnath Division	Sub-Division, Baijnath
			Sub-Division, Panchrukhi
			Project Sub-Division, Baijnath
		Jogindernagar Division	Sub-Division, Ladbharol
			Sub-Division, Jogindernagar
		Padhar Division	Sub-Division No-I, Panarsa
			Project Sub-Division, Mandi
			Sub-Division, Padhar
			Sub-Division, Kamand
			Horticulture Sub-Division, Pandoh
	6th Circle, Kullu	Kullu Division No. I	Sub-Division, Bhunter
			Sub-Division, Banjar
			Sub-Division, Manikaran
			Project Sub-Division, Shamshi
		Kullu Division No-II	Sub-Division, Manali
			Sub-Division No-1, Katrain
			Sub-Division No-III, Kullu
			Project Sub-Division, Kullu
		Chenab Valley Division, Udaipur	Sub-Division, Keylong
			Sub-Division, Udaipur
			Sissu Sub Division, Koksar
			Mechanical Sub Division, Karga
		Mechanical Division Shamshi	Mechanical Sub Division No-I, Shamshi
			Mechanical Sub Division No-II, Shamshi
			Sub-Division, Jogindernagar

			Sub-Division, Mandi
Hamirpur Zone	15th Circle, Una	Una Division	Sub-Division No-I, Una
			Sub-Division No-II, Mehatpur
			Sub-Division, Tahliwala
		Bangana Division	Sub-Division, Bagana
			Sub-Division, Jol
		Bharwain Division	Sub-Division, Bharwain
			Sub-Division, Gagret
			Sub-Division, Amb
	8th Circle, Hamirpur	Hamirpur Division	Sub-Division, Hamirpur
			Sub-Division, Sujanpur-Tihra
			Sub-Division, Nadaun
		Sarkaghat Division	Sub-Division, Sarkaghat
			Sub-Division, Baldwara
		Tauni Devi Division	Sub-Division, Tauni Devi
			Sub-Division, Samirpur
			Sub-Division, Lambloo
		Barsar Division	Sub-Division, Barsar
			Sub-Division, Dhaneta
			Sub-Division, Bhoranj
			Project Sub-Division, Bhota
		Dharampur	Sub-Division, Dharampur
			Sub-Division, Mandap
			Sub-Division, Marhi
			Sub-Division, Tihra
	10th Circle, Hamirpur	Bilaspur Division No-I	Sub-Division, Beri
			Sub-Division, Bilaspur No-II
			Horticulture Sub-Division, Bilaspur
		Bilaspur Division No-II	Sub-Division, Namhol
			Sub-Division, Swarghat

			Sub-Division, Naina Devi Ji
			Sub-Division, Bilaspur No-III
		Ghumarwin Division	Sub-Division, Ghumarwin
			Sub-Division, Berthin
			Sub-Division, Bharari
			Project Sub-Division, Kalul
Electrical Wing	1st Electrical Circle Shimla	Elect. Division No-I, Kasumpti	Sub-Division No-I, Vidhan Sabha
			Sub-Division No-II, Kasumpti
			Sub-Division, Solan
			Sub-Division, Nahan
		Elect. Div. No-II, Shimla	Sub-Division Snowdon, Shimla
			Sub-Division, Rampur
			Sub-Division, Theog
			Sub-Division, Peo
		Elect. Division Mandi	Sub-Division, Mandi
			Sub-Division, Sundernagar
			Sub-Division, Kullu
			Sub-Division, Udaipur
	2nd Electrical circle Dharmashala, Kangra	Elect. Division Una	Sub-Division, Una
			Sub-Division, Hamirpur
			Sub-Division, Bilaspur
		Elect. Division Palampur	Sub-Division, Palampur
			Sub-Division, Chamba
			Sub-Division, DharmShala
Mechanical Wing	Mechanical Circle	Mechanical Division Shimla	Sub-Division No-II, Sanjauli (Bhattakuffar)
			Sub-Division Dhalli, Steel Bridge Const.

		Mechanical Division, Bilaspur	Sub-Division, Tara Devi
			Sub-Division, Bilaspur
			Sub-Division, Hamirpur
			Sub-Division, Parchhu
			Sub-Division, Una (Jalgran)
National Highway	National Highway Circle Shimla	NH Division, Rampur	Sub-Division, Narkanda
			Sub-Division, Rampur
			Sub-Division, Jeori
			Sub-Division, Neugalseri
		NH Division, Solan	Sub-Division, Nalagarh
			Sub-Division, Chambaghat
			Sub-Division, Shalaghat
			Sub-Division, Dhoulakuan
			Sub-Division, Dhalli
	National Highway Circle Shahpur	NH Division, Jogindernagar	Sub-Division, Nurpur
			Sub-Division, Shahpur
			Sub-Division, Baijnath
			Sub-Division, Gumma
			Sub-Division, Drang(Mandi)
		NH Division, Hamirpur	Sub-Division, Jwalamukhi
			Sub-Division, Amb
			Sub-Division, Samirpur
			Sub-Division, Jukhala
			Sub-Division, Dehra
		NH Division, Pandoh	Sub-Division, Shillai
			Sub-Division, Kotli
			Sub-Division, Kullu
			Sub-Division, Katrain
			Sub-Division, Pandoh

Arbitration Wing	Arbitration Circle		Arbitration Office, Solan
Land Acquisition Wing	Land Acquisition Office	Land Acquisition Office	Land Acquization Office, Shimla
			Land Acquization Office, Mandi
			Land Acquization Office, Dharamshala
Architecture Wing	Chief Architect Office	Architect Office	Architecture Office, Shimla
			Senior Architecture Office, Mandi
			Asst Architecture Office, Dharmashala
Quality Control Wing			Field Office, Shimla
			Field Office, Kangra
			Field Office, Mandi
HPRIDC Wing		CMU Division, Shimla	
		CMU Division, Una	
		CMU Division, Hamirpur	
		CMU Division, Dharmashala	
			RIDC - GM Finance Office, Shimla

Nature of Offices	Numbers of Offices
Office of Secretary - PWD	1
Secretariat - Shimla	1
Head Office	1
Zones	4
Circles	19
Divisions	77
Sub Divisions	283
L.A.O	3
National Highway	1
Quality Control	1
HPRIDC	1
GM Finance	1
Architecture Wing (HO)	1
Total Number of Offices in HP PWD	394

4.3 Table of Holidays and Other Non-Working Days

As per Government of Himachal Calendar

F. REQUIRED FORMAT OF TECHNICAL BIDS

5.1 Description of Information Technologies, Materials, Other Goods, and Services

5.1.0 The Bidder must provide detailed descriptions of the essential technical, performance, or other relevant characteristics of all key Information Technologies, Materials, other Goods, and Services offered in the bid (e.g., version, release, and model numbers). Without providing sufficient clear detail, Bidders run the risk of their bids being declared non-responsive.

5.1.1 To assist in the bid evaluation, the detailed descriptions should be organized and cross referenced in the same manner as the Bidder's item-by-item commentary on the Technical Requirements described in Section 5.2 below. All information provided by cross reference must, at a minimum, include clear titles and page numbers.

5.2 Item-by-Item Commentary on the Technical Requirements

5.2.0 The Bidder must provide an item-by-item commentary on the Purchaser's Technical Requirements, demonstrating the substantial responsiveness of the overall design of the System and the individual Information Technologies, Goods, and Services offered to those Requirements, see ITB Clause 16.2 (b) (IS1STG SBD) or ITB Clause 14.2 (b) (IS2STG SBD).

5.2.1 In demonstrating the responsiveness of its bid, the Bidder is strongly urged to use the Technical Responsiveness Checklist provided in Section G of the Technical Requirements. Failure to do so, increases significantly the risk that the Bidder's Technical Bid will be declared technically non-responsive. Among other things, the checklist should contain explicit cross references to the relevant pages in the Bidder's Technical Bid.

5.3 Preliminary Project Plan

5.3.0 The Bidder must prepare a Preliminary Project Plan describing, among other things, the methods and human and material resources that the Bidder proposes to employ in the design, management, coordination, and execution of all its responsibilities, if awarded the Contract, as well as the estimated duration and completion date for each major activity. The Preliminary Project Plan must also address the topics and points of emphasis specified in SCC Clause 19. The Preliminary Project Plan should also state the Bidder's assessment of the major responsibilities of the Purchaser and any other involved third parties in System supply and installation, as well as the Bidder's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.

5.4 Confirmation of Responsibility for Integration and Interoperability of Information Technologies

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- 5.4.0 The Bidder must submit a written confirmation that, if awarded the Contract, it shall accept responsibility for successful integration and interoperability of all the proposed Information Technologies included in the System, as further specified in the Bidding Documents.

G. TECHNICAL RESPONSIVENESS CHECKLIST

Technical Responsiveness Checklist

Note to Bidders: The following Checklist is provided to help the Bidder organize and consistently present its Technical Bid. For each of the following Technical Requirements, the Bidder must describe how its Technical Bid responds to each Requirement. In addition, the Bidder must provide cross references to the relevant supporting information, if any, included in the bid. The cross reference should identify the relevant document(s), page number(s), and paragraph(s). The Technical Responsiveness Checklist does not supersede the rest of the Technical Requirements (or any other part of the Bidding Documents). If a requirement is not mentioned in the Checklist that does not relieve the Bidder from the responsibility of including supporting evidence of compliance with that other requirement in its Technical Bid. One- or two-word responses (e.g. “Yes,” “No,” “Will comply,” etc.) are normally not sufficient to confirm technical responsiveness with Technical Requirements.

Tech. Require. No. 1	Technical Requirement: <i>[insert: abbreviated description of Requirement]</i>	<i>[specify: Mandatory or Preferred]</i>
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 2	Technical Requirement: <i>[insert: abbreviated description of Requirement]</i>	<i>[specify: Mandatory or Preferred]</i>
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

H. ATTACHMENTS

Attachment 1. Project Governance Structure

Project governance is the management framework within which project decisions are made. Project governance is a critical element of any project since while the accountabilities and responsibilities associated with an organization's business as usual activities are laid down in their organizational governance arrangements

The role of project governance is to provide a decision making framework that is logical, robust and repeatable to govern an organization's capital investments. In this way, an organization will have a structured approach to conducting both its business as usual activities and its business change, or project, activities.

The institutional structure for this project as detailed below:-

Committee	Constitutes	Roles
Project Steering Committee	<ul style="list-style-type: none"> - Additional Chief Secretary PWD - Engineer-in –Chief - Project Director, RIDC - Chief Engineers of concerned Zones 	<ul style="list-style-type: none"> - Overall Guidance - Decision on policy matters - Approval of all deliverables by various agencies/groups - Financial Powers as per the delegation
Project Implementation Committee	<ul style="list-style-type: none"> - Project Director, RIDC - Dedicated full time HOD / EE - Nodal Officer, IT - Internal Domain specialist - Representative from IT Department - Representative from PMC team, M/s Wipro Ltd. 	<ul style="list-style-type: none"> - Overall responsibility of Project implementation - Communications and Training - Selection of Customization/ Development and Implementation Agencies - Exercise Strategic Control - Ongoing support and upgrades

- Project Steering Committee, with Secretary PWD of the State as its Chairman, shall be responsible for overall guidance, deciding policy level matters and to act as final body for approving all issues relating to project implementation.
- Project Implementation Committee, with Project Director of HPRIDC as its Chairman, Shall be responsible for overall responsibility of the project implementation, communication and training and act as project implementation body.

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Attachment 2. Service Level Agreement**1. Purpose:**

The purpose of this SLA is to clearly define the expected levels of service to be provided by selected bidder to purchaser during the entire duration of this contract or till the amendment of SLA whichever is earlier.

2. Definitions:

- (a) “Scheduled Maintenance Time” shall mean the time that the System is not in service due to a scheduled activity as defined in this SLA. The scheduled maintenance time would not be during 16X6 timeframe. Further, scheduled maintenance time is planned downtime with the prior permission.
- (b) “Scheduled operation time” means the scheduled operating hours of the System for the month. All scheduled maintenance time on the system would be deducted from the total operation time for the month to give the scheduled operation time. The total operation time for the applications within the Primary DC, DRC and critical client site infrastructure will be 12 hrs X 7 days X 12 months.
- (c) “System downtime” means accumulated time during which the System is totally inoperable within the Scheduled Operation Time but outside the scheduled maintenance time and measured from the HPPWD/HPRIDC employees log a call with the SI team of the failure or the failure is known to the SI from the availability measurement tools to the time when the System is returned to proper operation.
- (d) “Availability” means the time for which the services and facilities are available for conducting operations including application and associated infrastructure. Availability is defined as:
$$\{(\text{Scheduled Operation Time} - \text{System Downtime}) / (\text{Scheduled Operation Time})\} * 100\%$$
- (e) “Incident” refers to any event / abnormalities in the functioning of the Data Centre Equipment / Services that may lead to disruption in normal operations of the Data Centre, System or Application services.
- (f) “Error” in data digitization or data migration exercise, refers to the mistakes made intentional/ unintentional by SI which may or may not change the actual meaning of the subject.

3. Interpretations:

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- (a) The business hours are 10:00AM to 5:00PM on all working days (Mon-Sat) excluding Public Holidays or any other Holidays observed by the State. The SI however recognizes the fact that the HPPWD/HPRIDC offices will require to work beyond the business hours on need basis.
- (b) "Non-Business Hours" shall mean hours excluding "Business Hours".
- (c) 12X7 shall mean hours between 10:00AM -5:00 PM on all days of the week.
- (d) The SLA parameters shall be monitored on a monthly basis as per the individual SLA parameter requirements. However, if the performance of the system/services is degraded significantly at any given point in time during the contract and if the immediate measures are not implemented and issues are not rectified to the complete satisfaction, then the HPPWD/HPRIDC will have the right to take appropriate disciplinary actions including termination of the contract.
- (e) Overall Availability and Performance Measurements will be on a monthly basis for the purpose of Service Level reporting. An "Availability and Performance Report" will be provided by the SI on monthly basis in the suggested format and a review shall be conducted based on this report. A monthly Availability and Performance Report shall be provided to at the end of every month containing the summary of all incidents reported and associated SI performance measurement for that period. The monthly Availability and Performance Report will be deemed to be accepted by the HPPWD/HPRIDC upon review and signoff by both SI and the HPPWD/HPRIDC. Where required, some of the Service Levels will be assessed through audits or reports e.g. utilization reports, measurements reports, etc. as appropriate to be provided by the SI on a monthly basis, in the formats as required by auditor will need to be provided by the SI. Audits will normally be done on regular basis or as required by the HPPWD/HPRIDC and will be performed by the HPPWD/HPRIDC or the HPPWD/HPRIDC appointed third party agencies.
- (f) EMS system shall play a critical role in monitoring the SLA compliance. This tool should generate the SLA Monitoring report in the end of every month which is to be shared with the HPPWD/HPRIDC on a monthly basis. The tool should also be capable of generating SLA reports for a half-year. The HPPWD/HPRIDC will audit the tool and the scripts on a regular basis. .
- (g) The SI is expected to provide the required service levels. In case the service levels cannot be achieved at service levels defined in the tables below, it shall result in a breach of contract and invoke the penalty clause. Payments to the SI are linked to the compliance with the SLA metrics laid down in the tables below. During the contract period, it is envisaged that there could be changes to the SLA, in terms of addition, alteration or deletion of certain parameters, based on mutual consent of both the parties i.e. the HPPWD/HPRIDC and SI.
- (h) Following tables outlines the key service level requirements for the system, which needs be ensured by the SI during the operations and maintenance period.

4 Service level requirements for the system

4.1 Data Digitization

S. No.	SLA Terms	Description
1.	% Accuracy	<p>HPPWD/HPRIDC officials will physically verify the digitized records submitted by the SI vendor against the original records and will identify the erroneous fields in each record. The % accuracy for each batch will be calculated as follows:</p> <p>Total no. of erroneous fields in the batch - X</p> <p>Total no. of records in the batch - Y</p> <p>Field per record - N</p> <p>Accuracy per batch (%) = $(X*100)/(Y*N)$</p>
2.	Digitization Cost	Digitization cost = A*Y, where “A” is the rate per record digitized and Y is the total no. of records in the batch.

