

BIDDING DOCUMENT (SINGLE-STAGE)

Issued on: 26th November, 2018



**Procurement of Contract
For**

Development of ICT Infrastructure in HPPWD and HPRIDC

**IFB No: PW/SRP/RIDC/HP/ICT/ICB-4
HP State Road Project**

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

Request for Bids

Selection of a System Integrator for Design, Supply, Install, Integration, Commissioning, Testing, and Maintenance of an Integrated Management Information System (IMIS) for HPPWD and HPRIDC

Purchaser: Himachal Pradesh Road & Other Infrastructure Development Corporation

Project: *Development of ICT Infrastructure in HPPWD and HPRIDC*

Contract title: Selection of a System Integrator for Design, Supply, Install, Integration, Commissioning, Testing, and Maintenance of an Integrated Management Information System (IMIS) for HPPWD and HPRIDC

Country: India

Loan No. /Credit No. / Grant No.: P4900-IN

RFB No: PW/SRP/RIDC/HP/ICT/ICB-4

Issued on: [26/11/2018]

1. The Government of Himachal Pradesh through Government of India has received PPAF loan from the World Bank (Loan No. P4900-IN) from the International Bank for Reconstruction and Development towards the cost of ***HP State Road Transformation Program*** and it is intended that a full loan agreement shall be signed with the World Bank after completion of project preparatory activities and a part of proceeds of this ***loan will be applied*** to eligible payments under the agreement(s) resulting from this RFB: PW/SRP/RIDC/HP/SI/ICB-4 –Development of Integrated Management Information System (IMIS) in HPPWD and HPRIDC.
2. The **Himachal Pradesh Road & Other Infrastructure Development Corporation** now invites sealed Bids from eligible Bidders for –**Selection of System Integrator for Design, Supply, Install, Integration, Commissioning, Testing, and Maintenance of an Integrated Management Information System (IMIS) for HPPWD and HPRIDC**–
3. Bidding will be conducted through international competitive procurement using Request for Bids (RFB) as specified in the World Bank’s –Procurement Regulations for IPF Borrowers– [December 22, 2017] (–Procurement Regulations–), and is open to all eligible Bidders as defined in the Procurement Regulations.
4. 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 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 **20/12/2018 at 11:00 hrs (IST)** at below address.
5. The bidding document in English is available on website of HPRIDC which can be downloaded from the website of HPRIDC and HPPWD i.e. <http://himachalservices.nic.in/hpridc/> and <http://hppwd.gov.in/>. The tender fees i.e. **INR 15,000 (US \$225)** of the bid document downloaded from the website of HPRIDC are to be paid to HPRIDC at the time of submission of the bid. The method of payment will be through Demand Draft payable at Shimla in favor of Chief Engineer-cum-Project Director, HP State Roads Project, HPRIDC.
 6. Bids must be delivered to the address below on or before **07/01/2019 at 15:00 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 **07/01/2019 at 1530 Hours (IST)**.
 7. All bids must be accompanied by a Bid Security of **INR 4.5 Million/ USD 70965 /-**
 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. The address (es) referred to above is (are): *[insert detailed address (es)]*

**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**

*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](tel:0177-2620663), 2627602*

Table of Contents

Table of Contents

Section I - Instructions to Bidders	5
Section II - Bid Data Sheet (BDS).....	42
Section III - Evaluation and Qualification Criteria	48
Section IV - Bidding Forms	63
Section V - Eligible Countries.....	109
Section VI - Fraud and Corruption.....	110
Section VII - Requirements of the Information System	113
Technical Requirements	114
Table of Content	114
Implementation Schedule Table	168
Table of Content	168
Background and Informational Materials	187
Table of Content	187
Section VIII - General Conditions of Contract	249
Table of Content	250
Section IX - Special Conditions of Contract.....	334
Table of Content.....	334
Section X - Contract Forms	357
Table of Contract Forms.....	357

PART 1 – BIDDING PROCEDURES

Section I - Instructions to Bidders

Table of Content

A. General	8
1. Scope of Bid	8
2. Source of Funds	8
3. Fraud and Corruption.....	9
4. Eligible Bidders	9
5. Eligible Goods and Services	12
B. Contents of Bidding Document.....	12
6. Sections of Bidding Document	12
7. Clarification of Bidding Document, Site Visit, Pre-bid Meeting	14
8. Amendment of Bidding Document.....	15
C. Preparation of Bids.....	15
9. Cost of Bidding	15
10. Language of Bid.....	15
11.DocumentsComprising the Bid.....	15
12. Letter of Bid and Price Schedules.....	17
13. Alternative Bids	17
14. Documents Establishing the Eligibility of the Information System.....	18
15. Documents Establishing the Eligibility and Qualifications of the Bidder.....	18
16. Documents Establishing Conformity of the Information System.....	18
17.Bid Prices	20
18.Currencies of Bid and Payment	23
19.Period of Validity of Bids.....	23
20. Bid Security	23
21.Format and Signing of Bid	26
D. Submission and Opening of Bids.....	26
22.Submission, Sealing and Marking of Bids	26
23.Deadline for Submission of Bids	27
24.Late Bids	27
25.Withdrawal, Substitution, and Modification of Bids	28
26.Bid Opening	28
E. Evaluation and Comparison of Bids.....	29

27. Confidentiality	30
28. Clarification of Bids	30
29. Deviations, Reservations, and Omissions.....	30
30. Determination of Responsiveness	30
31. Nonmaterial Nonconformities	31
32. Correction of Arithmetical Errors	32
33. Conversion to Single Currency	32
34. Margin of Preference	32
35. Evaluation of Bids	32
36. Comparison of Bids.....	35
37. Abnormally Low Bids	35
38. Unbalanced or Front Loaded Bids	35
39. Eligibility and Qualification of the Bidder	36
40. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids	37
41. Standstill Period	37
42. Notification of Intention to Award.....	37
F. Award of Contract	37
43. Award Criteria	38
44. Purchaser's Right to Vary Quantities at Time of Award	38
45. Notification of Award	38
46. Debriefing by the Purchaser	39
47. Signing of Contract	40
48. Performance Security	41
49. Adjudicator	41
50. Procurement Related Complaint	41

A. General

1. Scope of Bid

- 1.1 The Purchaser, as indicated **in the BDS**, or its duly authorized Purchasing Agent if so specified **in the BDS** (interchangeably referred to as **the Purchaser**) issues this bidding document for the supply and installation of the Information System as specified in Section VII, Purchaser's Requirements. The name, identification and number of lots (contracts) of this RFB are specified **in the BDS**.
- 1.2 Unless otherwise stated, throughout this bidding document definitions and interpretations shall be as prescribed in the Section VIII, General Conditions of Contract.
- 1.3 Throughout this bidding document:
 - a) the term **in writing** means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the BDS, distributed or received through the electronic-procurement system used by the Purchaser) with proof of receipt;
 - b) if the context so requires, **singular** means **plural** and vice versa; and
 - c) **Day** means calendar day, unless otherwise specified as **Business Day**. A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays.

2. Source of Funds

- 2.1 The Borrower or Recipient (hereinafter called **the Borrower**) indicated **in the BDS** has applied for or received financing (hereinafter called **the funds**) from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called **the Bank**) in an amount specified **in the BDS** toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this bidding document is issued.
- 2.2 Payments by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement between the Borrower and the Bank (hereinafter called the Loan Agreement), and will be subject in all respects to the terms and conditions of that Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of equipment, materials or any other goods, if such payment or import 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 any rights from the Loan (or other financing) Agreement or have any claim to the funds.

3. Fraud and Corruption

- 3.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.
- 3.2 In further pursuance of this policy, Bidders shall permit and shall cause their agents (where declared or not), subcontractors, sub consultants, service providers, suppliers, and their personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

- 4.1 A Bidder may be a firm that is a private entity, a state-owned enterprise or institution subject to ITB 4.6, or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified **in the BDS**, there is no limit on the number of members in a JV.
- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this Bidding process, if the Bidder:
- a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
 - b) receives or has received any direct or indirect subsidy from another Bidder; or
 - c) has the same legal representative as another Bidder; or
 - d) has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Purchaser regarding this Bidding process; or

- e) any of its affiliates participates as a consultant in the preparation of the design or technical specifications of the Information System that are the subject of the Bid; or
 - f) or any of its affiliates has been hired (or is proposed to be hired) by the Purchaser or Borrower as Project Manager for the Contract implementation; or
 - g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the Contract, and/or the Bid evaluation process of such Contract; or (ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the Bidding process and execution of the Contract.
- 4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate as a Bidder or as JV member in more than one Bid except for permitted alternative Bids. Such participation shall result in the disqualification of all Bids in which the firm is involved. However, this does not limit the participation of a Bidder as subcontractor in another Bid or of a firm as a subcontractor in more than one Bid.
- 4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.

- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be initially selected for, prequalified for, bid for, propose for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- 4.6 Bidders that are state-owned enterprises or institutions in the Purchaser's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of the Purchaser.
- 4.7 A Bidder shall not be under suspension from bidding by the Purchaser as the result of the operation of a Bid-Securing Declaration or Proposal-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, 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 goods or the contracting of works or services required; or (b) 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 or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 This Bidding is open for all eligible Bidders, unless otherwise specified in ITB 15.2.
- 4.10 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; (a) relates to fraud or corruption, and (b) followed a judicial or administrative proceeding that

afforded the firm adequate due process.