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Required Service Level	Penalty
Data Accuracy	Accuracy of the data digitized by the SI vendor when compared against the original records	The ratio between the total no. error free of records in a batch of data that were successfully digitized to the total no. of records in that batch of data	HPPWD /HPRIDC appointed shall take physical count of data that was migrated successfully into the new system as compared to that which existed in the old legacy source	Weekly	Fortnightly	7x6	> 98%	30% of Data Digitization Cost.

Please note:

- Accuracy of less than 90% will be considered as the Breach of the Agreement and reserves the Right to terminate the agreement.
- In all such cases, where the accuracy is below 100%, the SI will be responsible to carry out corrections with no additional cost to HPPWD/HPRIDC.
- Payment of Data Digitization to the SI will be made only after achieving the 100% accuracy level

4.2 Application availability and Performance

Service Category	Description	Required Service Level	Penalty	
			% Availability	Penalty as % of the Quarterly Instalment of Managed IT/Service Delivery Phase
Application availability	Availability of all Modules for at least 99.9% of time measured on monthly basis for a 24x7x365 time period	99.9%	<99.9% & >=99%	0.5%
			< 99% & >= 98%	1%
			< 98% & >= 97%	2%
Application Performance	1) Average page opening/ loading time - 7 seconds 2) Average response time for retrieval of information from server – 7 seconds 3) Business Transaction Response Time involving uploading/downloading of documents - 30 seconds (Considering average 5 scanned documents of 0.5 Mb)	95% (Response time of services, measured monthly)	<95% & >=93%	0.5%
			< 93% & >= 91%	1%
			< 91% & >= 89%	2%

Please note:

- For each additional drop of 1% in Application availability below 97%, 2% of the Quarterly Instalment of Managed IT/Service Delivery Phase will be levied as additional penalty
- Application availability at SDC of less than 97% continuously for two quarter will be considered as the Breach of the Agreement in case of O&M Phase and HPPWD/HPRIDC reserves the Right to terminate the agreement
- The non-availability for application service, website measured on monthly basis and excluding the scheduled maintenance shutdown. Performance of system refers to the proper and timely functioning of the system's functionalities. The applications should be available and performing as per functionalities
- Standard Bandwidth for analyzing response time of the developed/ customized application will be 128 Kbps
- For each additional drop of 1% in Application performance below 89%, 2% of the Quarterly Instalment of Managed IT/Service Delivery Phase will be levied as additional penalty

4.3 Training and Change Management

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Required Service Level	Penalty
Training Satisfaction	Satisfaction level of the training sessions conducted by vendor for staff members & stakeholders	The feedback shall be received by the officials of HPPWD/HPRIDC after each training session. HPPWD/HPRIDC may decide to use the SLA in case insufficient training sessions are conducted by the SI vendor.	Feedback ratings received from Training participants, no. of participants and no. of Trainings delivered	Monthly	Monthly	Feedback ratings > 8	20% deduction from the payment for that of training session.

Please Note:

- Feedback rating of less than 6 by 20% of the trainees of a batch will be considered as the Breach of the Agreement and HPPWD/HPRIDC reserves the Right to terminate the agreement
- The bidder will be solely responsible (no additional charges) for conducting additional training sessions for the staff members providing the rating less than 6.

4.4 Service Levels for Issue Resolution Efficiency/Help Desk

Definitions:

- “Response Time” shall mean the time interval between the time the incident is reported to the Helpdesk and the time an engineer is assigned to the call.
- “Resolution Time” shall mean the time taken (after the incident has been reported at the Helpdesk), in resolving (diagnosing, troubleshooting and fixing) or escalating (to the second level or to respective Vendors, getting the confirmatory details about the same from the Vendor and conveying the same to the end user), the services related troubles during the first level escalation. The resolution time shall vary based on the severity of the incident reported at the Helpdesk. The severity would be as follows:
 - **Critical:** Show-stopper application breakdown/crash. Has serious implications on running the Application server and has impacted all business critical process. It has affected or may affect >50% of the user community.
 - **High:** Serious degradation in the application performance. Has impacted majority of the business process but able to continue the operations with the system limitations. It may have serious implications on the data integrity. It has affected or may affect, around 10% to 50% of the user community.
 - **Medium:** Moderate degradation in the application performance No implications on the data integrity. Has no impact on the normal operations/day-to-day working. It has affected or may affect, <10% of the user community.
 - **Low:** Applications are stable and has no impact on the day-to-day working. It has affected or may affect a single user

Type of Service	Metric	Basis of Measurement	Response Time (Required Service Level)		Expected Action / Remarks
*As per Problem Report (PR)	Initial Response	/ Call log details / EMS / Server logs	Critical	20 Min.	Initial review for Category, Priority and whether the PR has sufficient information to understand the problem Assignment to respective individual for analysis Respond to initiator informing of assignment for further
			High	2 Hours	
			Medium	3 Hours	
			Low	4 Hours	

					analysis
Type of Service	Metric	Basis of Measurement	Resolution (Required Level)	Time Service	Expected Action / Remarks
*As per Problem Report (PR)	Complete Analysis / Resolution	Call log details / EMS / Server logs	Critical	1 Hours	Detail analysis of Problem Report and provide root cause analysis report, potential risk / impact, effort estimate for resolution and closing of the problem
			High	4 Hours	
			Medium	8 Hours	
			Low	10 Hours	

***Note: - reported incidents include but not limited to any application and hardware related issues, bugs, errors, security incidents, application availability etc.**

Penalties in case of failure to meet Service Levels:-

Following penalty shall be applicable to the selected bidder in case of failure to meet provisions of Service Level Agreement (SLA) as provided in table above

- In case of problem categorized as “**Critical**”: purchaser shall recover from the selected bidder, a sum equivalent to 0.1% of the Quarterly Payment (On pro-rata basis) prices for every thirty (30) minutes of delay over and above the given threshold limit for each of such incidents
- In case of problem categorized as “**High**”: purchaser shall recover from the selected bidder, a sum equivalent to 0.1% of the Quarterly Payment (On pro-rata basis) prices for every sixty (60) minutes of delay over and above the given threshold limit for each of such incidents; and
- In case of problem categorized as “**Medium**”: purchaser shall recover from the selected bidder, a sum equivalent to 0.1% of the Quarterly Payment (On pro-rata basis) prices for every one hundred and twenty (120) minutes of delay over and above the given threshold limit for each of such incidents

Please note:

More than 3 incidents of not resolving the bugs / issues within the defined time limits in a quarter will be considered as the Breach of the Agreement in case of O&M Phase and HPPWD/HPRIDC reserves the Right to terminate the agreement

4.5 Manpower support

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- Following penalties pertaining to manpower deployment shall be applicable only on Project Manager, Domain specialist, Application lead, Database administrator, Network administrator, Training and change management expert.

Sr. No.	Parameter	SLA	Penalty
1.	Attendance (i.e. absenteeism of resource without any replacement) (SI will follow Himachal Government calendar)	Attendance less than 90%	No payment will be made for the days a resource is absent (per day payment will be calculated by dividing man-month rate by number of working days in that month).

- In case resource is on allowed leave for more than 5 working days, alternate resource shall be provided with the prior approval of Department
- Replacement of Key Experts:** -Key expert includes Project Manager, Database administrator, System Administrator, Network administrator, Training and change management expert and Domain Expert. The substitution of Key Experts during Contract execution may be considered only based on the SI written request and due to circumstances outside the reasonable control of the SI, including but not limited to death or medical incapacity. In such case, the SI shall forthwith provide as a replacement, a person of equivalent or better qualifications and experience, and at the same rate of remuneration.
- Prior intimation to the Department is required before availing any leave
- SI will submit resource deployment plan along with the project plan.
- The Manpower deployed by SI will report to the Nodal officer appointed by the purchaser at office level on daily basis. This deployed manpower shall mark their attendance in the register (Working Hours, Leave) maintained by the purchaser at the deployed location

4.6 Supply, installation and Commissioning of Hardware at DR (Disaster Recovery) site

Type of Service	Basis of Measurement	Required Service Level	Service Level Dependency	Penalty
Supply, installation and Commissioning of Hardware at DR site	Sign-off by the State-level representative.	As per agreed commissioning schedule	<ul style="list-style-type: none"> - Availability of DR Site - Necessary approval from the State Government 	INR 25,000 for every week's delay beyond the agreed commissioning schedule.

5. SLA Change Control

- It is acknowledged that SLA may change as purchaser's business needs evolve over the course of the contract period. As such, this document also defines the following management procedures:
 - A process for negotiating changes to the SLA.
 - An issue management process for documenting and resolving particularly difficult issues.
 - Purchaser and selected bidder management escalation process to be used in the event that an issue is not being resolved in a timely manner
- Any changes to the levels of service provided during the term of this agreement will be requested, documented and negotiated in good faith by both parties. Either party can request a change. Changes will be documented as an addendum to SLA and consequently the contract

6. Exclusions

The selected bidder will be exempted from any delays or slippages on SLA in case delay in execution due to delay (in approval, review, network etc.) from purchaser side. Any such delays will be notified in written to the purchaser

Attachment 3. Functional Requirements and Specifications (FRS)

1. Work Execution Module

Various Sub-Modules of Work execution module and their functional requirements are listed below:-

1.1 Estimation Preparation

An automated system is proposed for the preparation of detail estimation of work along with calculation of bill of quantities, bill of material and estimation cost.

- System should calculate bill of quantity as per the items mentioned in the schedule of rates (SOR) and assign a unique estimation number to calculation
- System should facilitate to enter items not defined in SOR
- System should be able to generate sub-estimate for electrical and civil work etc. for a large size project by the different competent levels
- System should allow to enter length, width and height of the item in defined measuring unit of the respective item and define rate factor/present prevailing market rate according to the area and other factors.
- Databases for unit cost items such as labour wage rates, equipment rental and material prices. These databases can be used for any cost estimate required. If these rates change, cost estimates can be rapidly re-computed after the databases have been updated
- Provisions for manual review, over-ride and editing of any cost element resulting from the cost estimation system
- Flexible reporting formats, including provisions for electronic reporting rather than simply printing cost estimates on paper
- Archives of past projects to allow rapid cost-estimate updating or modification for similar designs
- If a similar design has already been estimated or exists in the PWD archive, the old project information is retrieved

1.2 Technical sanction & approval

A workflow based system is proposed to automate the Project / Estimation Approval process (AA/ES, Technical Sanction). The workflow process for each type of the project may be different as per competency level.

- System should facilitate workflow process to move project plan / estimate to all competent levels for approval.
- System should display estimate to concern officer for review and forward to next competent level for approval or give approval as per the financial powers.
- The system should facilitate to view and upload all relevant document necessary for AA/ES (Administrative approval/Expenditure sanction) and Technical Sanction.
- After approval to the estimate automatically assign technical sanction number.
- System should also allow manual intervention to make changes in the quantity and rate factor

1.3 Architecture Design Process (HPPWD)

Divisional engineer send design requirements, financial constraint, site plan, soil bearing capacity report to architecture wing. A workflow based system is proposed for communication with the division engineer and architecture wing. The communication between Division engineer and Architecture wing should be attached with document management system to store various versions of the drawings of a single site. Further the architecture department will also upload the drawing as per lay out plan, structure design, electrical plan, elevation plan, floor wise plan, section plan, sanitary and pipe line plan etc.

- The system should store all type of instruction/communication between from concern division office to architecture wing
- The system should allow divisional engineer to send design requirements, financial constraint, site plan, soil bearing capacity report and other necessary reports/requirement to architecture wing.
- The system should facilitate to view and upload drawings designed in Auto Cad and STAADPro.
- The system should display drawings for review and approval from competent authority
- The system should provide note sheet to record the comment of every stakeholder involved in the approval process

1.4 Tender Management

After the approval from Government, Executive Engineer at Division level office initiate tendering process and float tenders. Tendering is usually undertaken by the use of bidding documents in which rates are quoted in the Bill of Quantities (BOQ).

E-Tendering solution of Government of Himachal Pradesh designed and developed by NIC should be integrated with the Contract Management Module of proposed solution

- Provision for preparation of DNIT(Draft notices inviting tender)
- Provision for preparation of Bidding Document
- Facilitated generation of BOQ built on Technical Sanctions.
- Approval process of DNIT/BOQ/SBD should be work flow based
- Should be integrate with existing e-Tendering System

1.5 Work Allocation and Agreement

After the award of the tender contract agreement will be prepared for the selected vendor/s. The contract/ agreement generally contains standard format, clauses and terms and conditions. The proposed systems must provide the following to automate the contract management process:

- Provision to store standard templates for the various types of contracts
- Editing and updating of the contract details as per requirement
- Generation and printing of the Contract document
- Workflow process for approval of the contract / agreement

- Shall facilitate in contract closure and thereafter generate a completion report containing all the detail of the project.
- Archives of past contract document/detail to allow rapid preparation of contract document/detail
- If a similar type/nature contract already exists in the PWD archive, the old contract detail is retrieved

1.6 Progress Monitoring of Work

The Measurement book is very important document to prepare Bills and monitor progress of the work. After analyzing the work done by the contractor JE at ground level makes entry in the measurement book. **JE/ ground level staff should be equipped with Android Based hand device (mobile / Tablet) to record the MB details in preloaded mobile application in online as well as offline mode depending upon the availability of the connectivity.** The scope of online MB book in respect to progress of work should be as under

- Electronic Measurement Book should be issued to JE against project work i.e. should be linked with work code
- Provision for generation of project plan, milestones and deliverables
- Facilitate entry of project status
- It should provide log of previous made entries in the MB
- It should capture items as mentioned in the approved work contract
- Manual intervention to enforce penalty or deduction in the bill on account of low quality of work
- System should allow to move the MB to the next competent level for approval.
- MB should have option to upload photos of the site under construction for work progress monitoring purpose and also automatically update geospatial data
- System should generate auto alerts to the JE for not making entry in MB and enforce to update MB once in a month
- The system should support the management in monitoring of both physical and financial milestones through statistical and graphical reports
- It should be integrated with Accounts and Billing module for financial monitoring

1.7 Work Deviation

- Contractor should be able to raise work deviation request by logging into their profile through online system
- System should generate the work progress report in respect of work done by the contractor and material used for work done
- Competent authority should have option to approve / reject contractor request as per their financial powers predefined in the system
- System should provide option to forward request to next competent level

- In case of approval of the work deviation request system should reflect contractor's working plan, billing cycle, milestones etc.

1.8 Time Extension

- Contractor should be able to raise time extension request by logging into their profile through online system
- System should generate the work progress report in respect of work done by the contractor and material used for work done
- Competent authority should have option to approve / reject contractor request as per their financial powers predefined in the system
- System should provide option to forward request to next competent level
- In case of approval of the time extension request system should reflect contractor's working plan, billing cycle, milestones etc.

2. Asset Management System

PWD owns and manages large number of building, land, machinery and other assets like rest house, parks, and gardens in the state. The Assets Management System will provide overview of each of these assets. The system can be used by various stakeholders of PWD. Asset Management System is to be implemented to track the assets. An Asset Register needs to be implemented to keep a record and track all the assets that PWD own. A complete functional module for Asset Management (Project Wise) will comprise of following details:

2.1 Road and Bridge Asset Register (GIS based)

- System Should capture details of assets as described in the format of Asset Registration
- GIS based road inventory of all the road assets (including bridge) and its condition (system should be capable of handling dynamic segmentation for storing km wise condition data)
- System should be integrated with the **GIS-based Road Information Management and Monitoring System GRIMMS**
- Generate information about any road asset (in the form of reports/graphs/GIS maps) that can assist in the decision making process
- It should record the technical document pertaining to asset
- It should comprises the details of building along with block wise details, and then floor wise details
- It should have feature to add the details of addition in the asset e.g addition of new block in the building It should have feature to add the modification made in the assets like construction of additional room in a block
- It should comprises the feature to delete and item from the asset
- A separate module needs to be developed for Electrical and Mechanical Wing

2.2 Maintenance Management System

- System should allow PWD offices to submit their Annual head wise budget requirement for maintenance
- The system should provide facility for repairs of various types like Ordinary Repair, Special Repair and Schedule Repair
- **System should be integrated with the RMMS (Road Management and Monitoring System)**
- Automate process for pre-budget estimation should be done on the basis of pre-defined schedule of items. e.g. in case of building system should have feature to define the schedule of repair items like white wash, wood work repair, roof repairing, painting etc.
- The system should generate the list of repair item need to be in a building, where repair is overdue
- The system should capture asset wise details of repair work made
- The system should integrate with asset register to capture the detail of modification and addition made in the building
- The system should integrate with inventory system to capture the material used in repair & maintenance
- The system should integrate with finance and captured the details of expenditure made on each building in term of labor, material other overheads
- The system should generate MIS related to asset wise repair details, repairs due with frequency of period, repair must, etc.