5. Eligible Goods and Services

- 5.1 The Information Systems to be supplied under the Contract and financed by the Bank may have their origin in any country in accordance with Section V, Eligible Countries.
- 5.2 For the purposes of this bidding document, the term "Information System" means all:
- 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; 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.
- 5.3 For purposes of ITB 5.1 above, "origin" means the place where the goods and services making the Information System are produced in or supplied from. 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.

B. Contents of Bidding Document

6. Sections of Bidding Document

- 6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8:

PART 1 - Bidding Procedures

Section I - Instructions to Bidders (ITB)

Section II - Bid Data Sheet (BDS)

Section III - Evaluation and Qualification Criteria

Section IV - Bidding Forms

Section V - Eligible Countries

Section VI - Fraud and Corruption

PART 2 - Purchaser's Requirements

Section VII - Requirements of the IS, including:

- Technical Requirements
- Implementation Schedule
- System Inventory Tables
- Background and Informational Materials

PART 3 - Contract

Section VIII - General Conditions of Contract

Section IX -Special Conditions of Contract

Section X - Contract Forms

- 6.2 The Specific Procurement Notice ó Request for Bids (RFB) issued by the Purchaser is not part of this bidding document.
- 6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.

-
- 7. Clarification of Bidding Document, Site Visit, Pre-bid Meeting**
- 7.1 A Bidder requiring any clarification of the bidding document shall contact the Purchaser in writing at the Purchaser's address specified **in the BDS** or raise its enquiries during the pre-Bid meeting if provided for in accordance with ITB 7.4. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified **in the BDS**. The Purchaser shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified **in the BDS**, the Purchaser shall also promptly publish its response at the web page identified **in the BDS**. Should the Purchaser deem it necessary to amend the bidding document as a result of a request for clarification, it shall do so following the procedure under ITB 8 and ITB 23.2.
- 7.2 The Bidder may wish to visit and examine the site where the Information System is to be installed and its surroundings and obtain for itself on its own responsibility all information that may be necessary for preparing the Bid and entering into a contract. The costs of visiting the site shall be at the Bidder's own expense.
- 7.3 The Bidder and any of its personnel or agents will be granted permission by the Purchaser to enter upon its premises and lands for the purpose of such visit, but only upon the express condition that the Bidder, its personnel, and agents will release and indemnify the Purchaser and its personnel and agents from and against all liability in respect thereof, and will be responsible for death or personal injury, loss of or damage to property, and any other loss, damage, costs, and expenses incurred as a result of the inspection.
- 7.4 The Bidder's designated representative is invited to attend a pre-Bid meeting and/or a site visit, if provided for **in the BDS**. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 7.5 The Bidder is requested, as far as possible, to submit any questions in writing, to reach the Purchaser not later than one week before the meeting.
- 7.6 Minutes of the pre-Bid meeting, including the text of the questions raised without identifying the source, and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Bidders who have

acquired the bidding document in accordance with ITB 6.3. Any modification to the bidding document that may become necessary as a result of the pre-Bid meeting shall be made by the Purchaser exclusively through the issue of an Addendum pursuant to ITB 8 and not through the minutes of the pre-Bid meeting.

7.7 Nonattendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.

8. Amendment of Bidding Document

8.1 At any time prior to the deadline for submission of Bids, the Purchaser may amend the bidding document by issuing addenda.

8.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Purchaser in accordance with ITB 6.3. The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.

8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of Bids, pursuant to ITB 23.2

C. Preparation of Bids

9. Cost of Bidding

9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

10. Language of Bid

10.1 The Bid, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in the language specified **in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified **in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.

**11. Documents
Comprising the Bid**

11.1 The Bid submitted by the Bidder shall comprise the following:

- (a) **Letter of Bid** prepared in accordance with ITB 12;
- (b) **Price Schedules** completed in accordance with ITB 12 and ITB 17;

- (c) **Bid Security or Bid-Securing Declaration** in accordance with ITB 20;
- (d) **Alternative Bid:** if permissible, in accordance with ITB 13;
- (e) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 21.3;
- (f) **Eligibility of Information System:** documentary evidence established in accordance with ITB 14.1 that the Information System offered by the Bidder in its Bid or in any alternative Bid, if permitted, are eligible;
- (g) **Bidder's Eligibility:** documentary evidence in accordance with ITB 15 establishing the Bidder's eligibility and qualifications to perform the contract if its Bid is accepted;
- (h) **Conformity:** documentary evidence established in accordance with ITB 16 that the Information System offered by the Bidder conform to the bidding document;
- (i) **Subcontractors:** list of subcontractors, in accordance with ITB 16.4;
- (j) **Intellectual Property:** a list of: Intellectual Property as defined in GCC Clause 15;
 - (i) all Software included in the Bid, assigning each item to one of the software categories defined in GCC Clause 1.1 (c):
 - a. System, General Purpose, and Application Software; or
 - b. Standard and Custom Software;
 - (ii) all Custom Materials, as defined in GCC Clause 1.1 (c), included in the Bid;

All Materials not identified as Custom Materials shall be deemed Standard Materials, as defined in GCC Clause 1.1 (c);

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 Information System); and

(k) any other document required **in the BDS**.

11.2 In addition to the requirements under ITB 11.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members indicating at least the parts of the Information System to be executed by the respective members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement indicating at least the parts of the Information System to be executed by the respective members.

11.3 The Bidder shall furnish in the Letter of Bid information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.

12. Letter of Bid and Price Schedules

12.1 The Bidder shall complete the Letter of Bid, including the appropriate Price Schedules, using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 21.3. All blank spaces shall be filled in with the information requested.

13. Alternative Bids

13.1 The BDS indicates whether alternative Bids are allowed. If they are allowed, the **BDS** will also indicate whether they are permitted in accordance with ITB 13.3, or invited in accordance with ITB 13.2 and/or ITB 13.4.

13.2 When alternatives to the Time Schedule are explicitly invited, a statement to that effect will be included **in the BDS**, and the method of evaluating different time schedules will be described in Section III, Evaluation and Qualification Criteria.

13.3 Except as provided under ITB 13.4 below, Bidders wishing to offer technical alternatives to the Purchaser's requirements as described in the bidding document must also provide: (i) a price at which they are prepared to offer an Information System meeting the Purchaser's requirements; and (ii) all

information necessary for a complete evaluation of the alternatives by the Purchaser, including drawings, design calculations, technical specifications, breakdown of prices, and proposed installation methodology and other relevant details. Only the technical alternatives, if any, of the Bidder with the Most Advantageous Bid conforming to the basic technical requirements shall be considered by the Purchaser.

- 13.4 When Bidders are invited **in the BDS** to submit alternative technical solutions for specified parts of the system, such parts shall be described in Section VII, Purchaser's Requirements. Technical alternatives that comply with the performance and technical criteria specified for the Information System shall be considered by the Purchaser on their own merits, pursuant to ITB 35.

**14. Documents
Establishing the
Eligibility of the
Information System**

- 14.1 To establish the eligibility of the Information System in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.

**15. Documents
Establishing the
Eligibility and
Qualifications of the
Bidder**

- 15.1 To establish its eligibility and qualifications to perform the Contract in accordance with Section III, Evaluation and Qualification Criteria, the Bidder shall provide the information requested in the corresponding information sheets included in Section IV, Bidding Forms.

- 15.2 In the event that prequalification of potential Bidders has been undertaken as stated **in the BDS**, only Bids from prequalified Bidders shall be considered for award of Contract. These qualified Bidders should submit with their Bids any information updating their original prequalification applications or, alternatively, confirm in their Bids that the originally submitted prequalification information remains essentially correct as of the date of Bid submission.

**16. Documents
Establishing
Conformity of the
Information System**

- 16.1 Pursuant to ITB 11.1 (h), 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 design, supply and install under the Contract

- 16.2 The documentary evidence of conformity of the Information System to the bidding documents including:

- (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 the Contract, and the

human and other resources the Bidder proposes to use. 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;

- (b) 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;
- (c) 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 Bidder is encouraged to use the Technical Responsiveness Checklist (or Checklist Format) in the Sample Bidding Forms (Section IV). 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;
- (d) support material (e.g., product literature, white papers, narrative descriptions of technologies and/or technical approaches), as required and appropriate; and
- (e) any separate and enforceable contract(s) for Recurrent Cost items which the BDS ITB 17.2 required Bidders to bid.

16.3 References to brand names or model numbers or national or proprietary standards designated by the Purchaser in the bidding documents 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.

- 16.4 For major items of the Information System as listed by the Purchaser in Section III, Evaluation and Qualification Criteria, which the Bidder intends to purchase or subcontract, the Bidder shall give details of the name and nationality of the proposed subcontractors, including manufacturers, for each of those items. In addition, the Bidder shall include in its Bid information establishing compliance with the requirements specified by the Purchaser for these items. Quoted rates and prices will be deemed to apply to whichever subcontractor is appointed, and no adjustment of the rates and prices will be permitted.
- 16.5 The Bidder shall be responsible for ensuring that any subcontractor proposed complies with the requirements of ITB 4, and that any goods or services to be provided by the subcontractor comply with the requirements of ITB 5 and ITB 16.1.