2.3 Tools and Machinery

A separate Sub Module needs to be developed for Electrical and Mechanical Wing. These division caters heavy machinery and tools for roads, building construction, Government vehicles etc.

- System should have facility to store all types of tools and machinery available in PWD
- This module should allow PWD employee generate request for new machinery / equipment
- System should be able to process request generated by the PWD employee
- System should store and populate alert for repair and maintenance schedule of each asset

3. Project Planning

3.1 Activity Planner

The application should provide complete facility to add/ edit/ review/block activity, sub activities and other task related to Activities. It will provide a workflow for the approval of activities wherever required. The user may specify the task and stage related to activity. e.g for approval of DPR, system will comprise sub activities like finalization of land, location of land, clearance from revenue department, rough estimation, bill of quantities, clearance from internal accounts branch etc. It will provide facility to define start date, target date, priority, ownership, weightage etc.

3.2 Work Flow Management

- The workflow management system should support definition of business performance measurements
- The system allow configuration of various processes and management of multi stage process workflow
- The system should support BPEL (Business Process Execution Language) export of the business process
- The system should provide graphical modeling environment for process flow, resources, organization, cost, time, data and performance measurement
- The system should support static analysis of the business process etc.
- The system should support export of the analysis results as excel sheets, PDF, Word format
- The system should support dynamic analysis of the business process
- The system should support generation of multiple types of reports and their formats – Summary, Comparison etc.
- The system should provide multiple in-built reports
- The system should provide multiple in-built performance indicators for the process
- The system should provide case-analysis of the processes
- The system should provide shared team-based process development
- The system should conform to industry workflow standards like WfMC, BPEL
- The system should provide a common Web-based UI for System Administration
- The system should provide multiple ways of process modeling like Flow-based, State-machines-based etc.
- The system should support Business rules and templates.
- The system should support rich human interactions
- The system should support flexible Exception handling framework and transaction management

3.3 File Management

(a) Dak Management

- Dak Receipt (Centralized /de centralized within office/department) (by post/fax/email etc.)
- Dak Scanning/forwarding (electronic & paper based)
- Adding Comments, Follow-up, Movement tracking
- Attaching dak with file, Action taken and status maintaining
- Dak Dispatch: (Centralized /de centralized within office/department) (multiple recipients)

- Dispatch number generation as per rules
- Recording dispatch details and Scanning/attaching document to file (Manual, by post, fax, email, electronically through system)
- Movement tracking, Follow-up, reminder etc.

(b) e-File

- Create electronic file using File Scanning in all supported formats (pdf, tif and jpg etc.) along with notes/comments if any.
- Integration of Digital signature authentication for approval process.
- Facility to maintain/link the main file with all associated part files.
- File viewer to electronically view the physical file (Main as well as part files) and also provide the provision to export/print the files (partial/full).
- Defining file attributes (categories, classification, purpose/case to be dealt on file, creation date, created by and modified by etc.) and associated parameters, timelines for file tracking.
- Provision to add Comments/notes etc. for each case/purpose of file movement at each level.
- Movement tracking, Follow-up, reminder etc.
- Interoperability between departments allowing stakeholders to collaborate and share files.
- Provision to merge the part files with main file.
- Record the user details and timestamp (apply, e-File approval process) for audit trail.

3.4 Resource Allocation

The application will provide resource allocation system for the ownership of each activity, wherein system will be able to define resource owner, responsibility of owner till micro level, weightage of his ownership etc. The Resource management module will provide the following functionality to be implemented:

- Maintenance of the skills database of all employees in PWD working on Projects
- Review of the skills database of employees to enable resource allocation to projects
- Resource allocation module to update the database of the employees for the projects allocated from time to time
- Performance management module to enter the performance of the employees based on the status of the projects
- **The system will also have the provisions for linkages with the HR Management system implemented at state level by Government of Himachal**

4. Finance and Accounts Management

4.1 Budget Pre-Planning

Division / sub Division offices initially prepare project proposal. Proposal are then forwarded to the competent level for approval. Proposals received from all Divisional Engineers offices should be consolidated, prioritized, budgeted and then moved to the government for approvals process. Major features of Preliminary Budget Estimate preparation are mentioned below:

- System should allow EE to prepare proposal under various head of accounts
- System should have facility to define head and sub head code for each work
- Validation criteria to validate the project plans
- System should be integrated with estimate preparation module
- Standard Governance templates for preparation of Preliminary Estimates in P.W.D.
- online submission of templates/format to facilitate review and authorized administrative approval of forecast estimates from the concerned authority as per Schedule of Powers
- Interlinking facility of document management system to attach Drawing, technical reports and other documents along with proposal.
- Budget Estimation module will facilitate preparation of estimates with multiple revisions, preparation of templates for standard projects, including contingency overheads, cover item code, description, unit rate, quantity and cost

4.2 Budget Approvals

A complete workflow process will need to be implemented for the approval process to ensure that necessary approvals are taken from all competent levels. PWD head office consolidates all proposals from PWD offices. System should have following features for Budget approval process

- Workflow process to move the budget proposal to the next higher level for consolidation and approval. The workflow process for each type of project may be different
- System should allow to change the workflow process for budget proposal approvals
- System should capture audit trail logs of changes being made by the different competent levels
- System should store head wise and sub head wise budget approvals

4.3 Budget Allocation System

After the final approval of budget by the Government, the E-in-C office prioritization the budget and accord head wise sanctioned amount and then schedule the works selected for improvement, maintenance and repair and then prioritize the works that needs to be done. The Engineer –in - chief office inform the head wise final allocation of the Budget to the all PWD offices.

4.4 Budget Monitoring

Finance and Accounts module should facilitate monitoring of the Budget and stop overutilization of the funds.

- System should generate alert in case of overutilization of the Budget in accordance with the Budget Plan
- Head wise and subhead wise expense statement should be available against each work code.
- Funds utilized report of all concerned PWD Offices should be generated on basis of real time.
- System should allow transfer of funds from one scheme to other after the approval of competent authority
- The system should generate the various MIS reports pertaining to funds transfer, funds not utilized, funds utilized in wrong head, funds transfer without prior permission, funds allocated but not transferred to division, funds laps etc.
- This module should give details of the project code, project start date end date and budget allocation to the project work
- System should generate project code wise financial statement
- It should provide interface to view expense made in the project and billing and payments made to the contractor
- System should have facility of Bank reconciliation
- It should be linked with Account and Billing module

4.5 Account and Billing module

- Support automatic periodic generation of the bill based on verified MB entries, and other contract agreement terms and conditions.
- System should provide deduction slabs, security deposit slabs, receipt rates, recovery rates for generating bill
- System should allow to generate divisional monthly account
- System should allow verification of divisional monthly account
- System should allow to access/enter head wise opening balance (Backlog entry)
- System should allow to access/enter Scheme wise opening balance (Backlog entry)
- System should allow to transfer entry in monthly account
- System should allow the verification/approval of transfer entries
- System should allow to generate payment voucher
- System should allow to create receipt voucher
- System should allow to update receipt voucher
- The progress monitoring module should be linked to billing module for verification
- Project Mile stone and plan should be linked along with contract document
- Measurement Books (MBs) should be linked to billing module for verification
- It should facilitated generation of financial progress reports

- System should alert recoveries/penalties on account of delays or quality issues etc. according to the contract agreement.
- It should generate various reports comprise of Cash and Bank Ledger or Receipts and Payments Accounts, reporting all the payments and receipts entered in each account together with running totals.

5. Store and Purchase

System should have module Project Purchase & Inventory Management System with the following Sub-modules and functionalities:-

5.1 Purchase Module

- This module should consist of computerized database of the store inventory, including records of receipts & issues, stock-in-hand etc
- System should generate requisition slip
- Approval of requisition from Competent Authority
- Generation of Purchase Order
- System should provide interface to enter receipt of the material against purchase order
- System should enforce quality and Quantity check against the purchase order
- System should be have facility for payment to the supplier

5.2 Inventory Module

- System should capture the stock issued against the work code by the PWD
- System should generate work code wise reports of all items issued to the contractor
- System should maintain category wise item database
- Each stock item should be assigned unique code all over the PWD offices
- There should be option to transfer items from one store to other PWD store
- System should provide interface to create indent preparation
- Interface for approval of indent by the competent authority
- System should maintain detailed stock issue register
- Provision for the stock transfer
- Bills of supplies
- Receipt of the material received

6. Quality and Control

At any point of time the higher authorities may disagree with the material used by the contractor in the construction work. System should have Quality and Control Management module with the followings functionalities:-

- System should store prescribed Quality parameters for the testing of the material
- Review and revise specifications, standards, rules to maintain the quality of the material to be used for the construction work
- System should capture test results and generate test reports based on the pre-defined quality rules

- System should generate work code wise test reports during the execution of the work
- System should maintain history of work code wise test performed
- In case of adverse test report should be made available to the all concerned immediately after the test report generation
- Workflow based system for approval of test reports from the competent authority
- System should auto generate list of the works to be inspected
- System should generate list of the works pending for the quality test as per Quality and Control policy
- This module should be interlinked with the Billing and Payment module in order to impose penalties/ stop payment to contractor in case of use of below specification material
- **This module should be integrated with OMASS system which is currently being used by the department**
- Periodic reviews based on milestones in the project life cycle

7. Legal and Arbitration

7.1 Legal

- System should allow entry of court case detail at divisional level and Sub divisional level
- System should allow to enter the detail of each case and generate a reference number
- System should provide MIS for preparation of court reply
- System should able to track the status of court case
- System should allow authorized officer to view court case dates
- System should send reminder of court case dates to concerned officer
- System should contain document management system to store the SOF and claim of parties
- Legal drafting of compliant is done through system in prescribed format

7.2 Arbitration

- System should provide online interface to contractor and department to raise issues / complaint
- System should allow to enter the detail of dispute
- Status of dispute can be track on system
- Work Flow based system is required for the processing of complaints
- System should be able to track the status of arbitration cases
- System should allow authorized officer to view hearing dates and decision
- System should send reminder of hearing dates to concerned officer
- System should able to generate compliant code for each compliant
- System should be able to track the status of compliant

8. Contract Management

8.1 Contractor Empanelment

- System should provide facility for online contractor registration
- System should contain registration details of Contractor
- System should contain document management system to store the details of contractor
- System should allow authorized officer to delist / approve contractor
- System should be able to change category of the contractor
- System should be able to maintain contractor individual credentials, their area of expertise, their valuation, past experience and contributions made to PWD
- **System should be integrated with NIC online e-tendering system which is being currently used by the department**
- System shall help the approval process in selecting the right contractor for the right project
- The contractor database will be updated periodically
- System should be integrated with payment gateway for deposition of registration fee
- System should be able to generate unique Registration Code and password to access online profile and information passed to contractor and concerned officers.
- System should allow to download auto generated registration Letter in PDF format
- System will ensure that contractor is enlisted in HPPWD

8.2 Contractor Management

- System should provide provision to enter the standards terms and conditions for the various types of contracts
- System should allow data entry option for entering the contract details
- System should be able to generate and print Contract document
- System should allow editing and updating of the contract details with the Change Management history and details
- System should allow workflow process for approval of the contract details and final document
- System should be integrated with contractor profile
- System should allow contractor to raise bills through online system
- Contractor should be able to enter work progress details
- Shall provide facility to raise a bill request by the supplier for work done during the work execution and at completion of work, for the subsequent release of the payments
- System should allow contractors to upload a scanned copy of relevant document pertaining to bill.
- Shall allow settlement of payments after analyzing the work done by the contractor and entries made in the verified MB
- System should be linked with the online MB for the monitoring of contract and release of payment
- For payments of bills it shall integrate the payment gateway/treasury system

- Maintain auditable record of all requisitions, work orders, work execution status, approvals, rejections, deliveries, and cycle times for these processes.
- Shall enable contractor's login to access and update completed work information and further JE will confirm /verify the work done by the contractor in the system
- System should allow contractor to submit request for work deviation, time deviation and quantity variation in accordance with the agreement
- The system should provide an approval mechanism for approving scope enhancements and taking decision on action against scope deviations.
- The system should support the management in monitoring of both physical and financial milestones through statistical and graphical reports.
- System should alert recoveries/penalties on account of delays or quality issues etc according to the contract agreement.
- System should have effective contractor grievances resolution arrangement pertaining to entries made in MBs, work deviation, Time deviation, penalties, Billing and payment, scope enhancement etc.
- Support automatic periodic generation of the bill based on verified MB entries, and other contract agreement terms and conditions.
- The bill amounts should be derived after comparing with the previous payments and comments made in the bill ledger, mandatory recoveries (TDS, Income tax etc), deductions etc.
- Shall facilitate in contract closure and thereafter generate a completion report containing all the detail of the project.

9. System Functional Requirements and Specifications

9.1 Web Portal

A user friendly, informative, interactive and easy to access Web application should be developed for HPPWD and HPRIDC. The web application should have following sections and features:-

- About the department and various schemes of department
- Department Vision, Objective and Organization setup etc
- Office wise and designation wise contact information of PWD officers
- Web portal should be CMS based and any modification to the content should be made through front end only
- Progress of the projects
- Various forms and application of PWD
- Citizen Charter
- Photo gallery would be a gallery of photographs
- Web portal should be accessible through all latest browsers
- Various Rules and Regulations of the department
- RTI section
- Notifications
- News section
- Statistical data related to project through query
- Posting Details

- Contractor Registration facility
- Apply for NOC through web portal
- Feedback form
- Contact us form

9.2 User Management Module

The system should have built-in access control system with following rights

- System should provide interface to create, edit, update and delete user profile
- System should provide right information to right people at right time
- System should provide ability to designate roles to specific users
- System should provide role based secure access to the users
- The solution will provide capability to allow access to sensitive data only through approved programs
- The system should have facility to create user groups
- The system should have facility to assign role based access to the users
- Forms based authentication should be implemented in the system
- Form level security to the users in terms of add, edit, update, delete, view and print records etc.
- System can assign more than one role to the single user
- System should maintain audit trail of each user
- System should provide facility to change user assigned roles
- System should provide facility to administrator user to delete , block , change user access role, block password

9.3 User Profile and Dashboard

The user dashboard of the system should provide overall view of entire department. It should give the overview of the all activities which are being conducted by the department. Dashboard of the system should have the following features:-

- Dashboard should be customized as per the user requirements
- Dashboard should provide information to the user as per user roles and project involvements
- The dashboard should provide facility of alerts, pending task, messaging to the concerns etc.
- Dashboard should provide tabular and Graphical view of the project progress
- Separate MIS dashboard for Engineer – in – chief , Chief Engineer , Superintending Engineer , Executive engineer, Assistant Engineer , Junior Engineer and Management users etc.
- User should be able to configure dashboard from front end tools
- Real time monitoring of project work
- System should create dynamic user profile (departmental user and contractors) based on the particular user information stored in the system

9.4 General & MIS Reporting

The proposed solution should generate dynamic MIS reports based on the user queries. MIS section of the each module should have following features:-

- System should provide real time reporting to the all concerns
- The Application shall be capable enough to be hosted on cloud environment or department hardware
- System ability to have an in-memory, column-oriented, relational database management is desirable
- System should provide facility to the user to the submit query and generate reports as per the business requirements
- System should allow to select columns to be mapped in a report
- System should provide reports for assembly questions, Legal, financial matters and audit reports
- System should generate graphical view of the reports wherever possible
- System should generate reports based on the specific user roles and accessibility
- System should generate reports in the formats as per the requirements of department
- MIS is expected to facilitate decision making by compiling the information from different functional areas of the organisation in the required format

Attachment 4. Existing Information System / Information Technologies.

The PWD department used various software(s) for their day to day activities. These software are used in tendering, road management, road and building planning, salary information, handling grievances, designing of buildings and roads etc. A brief account of all the software that is used in the department has been described below. The schemes can be divided into PMGSY specific application, other PWD specific application and HP PWD specific software

1 Central Government Scheme Specific Applications

There are a few applications that are specific to Central Government funded specific projects such as Pradhan Mantri Grameen Sadak Yogna (PMGSY). The purpose of PMGSY is to connect every village with population in excess of 500 with all-weather roads. To monitor the progress of the scheme, there are a couple of applications that are used by HP PWD.

1.1 eTendering

Front End: J2EE

DataBase: Postgre SQL

E-Tendering is used for publishing and finalization of Tenders for Himachal Pradesh Public Works Department. It is the process by which the physical tendering activity is carried out using Internet and associated technologies. It facilitates the user to introduce ease and efficiency without compromising the required procedures of the organization. eTendering provides transparency, results in saving time and money, shortening of procurement cycle time, ease of operation etc.

The functionalities include:

- Registration of Government Officials and bidders
- Tender Creation and Publishing
- Publishing of Corrigendum
- Publishing of Pre Bid document meetings
- Online submission / re submission of bids
- Facilitate online payment of collection through bank payment gateway
- Encryption of bids submitted by the bidder
- Facility for single/ two/ multiple cover system
- Withdrawal of online bids
- Tender opening online
- Authentic evaluation of the financial bid
- Updation of the committee recommendation at each stage of the tender process
- Award of Contract

The website where the information is available is: www.pmgsytendershp.gov.in

The above mentioned website, www.pmgsytendershp.gov.in, is used for uploading and finalization of tender works related to PMGSY only. All the tendering activity upto finalization

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of tender for HP PWD (PMGSY) is conducted through this portal.

1.2 Online Management Monitoring and Accounting System (OMMAS)

Front end: ASP .NET and Classic ASP

Database: SQL Server

For the effective monitoring of the PMGSY, the Online Management Monitoring and Accounting System (OMMAS) is designed as an online web-based system with centralized database. The data entry is done at the point where the data is generated i.e. at the Programme Implementation Unit (PIU) level for project data and at the State Technical Agency / State Rural Roads Development Agency and National Rural Roads Development Agency level where their intervention contributes to value addition to the data.

The data entry is near real-time to enable outputs to be useful for management as well as monitoring. The features of the software include

- Area Master which contains data regarding the Village Habitations and details of facilities available at Habitation level
- Roads Master which includes details regarding the name of the road, Surface type etc.
- Contractor Master
- MP/MLA Constituency
- Standard bidding document (including check-list) in order to generate bidding document
- DRRP road data categorizing roads as per their hierarchy and also including tracks and proposed links.
- Core Network data: - Selected links for inclusion in Core Network
- Entry of annual proposal based on selection of road links from the Core Network
- Data entry of proposal details based on DPRs prepared
- Tendering data and NIT
- Contractor award Details
- Entry of progress against each work in physical and financial terms
- Completion of road works
- Quality Monitoring Module:
- Accounting and Fund Flow: Accounting data to be entered by PIU with regard to classified expenditure against each road work
- Maintenance Module: Physical and Financial data regarding 5-year contract-based maintenance
- Security and Administration: - Management of Users, logins etc

1.3 GIS-based Road Information Management and Monitoring System GRIMMS

Front End: ASP.NET, JavaScript, objects of MapXtreme 2004 Database: SQL Server 2000

This application is used only for PMGSY. C-DAC developed GRIMMS (GIS-enabled Road Information Management and Monitoring System), which provides GIS interface to the existing Online Management and Monitoring System (OMMS). OMMS is the Management Information System developed by C-DAC for PMGSY (PradhanManthri Gram SadakYojana - Prime Minister's Rural Road Programme). The PMGSY GIS project involved generation of spatial database, customization of a standalone GIS system (GRIMMS-S) and development of web GIS (GRIMMS-Web) application.

For the GIS project, the sources of the graphical data were DVD (Digital Vector Data) from the Survey of India and 1:50,000 scale map tracings from the State Public Works Departments (PWD). The final mosaic is created separately for each State in shape format (.shp). The spatial database has only graphic information and IDs for each entity. The non-spatial data is from OMMS, which is available in SQL Server 2000 for the entire country. Himachal Pradesh continuously updates the attribute data online.

GRIMMS contains a range of user-friendly menus for various queries and highlights the query result on the map and on the attribute data table. The queries run on various spatial layers such as Habitation, Core Network road, DRRP road, by having a live link with OMMS database.

GRIMMS-S

The standalone version of the software (GRIMMS S) has been developed over ArcEditor 9.0, using Arc Objects and VB.NET. The standalone version has the capability to automatically activate the Arc Editor and use its objects to run required GIS functions. Users need not know ArcEditor features, as user-friendly menus are available separately for GRIMMS-S. The standalone version uses ESRI Shape files for spatial data and has the option to access SQL Server as well as MS Access for attribute data.

GRIMMS-Web

GRIMMS-Web is Web-based GIS, developed using ASP.NET, JavaScript, objects of MapXtreme 2004 and SQL Server 2000. Microsoft Web control is used for the Tree and Tab controls. The spatial data in .shp format is converted to .tab (MapInfo) format.

In GRIMMS-Web, menus, icons, tree-view of layers/legend, map display, query dialog box and attribute data display sections are incorporated for having a similar appearance as that of the standalone GIS version.

2 Applications other than Central Government funded specific applications

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For the schemes that are not under PMGSY, there are a set of other applications that are used in the department. Some of these applications are used across the departments of Himachal Pradesh. Some are specific to PWD. Here is the list:

2.1 e-Tendering (non PMGSY)

Front End: J2EE

Database: Postgre SQL

e Tendering is used for publishing and finalization of Tenders for Himachal Pradesh Public Works Department. It is the process by which the physical tendering activity is carried out using Internet and associated technologies. It facilitates the user to introduce ease and efficiency without compromising the required procedures of the organization. eTendering provides transparency, results in saving time and money, shortening of procurement cycle time, ease of operation etc.

The functionalities include:

- Registration of Government Officials and bidders
- Tender Creation and Publishing
- Publishing of Corrigendum
- Publishing of Pre Bid document meetings
- Online submission / re submission of bids
- Facilitate online payment of collection through bank payment gateway
- Encryption of bids submitted by the bidder
- Facility for single/ two/ multiple cover system
- Withdrawal of online bids
- Tender opening online
- Authentic evaluation of the financial bid
- Updation of the committee recommendation at each stage of the tender process
- Award of Contract

The website where the information is available is: www.hptenders.gov.in

The above mentioned website, www.hptenders.gov.in, is used for uploading and finalization of tender works related to non PMGSY only. All the tendering activity upto finalization of tender is conducted through this portal.

2.2 Road Maintenance Management System RMMS

Front End: Visual Basic

Database: MS Access

A Road Maintenance Management System also known as Road Information System
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(RIS) is information based computer package which facilitate maintenance management-planning tool, based on objective data, providing a systematic and uniform approach to Planning, Programming, and Budget etc. This was developed under World Bank Funding by SMEC International PTY Ltd from Australia.

RIS covers the requirements for the collection and management of road and pavement related data required for the establishment, operation and use of the Road Maintenance Management System (RMMS) in generating the annual maintenance Plan and integrate with Geographical Information System (GIS) to represent the road condition parameters on the Map.

Its main features of the RMMS are

- Basic Road Data
- Pavement condition or performance model
- Selection of intervention levels
- Listing of priorities for maintenance (renewal and overlay)

The system is developed in Visual Basic as front end and MS Access as Backend Database with Crystal Reports as Reporting tool. RMMS uses ROMDAS as a device to collect information on the roads and their condition. ROMDAS (Road Measurement Data Acquisition System) has been developed by Data Collection Ltd. (DCL) to collect road and pavement data using any vehicle. It is modular software which offers great flexibility by allowing users to add or remove modules depending on their specific data collection needs making the system one of the few fully customizable systems.

ROMDAS Hardware can be divided into three main categories; Central Systems, Modules (additional sensors that can be added to a central system to allow for a variety of data to be collected) and Standalone Systems (Units that can be operated independently without a Central system).

ROMDAS is used in the department to captures road features like:

- From Chainage, To Chainage
- Event
- Event Description
- Heading
- Time of reading
- Latitude and Longitude
- Altitude
- Average Speed
- Calibrated Roughness
- Riding Quality of Pavement etc.

2.3 eSamadhan

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Front End: ASP .NET

Backend; SQL Server

The Citizen Filling Form of e Samadhan

This is a standalone web based online system. The general public raised their grievances through this system and the mitigation is sent online via mail.

The application allows the common man to submit his grievances to different departments of the HP Government. Based on the nature of the grievance, the grievance is routed to a particular department. Once grievance is raised, the case moves on papers and files to the respective location. The resolution again moves on papers and files and is manually uploaded on the system and a mail is sent. The application allows the department to give a feedback on the grievance. This feedback is visible on the net to the end user, who has logged the complaint. The information is also sent through SMS to the end user.

Features:

- A SMS is sent to the end user once there is any change in the status
- The application shows the total grievances raised and resolved

2.4 e-Salary

Front End: ASP .NET

Backend; SQL Server

The e Salary System is developed to centralize the job of payroll processing at designation across all the departments of HP PWD. Only the monthly pay related changes of their employees are communicated and salary is directly credited to the saving/salary account of the employee through Electronics Clearing System. The software developed is web-enabled so that in future, subject to availability of connectivity, the change agents can enter changes online. The main advantage of the application has been to take away the job of manual paybill preparation and processing. This has also reduced the paper work.

Benefits

- Huge savings in terms of manpower costs involved
- Forecasting of expenditure under salaries, status of actual expenditure under salaries
- Creation of centralized database of all the HP Government employees
- Check on absenteeism
- Check on wrong drawl of salary from other offices
- Reduced paper work as paybill and schedule copies for AG office only will be printed
- Lesser movement of bundles of paybills/men/vehicles

2.5 PMIS

Front End: ASP.NET

Database: SQL Data Server

The Personnel MIS is a web-based system developed by NIC Himachal Pradesh using ASP.NET & SQL Data Server for convenient and effective monitoring of employee service book with complete details and generic software that may be used by any department. Following are the main features of Personnel MIS:-

Using Personnel MIS, the information like Personnel, Professional, Address, Nominee, Family, Education, Training, Leaves, Loans, ACR, and Service History etc. is available on click of mouse button to all employees, helping all individuals to view their up to date service book from remote locations irrespective of their reporting office.

After verifying the master data of the employees, the master eService book may be changed only using the online transaction modules such as transfer, promotion, joining, relieving etc.

While creating the online transfer/promotion list, the system will help the authority by providing the popup windows regarding the various notes received from the VIPs for an employee and VIP notes for other employees to the office where that employee is to be posted. The service history of the employees and the vacancy positions will also be available for the authority helping in decision making.

While entering the service book of an employee in Personnel MIS, a unique employee ID is generated which is used as user credentials for accessing three web-based software (e-Samadhan, Personnel MIS and Works MIS)

2.6 Attendance Recording System (ARS)

Database: SQL Server

The department has implemented attendance recording system in Head Office and US Club. The employee is supposed to get his/her fingerprint scanned at any one of the machine twice in a day: once when he/she enters the office and once when the employee leaves the office. There are seven machines installed in the entire department – Six at the head office and one at US Club.

The system was functional in May 2011. The database is SQL Server. The SI was Fortuna. The employee names are mapped with the Employee ID, which are in turn mapped with finger prints of the employee. Each employee has been provided with one ID card too for in case the machine is to record the fingerprint; the attendance is recorded with the help of the card. The in time and the out time of each employee are recorded in the database.

2.7 Backend Project Management System

HPRIDC is using Web based Project Monitoring System (PMS) to monitor all its Work Packages and Consultancy Services. Following Function are present in Backend Project Management System

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1. **Contract Administration Function** contains Contract Documents, Correspondence, Billing, Variation Order, Claims, Encumbrance, Design Issue, Compliance, Complaints, Assign Complaints, Instructions and Assign Instructions Icons
2. Through **Contract Documents Function** authorized User can create and maintain a repository of documents
3. Through **correspondence function** authorized User can track the Incoming and Outgoing Correspondence
4. Through **Billing Function** authorized User can Prepare, Edit and Delete bills
5. Through **Variation Order Function** authorized User can define Variation Orders (VO)
6. Through **Claims Function** authorized User can request or accept the Requested Claim
7. Through **Encumbrance Function** authorized User can enter Encumbrance details
8. Through **Design Issue Function** authorized User can enter Design Issues
9. Through **compliances Function** authorized User can enter Traffic, Environmental and Safety Compliance
10. Through **Complaint Function** the authorized User can View the list of Complaints and he can process the Complaint to the next level.
11. The authorized User can View all the Registered Complaints and Assign the Complaints to other Users

3 Specialized Software

Since the functioning of HP PWD is very specialized in nature, wherein the Public Works Department (PWD) is responsible for the Development and maintenance of all road assets in the state of Himachal Pradesh including the budgeting, programming, implementation and control of the Annual Maintenance Program. To aid the day to day activity of the department, there are specific software that are used in the department

3.1 ArcGIS

ArcGIS is a system for organization to accurately gather geographic information to make decisions. It facilitates collaboration and lets the end user easily author data, maps, globes, and models on the desktop and serve them for use on a desktop, in a browser, or in the field, depending on the needs of your organization. In HP PWD, it is used as a road information system. It collects data regarding roads and displays the information.

ArcGIS lets the end user manage data, maps, and geographic information within an interoperable, open, standards-based system. ArcGIS is used for mapping, analysis, collaboration, editing, design, and compilation tools. The details are as under:

- Planning and analysis—Make use of hundreds of scientifically based analysis tools as well as 2D, 3D, and temporal visualization capabilities.

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- Data management—Collect information that is spatially organized and allows versioning and multiple user editing. It maintains data integrity with QA/Q tools.
- Operational awareness—Empower decision makers with simple Web-based applications that reveal key decision points in a geographic context.
- Field workforce—Gives the field staff members the power to access, collect, and manage information. The end user can be provided with up-to-date information that's automatically synced with office-based systems.

3.2 Staad PRO

Staad Pro is used for Development of Structures, Calculations Such as creation of wireframe model, model for calculation, static calculation, code checking calculation, structural design etc.,

STAAD.Pro (Structural Analysis and Design), developed by Bentley allows structural engineers to analyze and design virtually any type of structure through its flexible modelling environment, advanced features and fluent data collaboration.

The features of STAAD PRO are the following:

- Flexible modeling is provided by a state-of-the-art graphical environment and the design supports over 70 international codes and over 20 U.S. codes in 7 languages.
- An array of advanced structural analysis and design features are included such as nuclear certification for 10CFR Part 50, 10CFR 21, ASME NQA-1-2000, time history and push over analysis and cable (linear and non-linear) analysis.
- Efficiencies are gained through the ability to maintain and streamline current workflows with fluent data collaboration. STAAD.Pro integrates with other Bentley products such as STAAD. foundation and ProSteel and OpenSTAAD is provided for integration with third party programs.

3.3 AutoCAD

AutoCAD is a software application for computer-aided design (CAD) and drafting. The software supports both 2D and 3D formats. The software is developed and sold by Autodesk, Inc. It was first released in December 1982 by Autodesk. AutoCAD is a product that has become amongst the most ubiquitous microcomputer design program in the world, utilizing functions such as "polylines" and "curve fitting". AutoCAD software is now used in a range of industries, employed by architects, project managers and engineers, amongst other professions.

AutoCAD is basically a drafting tool which helps the department to create orthographic views such as plans, elevations, and cross sections. It is used in preparation of sheets such as layouts, elevations, floor plans, detail sheets, sketch drawings drawing, working drawings, master plans etc. It is also used in design presentations.

Features of AutoCAD are the following:

- Changing and revision of design is easier
- Editing is very simple
- The time taken is very less
- The drawings are very accurate
- Calculation is inbuilt, so manual calculation is avoided

3.4 REVIT

REVIT or Revised Instantly is basically a building information modeling software. Autodesk Revit Architecture often referred to as simply Revit is a Building Information Modeling software developed by Autodesk. It allows the user to design with both parametric 3D modeling and 2D drafting elements. Building Information Modeling is a Computer Aided Design (CAD) paradigm that employs intelligent 3D objects to represent real physical building components such as walls and doors.

In addition, Revit's database for a project can contain information about a project at various stages in the building's lifecycle, from concept to construction to decommissioning. This is sometimes called 4D CAD where time is the fourth dimension.