17. Bid Prices

- 17.1 All Goods and Services identified in the Supply and Installation Cost Sub-Tables in System Inventory Tables in Section VII, and all other Goods and Services proposed by the Bidder to fulfill the requirements of the Information System, must be priced separately and summarized in the corresponding cost tables in the Sample Bidding Forms (Section IV), in accordance with the instructions provided in the tables and in the manner specified below.
- 17.2 **Unless otherwise specified in the BDS**, the Bidder must also bid Recurrent Cost Items specified in the Technical Requirements, Recurrent Cost Sub-Table of the System Inventory Tables in Section VII (if any). These must be priced separately and summarized in the corresponding cost tables in the Sample Bidding Forms (Section IV), in accordance with the instructions provided in the tables and in the manner specified below:
- (a) **if specified in the BDS**, the Bidder must also bid separate enforceable contracts for the Recurrent Cost Items not included in the main Contract;
 - (b) prices for 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 Information System and, if appropriate, of the Bidder's own allowance for price

increases;

- (c) prices for Recurrent Costs beyond the scope of warranty services to be incurred during the Warranty Period, defined in GCC Clause 29.4 and prices for Recurrent Costs to be incurred during the Post-Warranty Period, defined in SCC Clause 1.1. (e) (xiii), shall be quoted as Service prices on the Recurrent Cost Sub-Table in detail, and on the Recurrent Cost Summary Table in currency totals.

17.3 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 VII), and with GCC and SCC Clause 12 ó Terms of Payment. Bidders may be required to provide a breakdown of any composite or lump-sum items included in the Cost Tables

17.4 The price of items that the Bidder has left blank in the cost tables provided in the Sample Bid Forms (Section IV) 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 bid evaluation in accordance with ITB 31.3.

17.5 The prices for Goods components of the Information 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**, as follows:

- (a) Goods supplied from outside the Purchaser's country:

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 SCC for GCC 1.1 (e) (iii). 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;

- (b) Locally supplied Goods:

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;

(c) Inland transportation.

- 17.6 **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 17.5, 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 17.5 (a) specifies CIP, and the named places of destination are the Project Sites.
- 17.7 The price of Services shall be separated into their local and foreign currency components and where appropriate, broken down into unit prices. 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.
- 17.8 **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).
- 17.9 **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.

18. Currencies of Bid and Payment

- 18.1 The currency (ies) of the Bid and currencies of payment shall be the same. The Bidder shall quote in the currency of the Purchaser's Country the portion of the Bid price that corresponds to expenditures incurred in the currency of the Purchaser's Country, unless otherwise specified **in the BDS**.
- 18.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Purchaser's Country.

19. Period of Validity of Bids

- 19.1 Bids shall remain valid for the period specified **in the BDS** after the Bid submission deadline date prescribed by the Purchaser in accordance with ITB 23.1. A Bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 20.1, it shall also be extended for twenty-eight days (28) beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 19.3.
- 19.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Bid validity, the Contract price shall be determined as follows:
- (a) in case of fixed price contracts, the contract price shall be the Bid price adjusted by a factor or factors specified **in the BDS**;
 - (b) in the case of an adjustable price contracts, no adjustments shall be made;
 - (c) in any case, Bid evaluation shall be based on the Bid Price without taking into consideration the applicable correction from those indicated above.

20. Bid Security

- 20.1 The Bidder shall furnish as part of its Bid, either a Bid-Securing Declaration or a Bid Security as specified **in the BDS**, in original form and, in the case of a Bid Security, in the amount and currency specified **in the BDS**.

20.2 A Bid-Securing Declaration shall use the form included in Section IV, Bidding Forms.

20.3 If a Bid Security is specified pursuant to ITB 20.1, the bid security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) an unconditional guarantee issued by a non-bank financial institution (such as an insurance, bonding or surety company);
- (b) an irrevocable letter of credit;
- (c) a cashier's or certified check; or
- (d) another security indicated **in the BDS**,

from a reputable source from an eligible country. If an unconditional guarantee is issued by a non-bank financial institution located outside the Purchaser's Country the issuing non-bank financial institution shall have a correspondent financial institution located in the Purchaser's Country to make it enforceable unless the Purchaser has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required.

20.4 In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms or in another substantially similar format approved by the Purchaser prior to Bid submission. In either case, the form must include the complete name of the Bidder. The Bid Security shall be valid for twenty-eight days (28) beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 19.2.