HPPWD uses REVIT software to create a 3D model of the building, 3D views, plans, elevations sheets, walkthroughs, and animation and gives a virtually real description of the building and its environment. It is used in preparation of sheets such as layouts, elevations, floor plans, detail sheets, sketch drawings, working drawings, master plans etc. It is also used in design presentations.

Features of REVIT are the following:

- Any change in any of the plan or elevation or orthogonal view leads to change in the others. All the views are interlinked
- The designs can be restrained based on pre-defined conditions
- AutoCAD does not give errors or warnings but REVIT does

SECTION VII. SAMPLE FORMS

Notes to Bidders on working with the Sample Forms

The Purchaser has prepared the forms in this section of the Bidding Documents to suit the specific requirements of the System being procured. They are derived from the forms contained in the World Bank's Standard Bidding Documents for the Supply and Installation of Information Systems. In its bid, the Bidder must use these forms (or forms that present in the same sequence substantially the same information). Bidders should not introduce changes without the Purchaser's prior written consent (which may also require the clearance of the World Bank). If the Bidder has a question regarding the meaning or appropriateness of the contents or format of the forms and/or the instructions contained in them, these questions should be brought to the Purchaser's attention as soon as possible during the bid clarification process, either at the pre-bid meeting or by addressing them to the Purchaser in writing pursuant to ITB Clause 10.

The Purchaser has tried to provide explanatory text and instructions to help the Bidder prepare the forms accurately and completely. The instructions that appear directly on the forms themselves are indicated by use of typographical aides such as italicized text within square brackets as is shown in the following example taken from the Bid Submission Form:

Duly authorized to sign this bid for and on behalf of [*insert: **name of Bidder***]

In preparing its bid, the Bidder must ensure all such information is provided and that the typographical aides are removed.

The sample forms provide a standard set of documents that support the procurement process as it moves forward from the stage of bidding, through Contract formation and onto Contract performance. The first set of forms must be completed and submitted as part of the bid prior to the deadline for bid submission. These include: (i) the Bid Submission Form; (ii) the Price Schedules; (iii) the Manufacturer's Authorizations and key Subcontractor agreements; (iv) the List of Proposed Subcontractors; (v) Pre-qualification information forms; (vi) Technical Evaluation information form (vii) the form(s) for securing the bid (if and as required); and other forms as found in sub-sections 1 through 4 of this Section VII of the Bidding Documents.

- **Bid Submission Form:** In addition to being the place where official confirmation of the bid price, the currency breakdown, the completion date(s), and other important Contract details are expressed, the Bid Submission Form is also used by the Bidder to confirm - in case adjudication applies in this Contract - its acceptance of the Purchaser's proposed Adjudicator, or to propose an alternative. If the bid is being submitted on behalf of a Joint Venture, it is essential that the Bid Submission Form be signed by the partner in charge and that it be supported by the authorizations and power of attorney required pursuant to ITB Clause 6.2. Given widespread concern about illegal use of licensed software, Bidders will be asked to certify in the Bid Submission Form that either the Software included in the bid was developed and is owned by the Bidder, or, if not, the Software is covered by valid licenses with the proprietor of the Software.

- **Price Schedules:** The prices quoted in the Price Schedules should constitute full and fair compensation for supply, installation, and achieving Operational Acceptance of the System as described in the Technical Requirements based on the Implementation Schedule, and the terms and conditions of the proposed Contract as set forth in the Bidding Documents. Prices should be given for each line item provided in the Schedules, with costs carefully aggregated first at the Subsystem level and then for the entire System. If the Price Schedules provide only a summary breakdown of items and components, or do not cover some items unique to the Bidder's specific technical solution, the Bidder may extend the Schedules to capture those items or components. If supporting price and cost tables are needed for a full understanding of the bid, they should be included.

Arithmetical errors should be avoided. If they occur, the Purchaser will correct them according to ITB Clause 26.2 (ITB Clause 38.2 in the two-stage SBD) without consulting the Bidder. Major omissions, inconsistencies, or lack of substantiating detail can lead to rejection of a bid for commercial non-responsiveness. Presenting prices according to the breakdown prescribed in the Price Schedules is also essential for another reason. If a bid does not separate prices in the prescribed way, and, as a result, the Purchaser cannot apply the domestic preference provision described in ITB Clause 29 (ITB Clause 41 in the two-stage SBD), if they are applicable in this bidding, the Bidder will lose the benefit of the preference. Once bids are opened, none of these problems can be rectified. At that stage, Bidders are not permitted to change their bid prices to overcome errors or omissions.

- **Manufacturer's Authorizations and written agreements by key Subcontractors:** In accordance with ITB Clauses 6.1 (b) and (c), a Bidder may be required to submit, as part of its bid, Manufacturer's Authorizations in the format provided in the Bidding Documents, and agreements by Subcontractors proposed for key services, for all items specified in the Bid Data Sheet. There is no particular format (or sample form) for Subcontractor agreements.
- **List of Proposed Subcontractors:** In accordance with ITB Clause 6.3, a Bidder must submit, as part of its bid, a list of proposed subcontracts for major items of Technologies, Goods, and/or Services. The list should also include the names and places of registration of the Subcontractors proposed for each item and a summary of their qualifications.
- **List of Software and Materials:** In accordance with ITB Clause 13.1 (e) (vi) (ITB Clauses 13.1 (c) (vi) and 25.1 (e) (vi) in the two-stage SBD), Bidders must submit, as part of their bids, lists of all the Software included in the bid assigned to one of the following categories: (A) System, General-Purpose, or Application Software; or (B) Standard or Custom Software. Bidders must also submit a list of all Custom Materials. If provided for in the Bid Data Sheet, the Purchaser may reserve the right to reassign certain key Software to a different category.
- **Technical Evaluation information forms:** In accordance with ITB Clause 28, the purchaser will evaluate and compare the bids. This involves, Past Experience,

solution proposed and experience of key personnel criteria which are specified in the BDS for ITB Clause 28. The Bidder must provide the necessary information for the Purchaser to make this assessment through the forms in this sub-section. The forms contain additional detailed instructions which the Bidder must follow.

- Securing the bid: If the BDS for ITB Clause 17 (ITB Clause 29 in the two-stage SBD) requires that bids be secured, the Bidder shall do so in accordance with the type and details specified in the same ITB/BDS Clause, either using the form(s) included in these Sample Forms or using another form acceptable to the Purchaser. If a Bidder wishes to use an alternative form, it should ensure that the revised format provides substantially the same protection as the standard format; failing that, the Bidder runs the risk of rejection for commercial non-responsiveness.

Bidders need not provide the Performance Security and Advance Payment Security with their bids. Only the Bidder selected for award by the Purchaser will be required to provide these securities.

The following forms are to be completed and submitted by the successful Bidder following notification of award: (i) Contract Agreement, with all Appendices; (ii) Performance Security; and (iii) Advance Payment Security.

- Contract Agreement: In addition to specifying the parties and the Contract Price, the Contract Agreement is where the: (i) Supplier Representative; (ii) if applicable, agreed Adjudicator and his/her compensation; and (iii) the List of Approved Subcontractors are specified. In addition, modifications to the successful Bidder's Bid Price Schedules are attached to the Agreement. These contain corrections and adjustments to the Supplier's bid prices to correct errors, adjust the Contract Price to reflect – if applicable - any extensions to bid validity beyond the last day of original bid validity plus 56 days, etc.
- Performance Security: Pursuant to GCC Clause 13.3, the successful Bidder is required to provide the Performance Security in the form contained in this section of these Bidding Documents and in the amount specified in accordance with the SCC.
- Advance Payment Security: Pursuant to GCC Clause 13.2, the successful Bidder is required to provide a bank guarantee for the full amount of the Advance Payment - if an Advance Payment is specified in the SCC for GCC 12.1 - in the form contained in this section of these Bidding Documents or another form acceptable to the Purchaser. If a Bidder wishes to propose a different Advance Payment Security form, it should submit a copy to the Purchaser promptly for review and confirmation of acceptability before the bid submission deadline.

The Purchaser and Supplier will use the following additional forms during Contract implementation to formalize or certify important Contract events: (i) the Installation and Operational Acceptance Certificates; and (ii) the various Change Order forms. These and the procedures for their use during performance of the Contract are included in the Bidding Documents for the information of Bidders.

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1. BID SUBMISSION FORM (SINGLE-STAGE BIDDING)

Date: *[Bidder insert: date of bid]*

Loan/Credit No.: **4860-IN & 8199-IN**

IFB: **PW/SRP/RIDC/HP/ICT/ICB-3**

Contract: Engaging System Integrator (Supplier) responsible for Supply & Installation of Integrated IT Systems (including supply, warranty and post warranty of computer hardware and software) for Development of ICT Infrastructure in HPPWD and HPRIDC

To:

**Chief Engineer-cum-Project Director
HP State Roads Project,
Nirman Bhawan, Nigam Vihar, Shimla – 171 002
India**

Dear Sir or Madam:

Having examined the Bidding Documents, including Addenda Nos. *[insert numbers]*, the receipt of which is hereby acknowledged, we, the undersigned, offer to supply, install, achieve Operational Acceptance of, and support the Information System under the above-named Contract in full conformity with the said Bidding Documents for the sum of:

		<i>[insert: amount of local currency in words]</i>	<i>([insert: amount of local currency in figures from corresponding Grand Total entry of the Grand Summary Cost Table])</i>
	plus	<i>[insert: amount of foreign currency A in words]</i>	<i>([insert: amount of foreign currency A in figures from corresponding Grand Total entry of the Grand Summary Cost Table])</i>
	<i>[as appropriate, add the following]</i>		
	plus	<i>[insert: amount of foreign currency B in words]</i>	<i>([insert: amount of foreign currency B in figures from corresponding Grand Total entry of the Grand Summary Cost Table])</i>
	plus	<i>[insert: amount of foreign currency C in words]</i>	<i>([insert: amount of foreign currency C in figures from corresponding Grand Total entry of the Grand Summary Cost Table])</i>

or such other sums as may be determined in accordance with the terms and conditions of the Contract. The above amounts are in accordance with the Price Schedules attached herewith and made part of this bid.

We undertake, if our bid is accepted, to commence work on the Information System and to achieve Installation and Operational Acceptance within the respective times stated in the Bidding Documents.

If our bid is accepted, and if these Bidding Documents so require, we undertake to provide an advance payment security and a performance security in the form, in the amounts, and within the times specified in the Bidding Documents.

We hereby certify that the Software offered in this bid and to be supplied under the Contract (i) either is owned by us, or (ii) if not owned by us, is covered by a valid license from the proprietor of the Software.

We agree to abide by this bid, which, in accordance with ITB Clauses 13 and 16, consists of this letter (Bid Submission Form) and the enclosures listed below, for a period of 120 days from the date fixed for submission of bids as stipulated in the Bidding Documents, and it shall remain binding upon us and may be accepted by you at any time before the expiration of that period.

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to Contract execution if we are awarded the Contract, are listed below:

Name and Address of Agent		Amount and Currency		Purpose of Commission or Gratuity
Etc. <i>[if none, state: "none"]</i>				

Until the formal final Contract is prepared and executed between us, this bid, together with your written acceptance of the bid and your notification of award, shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this *[insert: **ordinal**]* day of *[insert: **month**]*, *[insert: **year**]*.

Signed:

Date:

In the capacity of [*insert: title or position*]

Duly authorized to sign this bid for and on behalf of [*insert: name of Bidder*]

ENCLOSURES:

Price Schedules

Bid-Securing Declaration or Bid-Security (if and as required)

Signature Authorization [*plus, in the case of a Joint Venture Bidder, list all other authorizations pursuant to ITB Clause 6.2*]

Attachment 1. Bidder's Eligibility

Attachment 2. Bidder's Qualifications (including Manufacturer's Authorizations and Subcontractor agreements if and as required)

Attachment 3. Eligibility of Goods and Services

Attachment 4. Conformity of the Information System to the Bidding Documents

Attachment 5. Proposed Subcontractors

Attachment 6. Intellectual Property (Software and Materials Lists)

[*if appropriate, specify further attachments or other enclosures*]

Bid Table of Contents and Checklist

Note: Purchasers should expand and modify (as appropriate) the following table to reflect the required elements of the Bidder's bid. As the following note to Bidders explains, it is in both the Purchaser's and Bidder's interest to provide this table and accurately fill it out.

Note: Bidders should expand and (if appropriate) modify and complete the following table. The purpose of the table is to provide the Bidder with a summary checklist of items that must be included in the bid as described in ITB Clauses 13.1 and 16, in order for the bid to be considered for Contract award. The table also provides a summary page reference scheme to ease and speed the Purchaser's bid evaluation process.

Item	present: y/n	page no.
Bid Submission Form.....		
Price Schedules		
Bid-Securing Declaration / Bid-Security (if and as required)		
Signature Authorization (for Joint Ventures additionally including the authorizations listed in ITB Clause 6.2) ...		
Attachment 1		
Attachment 2		
Manufacturer's Authorizations		
Subcontractor agreements		
Attachment 3		
Attachment 4		
Attachment 5		
Attachment 6		
.....		

2. PRICE SCHEDULE FORMS

2.1 Preamble

General

1. The Price Schedules are divided into separate Schedules as follows:
 - 2.2 Grand Summary Cost Table
 - 2.3 Supply and Installation Cost Summary Table
 - 2.4 Recurrent Cost Summary Table
 - 2.5 Supply and Installation Cost Sub-Table(s)
 - 2.6 Recurrent Cost Sub-Tables(s)
 - 2.7 Country of Origin Code Table
- [insert: *any other Schedules as appropriate*]
2. The Schedules do not generally give a full description of the information technologies to be supplied, installed, and operationally accepted, or the Services to be performed under each item. However, it is assumed that Bidders shall have read the Technical Requirements and other sections of these Bidding Documents to ascertain the full scope of the requirements associated with each item prior to filling in the rates and prices. The quoted rates and prices shall be deemed to cover the full scope of these Technical Requirements, as well as overhead and profit.
3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Bidders in the Bidding Documents prior to submitting their bid.

Pricing

4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Bidder. As specified in the Bid Data Sheet, prices shall be fixed and firm for the duration of the Contract.
5. Bid prices shall be quoted in the manner indicated and in the currencies specified in ITB Clauses 14 and 15 (ITB Clauses 27 and 28 in the two-stage SBD). Prices must correspond to items of the scope and quality defined in the Technical Requirements or elsewhere in these Bidding Documents.
6. The Bidder must exercise great care in preparing its calculations, since there is no opportunity to correct errors once the deadline for submission of bids has passed. A single error in specifying a unit price can therefore change a Bidder's overall total bid price substantially, make the bid noncompetitive, or subject the Bidder to possible loss. The Purchaser will correct any arithmetic error in accordance with the provisions of ITB Clause 26.2 (ITB Clause 38.2 in the two-stage SBD).
7. Payments will be made to the Supplier in the currency or currencies indicated under each respective item. As specified in ITB Clause 15.1 (ITB Clause 28.1 in the two-

stage SBD), no more than three foreign currencies may be used. The price of an item should be unique regardless of installation site.

2.2 Grand Summary Cost Table

		<i>[insert: Local Currency]</i> Price	<i>[insert: Foreign Currency A]</i> Price	<i>[insert: Foreign Currency B]</i> Price	<i>[insert: Foreign Currency C]</i> Price
1.	Supply and Installation Costs (from Supply and Installation Cost Summary Table)				
2.	Recurrent Costs (from Recurrent Cost Summary Table)				
3.	Grand Totals (to Bid Submission Form)				

Name of Bidder:		
Authorized Signature of Bidder:		

2.3 Supply and Installation Cost Summary Table

System or Subsystem number: [if a multi-lot procurement, insert: **Subsystem number**; otherwise state “**entire System procurement**”] [as necessary for supply, installation, and achieving Operational Acceptance of the System, specify items in the Table below, modifying, deleting, or expanding the sample line items and sample table entries as needed.]

Costs MUST reflect prices and rates quoted in accordance with ITB Clauses 14 and 15 .

		Supply & Installation Prices				
		Locally supplied items	Items supplied from outside the Purchaser's Country			
Line Item No.	Subsystem / Item	[insert: Local Currency] Price	[insert: Local Currency] Price	[insert: Foreign Currency A] Price	[insert: Foreign Currency B] Price	[insert: Foreign Currency C] Price
1	DR Infrastructure					
2	Application Software					
3	Training and Change Management					
4	Services other than Training (Data Digitization & Data Migration, etc.,)					
SUBTOTALS						
TOTAL (To Grand Summary Table)						

Note: - - indicates not applicable. “Indicates repetition of table entry above. Refer to the relevant Supply and Installation Cost Sub-Table for the specific components that constitute each Subsystem or line item in this summary table

Name of Bidder:		
Authorized Signature of Bidder:		

2.4 Recurrent Cost Summary Table

System or Subsystem number: *[if a multi-lot procurement, insert: **Subsystem number**, otherwise state “**entire System procurement**”] [as necessary for the operation of the System, specify items in the Table below, modifying the sample line items and sample table entries as needed.]*

Costs MUST reflect prices and rates quoted in accordance with ITB Clauses 14 and 15

Line Item No.	Subsystem / Item		<i>[insert: Local Currency] Price</i>	<i>[insert: Foreign Currency A] Price</i>	<i>[insert: Foreign Currency B] Price</i>	<i>[insert: Foreign Currency C] Price</i>
1	Operations & Maintenance Support (Hardware/Software/ Helpdesk)					
	Subtotals (to Grand Summary Table)					

Note: Refer to the relevant Recurrent Cost Sub-Tables for the specific components that constitute the Subsystem or line item in this summary table.

Name of Bidder:		
Authorized Signature of Bidder:		

2.5 Supply and Installation Cost Sub-Table

System or Subsystem number: [if a multi-lot procurement, insert: **Subsystem number**; otherwise state “**entire System procurement**”]

Line item number: [specify: **relevant line item number from the Supply and Installation Cost Summary Table (e.g., 1.1)**]

[as necessary for supply, installation, and achieving Operational Acceptance of the System, specify: **the detailed components and quantities in the Sub-Table below for the line item specified above, modifying the sample components and sample table entries as needed. Repeat the Sub-Table as needed to cover each and every line item in the Supply and Installation Cost Summary Table that requires elaboration.**]

Prices, rates, and subtotals MUST be quoted in accordance with ITB Clauses 14 and 15. Unit prices for the same item appearing several times in the table must be identical in amount and currency.

				Unit Prices / Rates					Total Prices				
				Supplied Locally	Supplied from outside the Purchaser's Country				Supplied Locally	Supplied from outside the Purchaser's Country			
Component No.	Component Description	Country of Origin Code	Quantity	[insert: local currency]	[insert: local currency]	[insert: foreign currency A]	[insert: foreign currency B]	[insert: foreign currency C]	[insert: local currency]	[insert: local currency]	[insert: foreign currency A]	[insert: foreign currency B]	[insert: foreign currency C]
1	DR Infrastructure												
1.1	Hardware	--	--	--	--	--	--	--					
1.1.1	Web Server		1										
1.1.2	Application Server		1										
1.1.3	Database Server		1										
1.1.4	Backup Server		1										

Himachal Pradesh Road & Other Infrastructure Development Corporation

				Unit Prices / Rates					Total Prices				
				Supplied Locally	Supplied from outside the Purchaser's Country				Supplied Locally	Supplied from outside the Purchaser's Country			
Component No.	Component Description	Country of Origin Code	Quantity	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>
1.2	Software DR	--	--	--	--	--	--	--					
1.2.1	Operating Systems for servers		4										
1.2.2	RDBMS		1										
1.2.3	HIPS (Host Intrusion Prevention System)		4										
2	Application Development, Customization , Installation and Implementation Charges (Module wise Details to be provided)	--	--	--	--	--	--	--	--	--			

				Unit Prices / Rates					Total Prices				
				Supplied Locally	Supplied from outside the Purchaser's Country				Supplied Locally	Supplied from outside the Purchaser's Country			
Component No.	Component Description	Country of Origin Code	Quantity	[insert: local currency]	[insert: local currency]	[insert: foreign currency A]	[insert: foreign currency B]	[insert: foreign currency C]	[insert: local currency]	[insert: local currency]	[insert: foreign currency A]	[insert: foreign currency B]	[insert: foreign currency C]
3	Training and Change Management Cost												
3.1	Basic Computer Training												
3.2	Application Specific Training												
3.3	Management Dashboard Training												
3.4	Application Champions												
3.5	Module Champions												
3.6	Advance Computer Training												
3.7	Leadership Workshop												

				Unit Prices / Rates					Total Prices				
				Supplied Locally	Supplied from outside the Purchaser's Country				Supplied Locally	Supplied from outside the Purchaser's Country			
Component No.	Component Description	Country of Origin Code	Quantity	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>
3.8	Communication Workshops												
3.9	Sensitization & Awareness Workshops												
4	Services other than Training (Data Digitization & Data Migration, etc.,)												
4.1	Data Digitization (scanned documents per pages)		Minimum 1000000 Pages (1 million pages)*										
4.2	Data Migration (per GB)		25 GB										

				Unit Prices / Rates					Total Prices				
				Supplied Locally	Supplied from outside the Purchaser's Country				Supplied Locally	Supplied from outside the Purchaser's Country			
Component No.	Component Description	Country of Origin Code	Quantity	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	<i>[insert: foreign currency C]</i>
4.3	Data Entry (Per Page)		Minimum 1000000 Pages(1 million pages)*										

* Bidder need to quote rate for Minimum 1000000 pages (all the types of pages for both data digitization and data entry) for comparison purpose. Above figure is purely indicative and SI in consultation with HPPWD/HPRIDC has to propose the actual number of pages, while submitting the Data digitization plan. However payment will be made on actual basis. HPPWD/HPRIDC reserve the right to accept or reject the proposal/ Data digitization plan.

Name of Bidder:		
Authorized Signature of Bidder:		

2.6 Recurrent Cost Sub-Table

Lot number: [if a multi-lot procurement, insert: **lot number**, otherwise state “**single lot procurement**”]

Line item number: [specify: **relevant line item number from the Recurrent Cost Summary Table (e.g., z.1)**]

Currency: [specify: **the currency of the Recurrent Costs in which the costs expressed in this Sub-Table are expressed**]

[as necessary for operation of the System, specify: **the detailed components and quantities in the Sub-Table below for the line item specified above, modifying the sample components and sample table entries as needed.** Repeat the Sub-Table as needed to cover each and every line item in the Recurrent Cost Summary Table that requires elaboration.]

Costs MUST reflect prices and rates quoted in accordance with ITB Clauses 14 and 15. Unit prices for the same item appearing several times in the table must be identical in amount and currency.

Component No.	Component	Y1	Y2	Y3	Sub-total for [insert: currency]
		Incl. in Warrant y	Incl. in Warranty	Incl. in Warranty	
1	Annual Operations & Maintenance Support cost for Hardware and Licenses (DR site)				
2	Annual Application support cost including up-gradation, deployment of patches, fixes etc.				
3	Help desk Cost				
4	Any Other Cost (if any, specify)				
	Annual Subtotals:				- -

Name of Bidder:		
Authorized Signature of Bidder:		

2.7 Country of Origin Code Table

Country of Origin	Country Code		Country of Origin	Country Code		Country of Origin	Country Code

3. OTHER BID FORMS AND LISTS

3.1 Manufacturer's Authorization

Invitation for Bids Title and No.: **PW/SRP/RIDC/HP/ICT/ICB-3 and "Development of ICT infrastructure in HPPWD & HPRIDC"**

[If applicable:] Lot, Slice, Subsystem No(s).:

To: _____

WHEREAS _____ who are official producers of
_____ and having production facilities at
_____ do hereby authorize
_____ located at
_____ (hereinafter, the "Bidder")
to submit a bid and subsequently negotiate and sign a Contract with you for resale of the
following Products produced by us:

We hereby confirm that, in case the bidding results in a Contract between you and the Bidder, the above-listed products will come with our full standard warranty.

Name _____ In the capacity of _____

Signed _____

Duly authorized to sign the authorization for and on behalf of : _____

Dated on _____ day of _____, _____.

Note: This authorization should be written on the letterhead of the Manufacturer and be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.

3.2 List of Proposed Subcontractors

Sr. No.	Item	Proposed Subcontractor	Place of Registration & Qualifications

3.3 Software List

[illegible]

3.4 List of Custom Materials

Custom Materials

3.5 Self-Declaration Form

(To be submitted by the prime bidder and Joint venture partners on their respective letter head)

Date: [Bidder insert: date of bid]

Loan/Credit No.: 4860-IN & 8199-IN

IFB: **PW/SRP/RIDC/HP/ICT/ICB-3**

Contract: [Engaging System Integrator (Supplier) responsible for Supply & Installation of Integrated IT Systems (including supply, warranty and post warranty of computer hardware and software) for Development of ICT Infrastructure in HPPWD and HPRIDC]

To:

**Chief Engineer-cum-Project Director
HP State Roads Project,
Nirman Bhawan, Nigam Vihar, Shimla – 171 002 India**

Dear Sir or Madam:

I / We as system integrator do hereby confirm that we have not been blacklisted by any public sector body in India.

I / We as system integrator do hereby confirm that we are not in the World Bank Listing of Ineligible Firms & Individuals.

I / We as system integrator do hereby confirm that we have no legal case pending in any court for winding up the company in India or elsewhere.

I / We as system integrator do hereby confirm that we are not under a declaration of ineligibility for any of the provision under ITB clause 4 (Eligible Bidder).

I / We as system integrator do hereby confirm that we are not under a declaration of ineligibility for any of the provision under ITB clause 5 (Eligible Goods & services)

I / We as system integrator do hereby confirm that we do not have any terminated contracts during the past 3 years due to nonperformance from the following

- I. The Central and State Government bodies in India,
- II. World Bank

I/We as system integrator do hereby confirm that the above applies to all parent and subsidiary organizations of the applicant firm.

Dated this [insert: ordinal] day of [insert: month], [insert: year].

Signed:

Date:

In the capacity of [insert: title or position]

Duly authorized to sign this bid for and on behalf of [insert: name of Bidder]

Himachal Pradesh Road & Other Infrastructure Development Corporation

3.6.1 General Information Form

All individual firms and each partner of a Joint Venture that are bidding must complete the information in this form. Nationality information should be provided for all owners or Bidders that are partnerships or individually owned firms.

Where the Bidder proposes to use named Subcontractors for highly specialized components of the Information System, the following information should also be supplied for the Subcontractor(s), together with the information in Forms 3.7.2, 3.7.3, 3.7.3a, 3.7.4, and 3.7.5. Joint Ventures must also fill out Form 3.7.2a.

1.	Name of firm	
2.	Head office address	
3.	Telephone	Contact
4.	Fax	Telex
5.	Place of incorporation / registration	Year of incorporation / registration

Nationality of owners ¹		
	Name	Nationality
1.		
2.		
3.		
4.		
5.		
^{1/} To be completed by all owners of partnerships or individually owned firms.		

3.6.2 General Information Systems Experience Record

Name of Bidder or partner of a Joint Venture
--

All individual firms and all partners of a Joint Venture must complete the information in this form with regard to the management of Information Systems contracts generally. The information supplied should be the annual turnover of the Bidder (or each member of a Joint Venture), in terms of the amounts billed to clients for each year for work in progress or completed. The annual periods should be calendar years, with partial accounting for the year up to the date of submission of applications. This form may be included for Subcontractors only if the Bid Data Sheet for ITB Clause 6.1 (a) explicitly permits experience and resources of (certain) Subcontractors to contribute to the Bidder's qualifications.

A brief note on each contract should be appended, describing the nature of the Information System, duration and amount of contract, managerial arrangements, purchaser, and other relevant details.

Use a separate page for each partner of a Joint Venture, and number these pages.

Bidders should not enclose testimonials, certificates, and publicity material with their applications; they will not be taken into account in the evaluation of qualifications.

Annual turnover data (applicable activities only)		
Year	Turnover	INR equivalent
2013-2014		
2014-2015		
2015-2016		

3.6.2a Joint Venture Summary

Names of all partners of a Joint Venture
1. Partner in charge
2. Partner
3. Partner
4. Partner
5. Partner
6. etc.

Total value of annual turnover, in terms of Information System billed to clients, in INR equivalent, converted at the rate of exchange at the end of the period reported:

Annual turnover data (applicable activities only)

Partner	Form 3.5.2 page no.	Year 1	Year 2	Year 3
1. Partner in charge				
2. Partner				
3. Partner				
4. Partner				
5. Partner				
6. Etc.				
Totals				

3.6.3 Particular Information Systems Experience Record

Name of Bidder or partner of a Joint Venture
--

On separate pages, using the format of Form 3.7.3a, the Bidder is requested to list contracts of a similar nature, complexity, and requiring similar information technology and methodologies to the contract or contracts for which these Bidding Documents are issued, and which the Bidder has undertaken during the period, and of the number, specified in the BDS for ITB Clause 6.1 (a). Each partner of a Joint Venture should separately provide details of its own relevant contracts. The contract value should be based on the payment currencies of the contracts converted into INR, at the date of substantial completion, or for ongoing contracts at the time of award.

3.6.3a Details of Contracts of Similar Nature and Complexity

Name of Bidder or partner of a Joint Venture

Use a separate sheet for each contract.

1.	Number of contract	
	Name of contract	
	Country	
2.	Name of Purchaser	
3.	Purchaser address	
4.	Nature of Information Systems and special features relevant to the contract for which the Bidding Documents are issued	
5.	Contract role (check one) <input type="checkbox"/> Prime Supplier <input type="checkbox"/> Management Contractor <input type="checkbox"/> Subcontractor <input type="checkbox"/> Partner in a Joint Venture	
6.	Amount of the total contract/subcontract/partner share (in specified currencies at completion, or at date of award for current contracts) Currency Currency Currency	
7.	Equivalent amount INR Total contract: INR_____; Subcontract: INR_____; Partner share: INR_____;	
8.	Date of award/completion	
9.	Contract was completed ____ months ahead/behind original schedule (if behind, provide explanation).	
10.	Contract was completed INR _____ equivalent under/over original contract amount (if over, provide explanation).	
11.	Special contractual/technical requirements.	
12.	Indicate the approximate percent of total contract value (and INR amount) of Information System undertaken by subcontract, if any, and the nature of such Information System.	
13.	Completion Certificate : Yes/ No	
14.	Satisfactory Work In Progress (WIP) certificate in case the project is not complete (as applicable as per the clause under which this form being filled)	

Attached Documents:

1. Work order
2. Contract copy describing clearly the scope of work
3. Completion certificate/ Satisfactory WIP certificate/Go-Live certificate for the projects mentioned are to be attached

3.6.4 Summary Sheet: Current Contract Commitments / Work in Progress

Name of Bidder or partner of a Joint Venture
--

Bidders and each partner to an Joint Venture bid should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Name of contract	Purchaser, contact address/tel./fax	Value of outstanding Information System (current INR equivalent)	Estimated completion date	Average monthly invoicing over last six months (INR/month)
1.				
2.				
3.				
4.				
5.				
etc.				

3.6.5 Financial Capabilities

Name of Bidder or partner of a Joint Venture
--

Bidders, including each partner of a Joint Venture, shall provide financial information to demonstrate that they meet the requirements stated in the BDS for ITB Clause 6.1 (a). Each Bidder or partner of a Joint Venture shall complete this form. If necessary, separate sheets shall be used to provide complete banker information. A copy of the audited balance sheets shall be attached.

Autonomous subdivisions of parent conglomerate businesses shall submit financial information related only to the particular activities of the subdivision.

Banker	Name of banker	
	Address of banker	
	Telephone	Contact name and title
	Fax	Telex

Summarize actual assets and liabilities in U.S. dollar equivalent (**at the rates of exchange current at the end of each year**) for the previous five calendar years. Based upon known commitments, summarize projected assets and liabilities in U.S. dollar equivalent for the next two calendar years, unless the withholding of such information by stock market listed public companies can be substantiated by the Bidder.

Financial information in US\$ equivalent	Actual: Previous five years					Projected: Next two years	
	5	4	3	2	1	1	2
1. Total assets							
2. Current assets							
3. Total liabilities							
4. Current liabilities							
5. Profits before taxes							
6. Profits after taxes							

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as indicated in the BDS for ITB Clause 6.1 (a).

Source of financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

Attach audited financial statements—including, as a minimum, profit and loss account, balance sheet, and explanatory notes—for the period stated in the BDS for ITB Clause 6.1 (a) (for the individual Bidder or each partner of a Joint Venture).