20.5 If a Bid Security or a Bid-Securing Declaration is specified pursuant to ITB 20.1, any Bid not accompanied by a substantially responsive Bid Security or Bid-Securing Declaration shall be rejected by the Purchaser as non-responsive.

20.6 If a Bid Security is specified pursuant to ITB 20.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the Performance Security pursuant to ITB 48.

20.7 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract and furnished the required Performance Security.

20.8 The Bid Security may be forfeited or the Bid-Securing Declaration executed:

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid; or
- (b) if the successful Bidder fails to:
 - (i) *sign the Contract in accordance with ITB 47; or*
 - (ii) furnish a performance security in accordance with ITB 48.

20.9 The Bid Security or the Bid-Securing Declaration of a JV shall be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid Security or the Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.

20.10 If a Bid Security is not required **in the BDS**, and;

- (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 19.2; or
- (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 47; or furnish a Performance Security in accordance with ITB 48;

the Purchaser may, if provided for **in the BDS**, declare the Bidder disqualified to be awarded a contract by the Purchaser for a period of time as stated **in the BDS**.

21. Format and Signing of Bid

- 21.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 11 and clearly mark it "ORIGINAL." Alternative Bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE." In addition, the Bidder shall submit copies of the Bid, in the number specified **in the BDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 21.2 Bidders shall mark as "CONFIDENTIAL" information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 21.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified **in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.
- 21.4 In case the Bidder is a JV, the Bid shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 21.5 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

22. Submission, Sealing and Marking of Bids

- 22.1 The Bidder shall deliver the Bid in a single, sealed envelope (one (1) envelope process). Within the single envelope the Bidder shall place the following separate, sealed envelopes:
- (a) in an envelope marked "ORIGINAL", all documents comprising the Bid, as described in ITB 11; and
 - (b) in an envelope marked "COPIES", all required copies of the Bid; and,

- (c) if alternative Bids are permitted in accordance with ITB 13, and if relevant:
 - (i) in an envelope marked "ORIGINAL & ALTERNATIVE BID", the alternative Bid; and
 - (ii) in the envelope marked "COPIES & ALTERNATIVE BID" all required copies of the alternative Bid.

22.2 The inner and outer envelopes shall:

- (a) bear the name and address of the Bidder;
- (b) be addressed to the Purchaser in accordance with ITB 23.1;
- (c) bear the specific identification of this Bidding process indicated in accordance with ITB 1.1; and
- (d) bear a warning not to open before the time and date for Bid opening.

22.3 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the Bid.

23. Deadline for Submission of Bids

23.1 Bids must be received by the Purchaser at the address and no later than the date and time indicated **in the BDS**. When so specified **in the BDS**, Bidders shall have the option of submitting their Bids electronically. Bidders submitting Bids electronically shall follow the electronic Bid submission procedures specified **in the BDS**.

23.2 The Purchaser may, at its discretion, extend this deadline for submission of Bids by amending the bidding documents in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders will thereafter be subject to the deadline as extended.

24. Late Bids

24.1 The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 23. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.

25. Withdrawal, Substitution, and Modification of Bids

- 25.1 A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB 21.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:
- (a) prepared and submitted in accordance with ITB 21 and ITB 22 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION;" and
 - (b) received by the Purchaser prior to the deadline prescribed for submission of Bids, in accordance with ITB 23.
- 25.2 Bids requested to be withdrawn in accordance with ITB 25.1 shall be returned unopened to the Bidders.
- 25.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

26. Bid Opening

- 26.1 Except as in the cases specified in ITB 24 and ITB 25.2, the Purchaser shall conduct the Bid opening in public, in the presence of Bidders' designated representatives and anyone who chooses to attend, and at the address, date and time specified **in the BDS**. Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified **in the BDS**.
- 26.2 First, envelopes marked "Withdrawal" 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.
- 26.3 Next, envelopes marked "Substitution" 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.

- 26.4 Envelopes marked "Modification" 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.
- 26.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and the Bid Price(s), including any discounts and alternative Bids, and indicating whether there is a modification; the presence or absence of a Bid Security or Bid-Securing Declaration; and any other details as the Purchaser may consider appropriate.
- 26.6 Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further in the evaluation. The Letter of Bid and the Price Schedules are to be initialed by representatives of the Purchaser attending Bid opening in the manner specified **in the BDS**.
- 26.7 The Purchaser shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 24.1).
- 26.8 The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum:
 - (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
 - (b) the Bid Price, per lot if applicable, including any discounts;
 - (c) any alternative Bids; and
 - (d) the presence or absence of a Bid Security or a Bid-Securing Declaration.
- 26.9 The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