If audits are not required by the laws of Bidders' countries of origin, partnerships and firms owned by individuals may submit their balance sheets certified by a registered accountant, and supported by copies of tax returns,

3.6.6 Personnel Capabilities

Name of Bidder

For specific positions essential to contract management and implementation (and/or those specified in the Bidding Documents, if any), Bidders should provide the names of at least two candidates qualified to meet the specified requirements stated for each position. The data on their experience should be supplied on separate sheets using one Form 3.7.6a for each candidate.

Bidders may propose alternative management and implementation arrangements requiring different key personnel, whose experience records should be provided.

1.	Title of position
	Name of prime candidate
	Name of alternate candidate
2.	Title of position
	Name of prime candidate
	Name of alternate candidate
3.	Title of position
	Name of prime candidate
	Name of alternate candidate
4.	Title of position
	Name of prime candidate
	Name of alternate candidate

3.6.6a Candidate Summary

Name of Bidder

Position		Candidate <input type="checkbox"/> Prime <input type="checkbox"/> Alternate
Candidate information	Name of candidate	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	Telex
	Job title of candidate	Years with present Employer

Summarize professional experience over the last twenty years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

From	To	Company/Project/ Position/Relevant technical and management experience

3.6.7 Technical Capabilities

Name of Bidder

The Bidder shall provide adequate information to demonstrate clearly that it has the technical capability to meet the requirements for the Information System. With this form, the Bidder should summarize important certifications, proprietary methodologies, and/or specialized technologies which the Bidder proposes to utilize in the execution of the Contract or Contracts.

3.6.8 Litigation History

Name of Bidder or partner of a Joint Venture
--

Bidders, including each of the partners of a Joint Venture, shall provide information on any history of litigation or arbitration resulting from contracts executed in the last five years or currently under execution. A separate sheet should be used for each partner of a Joint Venture.

Year	Award FOR or AGAINST Bidder	Name of client, cause of litigation, and matter in dispute	Disputed amount (current value, INR equivalent)

4. Bid-Securing Declaration

IFB: PW/SRP/RIDC/HP/ICT/ICB-3 and “Development of ICT infrastructure in HPPWD & HPRIDC”

To: *[insert: name and address of Purchaser]*

We, the undersigned, declare that:

We understand that, according to your conditions, bids must be supported by a Bid-Securing Declaration.

We accept that we, and in the case of a Joint Venture all partners to it, will automatically be suspended from being eligible for participating in bidding for any contract with you for the period of time of *[Purchaser insert: number of months or years]*, in case of, and starting from the date of, breaching our obligation(s) under the bidding conditions due to:

- (a) withdrawing our bid, or any part of our bid, during the period of bid validity specified in the Bid Submission Form or any extension of the period of bid validity which we subsequently agreed to; or
- (b) having been notified of the acceptance of our bid by you during the period of bid validity, (i) failing or refusing to execute the Contract Agreement, or (ii) failing or refusing to furnish the performance security, if required, in accordance with the Instructions to Bidders.

We understand this Bid-Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of the period of bid validity.

If the submission of alternative bids was permitted, and in case we did submit one or more alternative bids, this Bid-Securing Declaration applies to these parts of our bid as well.

Signed: *[insert: signature of person whose name and capacity are shown below]*

Name: *[insert: name of person signing the Bid-Securing Declaration]*, in the capacity of *[insert: legal capacity of person signing the Bid-Securing Declaration]*

Duly authorized to sign the bid for and on behalf of: *[insert: name of Bidder]*

Dated on _____ day of _____, 20__

[add Corporate Seal (where appropriate)]

[Note to Bidders: Joint Ventures need to ensure that, their Bid-Securing Declaration meets the requirements for Joint Ventures as stated in the ITB Clause on "Securing the Bid".]

4A. BID SECURITY (BANK GUARANTEE)

[insert: Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: *[insert: Name and Address of Purchaser]*

Date: *[insert: date]*

BID GUARANTEE No.: *[insert: Bid Guarantee Number]*

We have been informed that *[insert: name of the Bidder]* (hereinafter called "the Bidder") has submitted to you its bid dated *[insert: bid date]* (hereinafter called "the Bid") for the execution of *[insert: name of contract]* under Invitation for Bids No. *[insert: IFB number]*.

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee, and that the bid guarantee automatically covers any alternative bids included in the Bid, if the Bidder is permitted to offer alternatives and does so.

At the request of the Bidder, we *[insert: name of Bank]* hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *[insert: amount in figures]* (*[insert: amount in words]*) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) has withdrawn the Bid (or any parts of it) during the period of bid validity specified by the Bidder in the Bid Submission Form or any extension of the period of bid validity which the Bidder subsequently agreed to; or
- (b) having been notified of the acceptance of the Bid by you during the period of bid validity, (i) failed or refused to execute the Contract Agreement, or (ii) failed or refused to furnish the performance security, if required, in accordance with the Instructions to Bidders.

This guarantee will expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the contract signed by the Bidder and the performance security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful bidder; or (ii) twenty-eight days after the expiration of the Bid's validity.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[Signature(s)]

[Note to Bidders: Instructions on amount and currency can be found in the ITB Clause and BDS for "Securing the Bid." Joint Ventures need to also ensure that their Bank Guarantee meets the requirements for Joint Ventures as provided in the same Clause.]

4B. BID SECURITY (BID BOND)-NOT APPLICABLE

BOND NO.: _____

BY THIS BOND, *[insert: name of Bidder]* as Principal (hereinafter called "the Principal"), and *[insert: name, legal title, and address of surety]*, authorized to transact business in *[insert: name of Purchaser's country]*, as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert name of Purchaser]* as Obligee (hereinafter called "the Purchaser") in the sum of *[insert amount of Bond in currency, figures and words]*, for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted a written bid to the Purchaser dated the ____ day of _____, 20__, for the execution of *[insert: name of contract]* (hereinafter called "the Bid"). If the Principal was permitted by the bidding conditions to submit alternative bid(s) and did so, then these are deemed part of the Bid and thus covered by this Bond.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Principal:

- (a) withdraws the Bid (or any parts of it) during the period of the Bid's validity specified in the Bid Submission Form, or any extension of the period of the Bid's validity the Principal subsequently agreed to, notice of which to the Surety is hereby waived; or
- (b) having been notified of the acceptance of the Bid by the Purchaser during the period of the Bid's validity, (i) fails or refuses to execute the Contract Agreement, or (ii) fails or refuses to furnish the performance security, if required, in accordance with the Instructions to Bidders;

then the Surety undertakes to immediately pay to the Purchaser up to the above amount upon receipt of the Purchaser's first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has/have occurred.

The Surety hereby agrees that its obligation will remain in full force and effect up to and including the date 28 days after the date of expiration of the Bid's validity.

IN TESTIMONY WHEREOF, the Principal and the Surety have caused these presents to be executed in their respective names this ____ day of _____ 20__.

Principal: _____ Surety: _____

[add Corporate Seal(s) (where appropriate)]

[Signature]

[Signature]

[state: **printed name and title**]

[state: **printed name and title**]

[Note to Bidders: Instructions on amount and currency can be found in the ITB Clause and BDS for "Securing the Bid." Joint Ventures need to also ensure that their Bid Bond meets the requirements for Joint Ventures as provided in the same Clause.]

Himachal Pradesh Road & Other Infrastructure Development Corporation

5. CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT is made

the [insert: **ordinal**] day of [insert: **month**], [insert: **year**].

BETWEEN

- (1) [insert: **Name of Purchaser**], a [insert: **description of type of legal entity, for example, an agency of the Ministry of . . .**] of the Government of [insert: **country of Purchaser**], or corporation incorporated under the laws of [insert: **country of Purchaser**] and having its principal place of business at [insert: **address of Purchaser**] (hereinafter called “the Purchaser”), and
- (2) [insert: **name of Supplier**], a corporation incorporated under the laws of [insert: **country of Supplier**] and having its principal place of business at [insert: **address of Supplier**] (hereinafter called “the Supplier”).

WHEREAS the Purchaser desires to engage the Supplier to supply, install, achieve Operational Acceptance of, and support the following Information System [insert: **brief description of the Information System**] (“the System”), and the Supplier has agreed to such engagement upon and subject to the terms and conditions appearing below in this Contract Agreement.

NOW IT IS HEREBY AGREED as follows:

<p>Article 1.</p> <p>Contract Documents</p>	<p>1.1 Contract Documents (Reference GCC Clause 1.1 (a) (ii))</p> <p>The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:</p>
	<ol style="list-style-type: none"> (a) This Contract Agreement and the Appendices attached to the Contract Agreement (b) Special Conditions of Contract (c) General Conditions of Contract (d) Technical Requirements (including Implementation Schedule) (e) The Supplier’s bid and original Price Schedules (f) [Add here: any other documents]

	<p>1.2 Order of Precedence (Reference GCC Clause 2)</p> <p>In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above, provided that Appendix 7 shall prevail over all provisions of the Contract Agreement and the other Appendices attached to the Contract Agreement and all the other Contract Documents listed in Article 1.1 above.</p> <p>1.3 Definitions (Reference GCC Clause 1)</p> <p>Capitalized words and phrases used in this Contract Agreement shall have the same meanings as are ascribed to them in the General Conditions of Contract.</p>
<p>Article 2.</p> <p>Contract Price and Terms of Payment</p>	<p>2.1 Contract Price (Reference GCC Clause 1.1(a)(viii) and GCC Clause 11)</p> <p>The Purchaser hereby agrees to pay to the Supplier the Contract Price in consideration of the performance by the Supplier of its obligations under the Contract. The Contract Price shall be the aggregate of: [insert: amount of foreign currency A in words], [insert: amount in figures], plus [insert: amount of foreign currency B in words], [insert: amount in figures], plus [insert: amount of foreign currency C in words], [insert: amount in figures], [insert: amount of local currency in words], [insert: amount in figures], as specified in the Grand Summary Price Schedule.</p> <p>The Contract Price shall be understood to reflect the terms and conditions used in the specification of prices in the detailed price schedules, including the terms and conditions of the associated Incoterms, and the taxes, duties and related levies if and as identified.</p>
<p>Article 3.</p> <p>Effective Date for Determining Time for Operational Acceptance</p>	<p>3.1 Effective Date (Reference GCC Clause 1.1 (e) (ix))</p> <p>The time allowed for supply, installation, and achieving Operational Acceptance of the System shall be determined from the date when all of the following conditions have been fulfilled:</p> <p>(a) This Contract Agreement has been duly executed for and on behalf of the Purchaser and the Supplier;</p> <p>(b) The Supplier has submitted to the Purchaser the performance security and the advance payment security, in accordance with GCC Clause 13.2 and GCC Clause 13.3;</p>
	<p>(c) The Purchaser has paid the Supplier the advance payment,</p>

	<p>in accordance with GCC Clause 12;</p> <p>(d) <i>[specify here: any other conditions, for example, opening/confirmation of letter of credit].</i></p> <p>Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.</p> <p>3.2 If the conditions listed under 3.1 are not fulfilled within two (2) months from the date of this Contract Agreement because of reasons not attributable to the Supplier, the parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Achieving Operational Acceptance and/or other relevant conditions of the Contract.</p>
Article 4.	4.1 The Appendixes listed below shall be deemed to form an integral part of this Contract Agreement.
Appendixes	4.2 Reference in the Contract to any Appendix shall mean the Appendixes listed below and attached to this Contract Agreement, and the Contract shall be read and construed accordingly.

APPENDIXES

- Appendix 1. Supplier's Representative
- Appendix 2. Adjudicator *[if there is no Adjudicator, state "not applicable"]*
- Appendix 3. List of Approved Subcontractors
- Appendix 4. Categories of Software
- Appendix 5. Custom Materials
- Appendix 6. Revised Price Schedules (if any)
- Appendix 7. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

IN WITNESS WHEREOF the Purchaser and the Supplier have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

For and on behalf of the Purchaser

Signed:

in the capacity of [*insert: title or other appropriate designation*]

in the presence of

For and on behalf of the Supplier

Signed:

in the capacity of [*insert: title or other appropriate designation*]

in the presence of

CONTRACT AGREEMENT

dated the [*insert: number*] day of [*insert: month*], [*insert: year*]

BETWEEN

[*insert: name of Purchaser*], “the Purchaser”

and

[*insert: name of Supplier*], “the Supplier”

Appendix 1. Supplier's Representative

In accordance with GCC Clause 1.1 (b) (iv), the Supplier's Representative is:

Name: [insert: **name** and provide title and address further below, or state "**to be nominated within fourteen (14) days of the Effective Date**"]

Title: [if appropriate, insert: **title**]

In accordance with GCC Clause 4.3, the Supplier's addresses for notices under the Contract are:

Address of the Supplier's Representative: [as appropriate, insert: **personal delivery, postal, cable, telegraph, telex, facsimile, electronic mail, and/or EDI addresses.**]

Fallback address of the Supplier: [as appropriate, insert: **personal delivery, postal, cable, telegraph, telex, facsimile, electronic mail, and/or EDI addresses.**]

Appendix 2. Adjudicator

In accordance with GCC Clause 1.1 (b) (vi), the agreed-upon Adjudicator is:

Name: [*insert: name*]

Title: [*insert: title*]

Address: [*insert: postal address*]

Telephone: [*insert: telephone*]

In accordance with GCC Clause 6.1.3, the agreed-upon fees and reimbursable expenses are:

Hourly Fees: [*insert: hourly fees*]

Reimbursable Expenses: [*list: reimbursables*]

Pursuant to GCC Clause 6.1.4, if at the time of Contract signing, agreement has not been reached between the Purchaser and the Supplier, an Adjudicator will be appointed by the Appointing Authority named in the SCC.

Appendix 3. List of Approved Subcontractors

The Purchaser has approved use of the following Subcontractors nominated by the Supplier for carrying out the item or component of the System indicated. Where more than one Subcontractor is listed, the Supplier is free to choose between them, but it must notify the Purchaser of its choice sufficiently in advance of the time when the subcontracted work needs to commence to give the Purchaser reasonable time for review. In accordance with GCC Clause 20.1, the Supplier is free to submit proposals for Subcontractors for additional items from time to time. No subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by the Purchaser and their names have been added to this list of Approved Subcontractors, subject to GCC Clause 20.3.

[specify: item, approved Subcontractors, and their place of registration that the Supplier proposed in the corresponding attachment to its bid and that the Purchaser approves that the Supplier engage during the performance of the Contract. Add additional pages as necessary.]

Item	Approved Subcontractors	Place of Registration

The following table assigns each item of Software supplied and installed under the Contract to one of the three categories: (i) System Software, (ii) General-Purpose Software, or (iii) Application Software; and to one of the two categories: (i) Standard Software or (ii) Custom Software.

[illegible]

Appendix 5. Custom Materials

The follow table specifies the Custom Materials the Supplier will provide under the Contract.

Custom Materials

Appendix 6. Revised Price Schedules

The attached Revised Price Schedules (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the Price Schedules contained in the Supplier's Bid. These Revised Price Schedules reflect any corrections or adjustments to the Supplier's bid price, pursuant to the ITB Clauses 18.3, 26.2, and 33.1 (ITB Clauses 30.3, 38.2, and 45.1 in the two-stage SBD).

Appendix 7. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

The attached Contract amendments (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the relevant clauses in the GCC, SCC, Technical Requirements, or other parts of this Contract as defined in GCC Clause 1.1 (a) (ii).

6. PERFORMANCE AND ADVANCE PAYMENT SECURITY FORMS

6.1 Performance Security Form (Bank Guarantee)

[insert: Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: *[insert: Name and Address of Purchaser]*

Date: *[insert: date]*

PERFORMANCE GUARANTEE No.: *[insert: Performance Guarantee Number]*

We have been informed that on *[insert: date of award]* you awarded Contract No. *[insert: Contract number]* for *[insert: title and/or brief description of the Contract]* (hereinafter called "the Contract") to *[insert: complete name of Supplier]* (hereinafter called "the Supplier"). Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert: amount(s)¹ in figures and words]* upon receipt by us of your first demand in writing declaring the Supplier to be in default under the Contract, without cavil or argument, or your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

On the date of your issuing, to the Supplier, the Operational Acceptance Certificate for the System, the value of this guarantee will be reduced to any sum(s) not exceeding *[insert: amount(s)¹ in figures and words]*. This remaining guarantee shall expire no later than *[insert: number and select: of months/of years (of the Warranty Period that needs to be covered by the remaining guarantee)]* from the date of the Operational Acceptance Certificate for the System,² and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20 (a) is hereby excluded.