- 27. Confidentiality**
- 27.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until the Notification of Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 42.
- 27.2 Any effort by a Bidder to influence the Purchaser in the evaluation of the Bids or Contract award decisions may result in the rejection of its Bid.
- 27.3 Notwithstanding ITB 27.2, 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 Bidding process, it should do so in writing.
- 28. Clarification of Bids**
- 28.1 To assist in the examination, evaluation, and comparison of the Bids, and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Bids, in accordance with ITB 32.
- 28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Purchaser's request for clarification, its Bid may be rejected.
- 29. Deviations, Reservations, and Omissions**
- 29.1 During the evaluation of Bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified in the bidding document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the bidding document.
- 30. Determination of Responsiveness**
- 30.1 The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself, as defined in ITB 11.

30.2 A substantially responsive Bid is one that meets the requirements of the bidding document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that;

(a) if accepted, would:

(i) affect in any substantial way the scope, quality, or performance of the Information System specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the bidding document, the Purchaser's rights or the Bidder's obligations under the proposed Contract; or

(b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

30.3 The Purchaser shall examine the technical aspects of the Bid in particular, to confirm that all requirements of Section VII, Purchaser's Requirements have been met without any material deviation, reservation, or omission.

30.4 To be considered for Contract award, Bidders must have submitted Bids:

(a) for which detailed Bid evaluation using the same standards for compliance determination as listed in ITB 29 and ITB 30.3 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 ITB 35.8, the individual Subsystem, lot or slice Bid on; and are deemed by the Purchaser as commercially and technically responsive; and

(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 39.3.

31. Nonmaterial Nonconformities

31.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonconformity in the Bid that does not constitute a material deviation, reservation or omission.

-
- 31.2 Provided that a Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 31.3 Provided that a Bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified **in the BDS.**
- 32. Correction of Arithmetical Errors**
- 32.1 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:
- (a) where there are errors between the total of the amounts given under the column for the price breakdown and the amount given under the Total Price, the former shall prevail and the latter will be corrected accordingly;
 - (b) where there are errors between the total of the amounts of Schedule Nos. 1 to 5 and the amount given in Schedule No. 6 (Grand Summary), the former shall prevail and the latter will be corrected accordingly; and
 - (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- 32.2 A Bidder shall be requested to accept the correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1 shall result in the rejection of the Bid.
- 33. Conversion to Single Currency**
- 33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted into a single currency as specified **in the BDS.**
- 34. Margin of Preference**
- 34.1 No margin of domestic preference shall apply.
- 35. Evaluation of Bids**
- 35.1 The Purchaser shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification criteria.

No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies the Purchaser shall determine the Most Advantageous Bid.

Preliminary Examination

35.2 The Purchaser will examine the bids, to determine whether they have been properly signed, whether required sureties have been furnished, whether any computational errors have been made, whether required sureties have been furnished and are substantially complete (e.g., not missing key parts of the bid or silent on excessively large portions of the Technical Requirements). In the case where a pre-qualification process was undertaken for the Contract(s) for which these bidding documents have been issued, the Purchaser will ensure that each bid is from a pre-qualified bidder and, in the case of a Joint Venture, that partners and structure of the Joint Venture are unchanged from those in the pre-qualification

Technical Evaluation

35.3 The Purchaser will examine the information supplied by the Bidders Pursuant to ITB 11 and ITB 16, and in response to other requirements in the Bidding document, taking into account the following factors:

- (a) overall completeness and compliance with the Technical Requirements; and deviations from the Technical Requirements;
- (b) suitability of the Information System offered in relation to the conditions prevailing at the site; and the suitability of the implementation and other services proposed, as described in the Preliminary Project Plan included in the bid;
- (c) achievement of specified performance criteria by the Information System;
- (d) compliance with the time schedule called for by the Implementation Schedule and any alternative time schedules offered by Bidders, as evidenced by a milestone schedule provided in the Preliminary Project Plan included in the bid;
- (e) type, quantity, quality, and long-term availability of maintenance services and of any critical consumable items necessary for the operation of the Information System;

- (f) any other relevant technical factors that the Purchaser deems necessary or prudent to take into consideration;
- (g) any proposed deviations in the bid to the contractual and technical provisions stipulated in the bidding documents.

35.4 If specified **in 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 formula, specified in Section III, Evaluation and Qualification Criteria, which permits a comprehensive assessment of the Bid cost and the technical merits of each Bid

35.5 Where alternative technical solutions have been allowed in accordance with ITB 13, and offered by the Bidder, the Purchaser will make a similar evaluation of the alternatives. Where alternatives have not been allowed but have been offered, they shall be ignored.