[Signature(s)]

¹ The bank shall insert the amount(s) specified and denominated in the SCC for GCC Clauses 13.3.1 and 13.3.4 respectively, either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Purchaser.

² In this sample form, the formulation of this paragraph reflects the usual SCC provisions for GCC Clause 13.3. However, if the SCC for GCC Clauses 13.3.1 and 13.3.4 varies from the usual provisions, the paragraph, and possibly the previous paragraph, need to be adjusted to precisely reflect the provisions specified in the SCC.

6.2 Advance Payment Security Form (Bank Guarantee)

[insert: Bank's Name, and Address of Issuing Branch or Office]

Beneficiary: *[insert: Name and Address of Purchaser]*

Date: *[insert: date]*

ADVANCE PAYMENT GUARANTEE No.: *[insert: Advance Payment Guarantee Number]*

We have been informed that on *[insert: date of award]* you awarded Contract No. *[insert: Contract number]* for *[insert: title and/or brief description of the Contract]* (hereinafter called "the Contract") to *[insert: complete name of Supplier]* (hereinafter called "the Supplier"). Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of *[insert: amount in numbers and words, for each currency of the advance payment]* is to be made to the Supplier against an advance payment guarantee.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum or sums not exceeding in total the amount of the advance payment referred to above, upon receipt by us of your first demand in writing declaring that the Supplier is in breach of its obligations under the Contract because the Supplier used the advance payment for purposes other than toward the proper execution of the Contract.

It is a condition for any claim and payment to be made under this guarantee that the advance payment referred to above must have been received by the Supplier on its account *[insert: number and domicile of the account]*.

For each payment after the advance payment, which you will make to the Supplier under this Contract, the maximum amount of this guarantee shall be reduced by the ninth part of such payment.¹ At the time at which the amount guaranteed becomes nil, this guarantee shall become null and void, whether the original is returned to us or not.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.

[Signature(s)]

¹ This sample formulation assumes an Advance Payment of 10% of the Contract Price excluding Recurrent Costs, and implementation of the main option proposed by this SBD in the SCC for GCC Clause 13.2.2 for gradually reducing the value of the Advance Payment Security. If the Advance Payment is other than 10%, or if the reduction in amount of the security follows a different approach, this paragraph would need to be adjusted and edited accordingly.

7. INSTALLATION AND ACCEPTANCE CERTIFICATES

7.1 Installation Certificate

Date: [insert: **date**]

Loan/Credit Number: [insert: **loan or credit number from IFB**]

IFB: [insert: **title and number of IFB**]

Contract: [insert: **name and number of Contract**]

To: [insert: **name and address of Supplier**]

Dear Sir or Madam:

Pursuant to GCC Clause 26 (Installation of the System) of the Contract entered into between yourselves and the [insert: **name of Purchaser**] (hereinafter the “Purchaser”) dated [insert: **date of Contract**], relating to the [insert: **brief description of the Information System**], we hereby notify you that the System (or a Subsystem or major component thereof) was deemed to have been correctly installed on the date specified below.

1. Description of the System (or relevant Subsystem or major component: [insert: **description**]
2. Date of Installation: [insert: **date**]

Notwithstanding the above, you are required to complete the outstanding items listed in the attachment to this certificate as soon as practicable. This letter shall not relieve you of your obligation to achieve Operational Acceptance of the System in accordance with the Contract nor of your obligations during the Warranty Period.

For and on behalf of the Purchaser

Signed:

Date:

in the capacity of: [state: **“Project Manager”** or state **the title of a higher level authority in the Purchaser’s organization**]

7.2 Operational Acceptance Certificate

Date: [insert: **date**]

Loan/Credit Number: [insert: **loan or credit number from IFB**]

IFB: [insert: **title and number of IFB**]

Contract: [insert: **name of System or Subsystem and number of Contract**]

To: [insert: **name and address of Supplier**]

Dear Sir or Madam:

Pursuant to GCC Clause 27 (Commissioning and Operational Acceptance) of the Contract entered into between yourselves and the [insert: **name of Purchaser**] (hereinafter the “Purchaser”) dated [insert: **date of Contract**], relating to the [insert: **brief description of the Information System**], we hereby notify you the System (or the Subsystem or major component identified below) successfully completed the Operational Acceptance Tests specified in the Contract. In accordance with the terms of the Contract, the Purchaser hereby takes over the System (or the Subsystem or major component identified below), together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the System (or Subsystem or major component): [insert: **description**]

2. Date of Operational Acceptance: [insert: **date**]

This letter shall not relieve you of your remaining performance obligations under the Contract nor of your obligations during the Warranty Period.

For and on behalf of the Purchaser

Signed:

Date:

in the capacity of: [state: **“Project Manager” or higher level authority in the Purchaser’s organization**]

8. CHANGE ORDER PROCEDURES AND FORMS

Date: [insert: *date*]

Loan/Credit Number: [insert: *loan or credit number from IFB*]

IFB: [insert: *title and number of IFB*]

Contract: [insert: *name or System or Subsystem and number of Contract*]

General

This section provides samples of procedures and forms for carrying out changes to the System during the performance of the Contract in accordance with GCC Clause 39 (Changes to the System) of the Contract.

Change Order Log

The Supplier shall keep an up-to-date Change Order Log to show the current status of Requests for Change and Change Orders authorized or pending. Changes shall be entered regularly in the Change Order Log to ensure that the log is kept up-to-date. The Supplier shall attach a copy of the current Change Order Log in the monthly progress report to be submitted to the Purchaser.

References to Changes

- (1) Request for Change Proposals (including Application for Change Proposals) shall be serially numbered CR-nnn.
- (2) Change Estimate Proposals shall be numbered CN-nnn.
- (3) Estimate Acceptances shall be numbered CA-nnn.
- (4) Change Proposals shall be numbered CP-nnn.
- (5) Change Orders shall be numbered CO-nnn.

On all forms, the numbering shall be determined by the original CR-nnn.

Annexes

- 8.1 Request for Change Proposal Form
- 8.2 Change Estimate Proposal Form
- 8.3 Estimate Acceptance Form
- 8.4 Change Proposal Form
- 8.5 Change Order Form
- 8.6 Application for Change Proposal Form

8.1 Request for Change Proposal Form

(Purchaser's Letterhead)

Date: [*insert: date*]

Loan/Credit Number: [*insert: loan or credit number from IFB*]

IFB: [*insert: title and number of IFB*]

Contract: [*insert: name of System or Subsystem or number of Contract*]

To: [*insert: name of Supplier and address*]

Attention: [*insert: name and title*]

Dear Sir or Madam:

With reference to the above-referenced Contract, you are requested to prepare and submit a Change Proposal for the Change noted below in accordance with the following instructions within [*insert: number*] days of the date of this letter.

1. Title of Change: [*insert: title*]
2. Request for Change No./Rev.: [*insert: number*]
3. Originator of Change: [*select Purchaser / Supplier (by Application for Change Proposal), and add: name of originator*]
4. Brief Description of Change: [*insert: description*]
5. System (or Subsystem or major component affected by requested Change): [*insert: description*]
6. Technical documents and/or drawings for the request of Change:

Document or Drawing No.

Description

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7. Detailed conditions or special requirements of the requested Change: *[insert: description]*
8. Procedures to be followed:
- (a) Your Change Proposal will have to show what effect the requested Change will have on the Contract Price.
 - (b) Your Change Proposal shall explain the time it will take to complete the requested Change and the impact, if any, it will have on the date when Operational Acceptance of the entire System agreed in the Contract.
 - (c) If you believe implementation of the requested Change will have a negative impact on the quality, operability, or integrity of the System, please provide a detailed explanation, including other approaches that might achieve the same impact as the requested Change.
 - (d) You should also indicate what impact the Change will have on the number and mix of staff needed by the Supplier to perform the Contract.
 - (e) You shall not proceed with the execution of work related to the requested Change until we have accepted and confirmed the impact it will have on the Contract Price and the Implementation Schedule in writing.
9. As next step, please respond using the Change Estimate Proposal form, indicating how much it will cost you to prepare a concrete Change Proposal that will describe the proposed approach for implementing the Change, all its elements, and will also address the points in paragraph 8 above pursuant to GCC Clause 39.2.1. Your Change Estimate Proposal should contain a first approximation of the proposed approach, and implications for schedule and cost, of the Change.

For and on behalf of the Purchaser

Signed:

Date:

in the capacity of: *[state: “Project Manager” or higher level authority in the Purchaser’s organization]*

8.2 Change Estimate Proposal Form

(Supplier's Letterhead)

Date: [insert: **date**]

Loan/Credit Number: [insert: **loan or credit number from IFB**]

IFB: [insert: **title and number of IFB**]

Contract: [insert: **name of System or Subsystem and number of Contract**]

To: [insert: **name of Purchaser and address**]

Attention: [insert: **name and title**]

Dear Sir or Madam:

With reference to your Request for Change Proposal, we are pleased to notify you of the approximate cost of preparing the below-referenced Change in accordance with GCC Clause 39.2.1 of the Contract. We acknowledge that your agreement to the cost of preparing the Change Proposal, in accordance with GCC Clause 39.2.2, is required before we proceed to prepare the actual Change Proposal including a detailed estimate of the cost of implementing the Change itself.

1. Title of Change: [insert: **title**]
2. Request for Change No./Rev.: [insert: **number**]
3. Brief Description of Change (including proposed implementation approach): [insert: **description**]
4. Schedule Impact of Change (initial estimate): [insert: **description**]
5. Initial Cost Estimate for Implementing the Change: [insert: **initial cost estimate**]
6. Cost for Preparation of Change Proposal: [insert: **cost in the currencies of the Contract**], as detailed below in the breakdown of prices, rates, and quantities.

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For and on behalf of the Supplier

Signed:

Date:

in the capacity of: [state: ***“Supplier’s Representative” or other higher level authority in the Supplier’s organization***]

8.3 Estimate Acceptance Form

(Purchaser's Letterhead)

Date: [*insert: date*]

Loan/Credit Number: [*insert: loan or credit number from IFB*]

IFB: [*insert: title and number of IFB*]

Contract: [*insert: name of System or Subsystem and number of Contract*]

To: [*insert: name of Supplier and address*]

Attention: [*insert: name and title*]

Dear Sir or Madam:

We hereby accept your Change Estimate and agree that you should proceed with the preparation of a formal Change Proposal.

1. Title of Change: [*insert: title*]
2. Request for Change No./Rev.: [*insert: request number / revision*]
3. Change Estimate Proposal No./Rev.: [*insert: proposal number / revision*]
4. Estimate Acceptance No./Rev.: [*insert: estimate number / revision*]
5. Brief Description of Change: [*insert: description*]
6. Other Terms and Conditions:

In the event that we decide not to order the Change referenced above, you shall be entitled to compensation for the cost of preparing the Change Proposal up to the

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amount estimated for this purpose in the Change Estimate Proposal, in accordance with GCC Clause 39 of the General Conditions of Contract.

For and on behalf of the Purchaser

Signed:

Date:

in the capacity of: [state: ***“Project Manager” or higher level authority in the Purchaser’s organization***]

8.4 Change Proposal Form

(Supplier's Letterhead)

Date: [insert: **date**]

Loan/Credit Number: [insert: **loan or credit number from IFB**]

IFB: [insert: **title and number of IFB**]

Contract: [insert: **name of System or Subsystem and number of Contract**]

To: [insert: **name of Purchaser and address**]

Attention: [insert: **name and title**]

Dear Sir or Madam:

In response to your Request for Change Proposal No. [insert: **number**], we hereby submit our proposal as follows:

1. Title of Change: [insert: **name**]
2. Change Proposal No./Rev.: [insert: **proposal number/revision**]
3. Originator of Change: [select: **Purchaser / Supplier**; and add: **name**]
4. Brief Description of Change: [insert: **description**]
5. Reasons for Change: [insert: **reason**]
6. The System Subsystem, major component, or equipment that will be affected by the requested Change: [insert: **description**]
7. Technical documents and/or drawings for the requested Change:

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- | Document or Drawing No. | Description |
|-------------------------|--|
| 8. | <p>Estimate of the increase/decrease to the Contract Price resulting from the proposed Change: [insert: amount in currencies of Contract], as detailed below in the breakdown of prices, rates, and quantities.</p> <p>Total lump sum cost of the Change:</p> <p>Cost to prepare this Change Proposal (i.e., the amount payable if the Change is not accepted, limited as provided by GCC Clause 39.2.6):</p> |
| 9. | <p>Additional Time for Achieving Operational Acceptance required due to the Change: [insert: amount in days / weeks]</p> |
| 10. | <p>Effect on the Functional Guarantees: [insert: description]</p> |
| 11. | <p>Effect on the other terms and conditions of the Contract: [insert: description]</p> |
| 12. | <p>Validity of this Proposal: for a period of [insert: number] days after receipt of this Proposal by the Purchaser</p> |
| 13. | <p>Procedures to be followed:</p> <ul style="list-style-type: none"> (a) You are requested to notify us of your acceptance, comments, or rejection of this detailed Change Proposal within [insert: number] days from your receipt of this Proposal. (b) The amount of any increase and/or decrease shall be taken into account in the adjustment of the Contract Price. |

For and on behalf of the Supplier

Signed:

Date:

in the capacity of: [state: **“Supplier’s Representative” or other higher level authority in the Supplier’s organization**]

8.5 Change Order Form

(Purchaser's Letterhead)

Date: [insert: *date*]

Loan/Credit Number: [insert: *loan or credit number from IFB*]

IFB: [insert: *title and number of IFB*]

Contract: [insert: *name of System or Subsystem and number of Contract*]

To: [insert: *name of Supplier and address*]

Attention: [insert: *name and title*]

Dear Sir or Madam:

We hereby approve the Change Order for the work specified in Change Proposal No. [insert: *number*], and agree to adjust the Contract Price, Time for Completion, and/or other conditions of the Contract in accordance with GCC Clause 39 of the Contract.

1. Title of Change: [insert: *name*]
2. Request for Change No./Rev.: [insert: *request number / revision*]
3. Change Order No./Rev.: [insert: *order number / revision*]
4. Originator of Change: [select: *Purchaser / Supplier*; and add: *name*]
5. Authorized Price for the Change:

Ref. No.: [insert: *number*]

Date: [insert: *date*]

[insert: *amount in foreign currency A*] plus [insert: *amount in foreign currency B*] plus [insert: *amount in foreign currency C*] plus [insert: *amount in local currency*]

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6. Adjustment of Time for Achieving Operational Acceptance: [*insert: amount and description of adjustment*]

7. Other effects, if any: [*state: “none” or insert description*]

For and on behalf of the Purchaser

Signed:

Date:

in the capacity of: [*state: “Project Manager” or higher level authority in the Purchaser’s organization*]

For and on behalf of the Supplier

Signed:

Date:

in the capacity of: [*state “Supplier’s Representative” or higher level authority in the Supplier’s organization*]

8.6 Application for Change Proposal Form

(Supplier's Letterhead)

Date: [insert: *date*]

Loan/Credit Number: [insert: *loan or credit number from IFB*]

IFB: [insert: *title and number of IFB*]

Contract: [insert: *name of System or Subsystem and number of Contract*]

To: [insert: *name of Purchaser and address*]

Attention: [insert: *name and title*]

Dear Sir or Madam:

We hereby propose that the below-mentioned work be treated as a Change to the System.

1. Title of Change: [insert: *name*]
2. Application for Change Proposal No./Rev.: [insert: *number / revision*] dated: [insert: *date*]
3. Brief Description of Change: [insert: *description*]
4. Reasons for Change: [insert: *description*]
5. Order of Magnitude Estimation: [insert: *amount in currencies of the Contract*]
6. Schedule Impact of Change: [insert: *description*]
7. Effect on Functional Guarantees, if any: [insert: *description*]

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8. Appendix: [insert: ***titles*** (if any); otherwise state ***“none”***]

For and on behalf of the Supplier

Signed:

Date:

in the capacity of: [state: ***“Supplier’s Representative”*** or ***higher level authority in the Supplier’s organization***]