Economic Evaluation

35.6 To evaluate a Bid, the Purchaser shall consider the following:

- (a) the Bid price, excluding provisional sums and the provision, if any, for contingencies in the Price Schedules;
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
- (c) price adjustment due to discounts offered in accordance with ITB 26.8;
- (d) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 33; and
- (e) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
- (f) the evaluation factors indicated in Section III, Evaluation and Qualification Criteria.

35.7 If price adjustment is allowed in accordance with ITB 17.9, the estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

35.8 The Purchaser will evaluate and compare the Bids that have been determined to be substantially responsive, pursuant to ITB 30. The evaluation will be performed assuming either that:

- (a) the Contract will be awarded to the Most Advantageous Bid for the entire Information System; or
- (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 Most Advantageous Bid/Bids for the entire System.

In the latter case, discounts that are conditional on the award of more than one Subsystem, lot, or slice may be offered in Bids. Such discounts will be considered in the evaluation of bids as specified **in the BDS**.

36. Comparison of Bids

36.1 The Purchaser shall compare all substantially responsive Bids in accordance with ITB 35.6 to determine the lowest evaluated cost.

37. Abnormally Low Bids

37.1 An Abnormally Low Bid is one where the Bid price in combination with other constituent elements of the Bid appears unreasonably low to the extent that the Bid price raises material concerns as to the capability of the Bidder to perform the Contract for the offered Bid Price.

37.2 In the event of identification of a potentially Abnormally Low Bid, the Purchaser shall seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document.

37.3 After evaluation of the price analyses, in the event that the Purchaser determines that the Bidder has failed to demonstrate its capability to perform the Contract for the offered Bid Price, the Purchaser shall reject the Bid.

38. Unbalanced or Front Loaded Bids

38.1 If the Bid that is evaluated as the lowest evaluated cost is, in the Purchaser's opinion, seriously unbalanced or front loaded the Purchaser may require the Bidder to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the Bid prices with the scope of information systems, installations, proposed methodology, schedule and any other requirements of the bidding document.

38.2 After the evaluation of the information and detailed price

analyses presented by the Bidder, the Purchaser may:

- (a) accept the Bid; or
- (b) if appropriate, require that the total amount of the Performance Security be increased, at the expense of the Bidder, to a level not exceeding twenty percent (20%) of the Contract Price; or
- (c) reject the Bid.

39. Eligibility and Qualification of the Bidder

- 39.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially responsive Bid is eligible and meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 39.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 15.
- 39.3 **Unless otherwise specified in the BDS**, the Purchaser will NOT carry out tests at the time of post-qualification, to determine that the performance or functionality of the Information System offered meets those stated in the Technical Requirements. However, if **so specified in the BDS** the Purchaser may carry out such tests **as detailed in the BDS**.
- 39.4 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Purchaser shall proceed to the next lowest evaluated cost or best evaluated Bid, as the case may be, to make a similar determination of that Bidder's qualifications to perform satisfactorily.
- 39.5 The capabilities of the manufacturers and subcontractors proposed by the Bidder that is determined to have offered the Most Advantageous Bid for identified major items of supply or services will also be evaluated for acceptability in accordance with Section III, Evaluation and Qualification Criteria. Their participation should be confirmed with a letter of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Bid will not be rejected, but the Bidder will be required to substitute an acceptable manufacturer or subcontractor without any change to the Bid price. Prior to signing the Contract, the corresponding Appendix to the Contract Agreement shall be completed, listing

-
- the approved manufacturers or subcontractors for each item concerned.
- 40. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids**
- 40.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to contract award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.
- 41. Standstill Period**
- 41.1 The Contract shall not be awarded earlier than the expiry of the Standstill Period. The Standstill Period shall be ten (10) Business Days unless extended in accordance with ITB 46. The Standstill Period commences the day after the date the Purchaser has transmitted to each Bidder the Notification of Intention to Award the Contract. Where only one Bid is submitted, or if this contract
- 41.2 is in response to an emergency situation recognized by the Bank, the Standstill Period shall not apply.
- 42. Notification of Intention to Award**
- 42.1 The Purchaser shall send to each Bidder the Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
 - (b) the Contract price of the successful Bid;
 - (c) the total combined score of the successful Bid;
 - (d) the names of all Bidders who submitted Bids, and their Bid prices as readout and as evaluated prices and technical scores (if applicable);
 - (e) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notification is addressed) was unsuccessful;
 - (f) the expiry date of the Standstill Period; and
 - (g) instructions on how to request a debriefing or submit a complaint during the standstill period;

F. Award of Contract

-
- | | |
|--|---|
| 43. Award Criteria | <p>43.1 Subject to ITB 40, the Purchaser shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid. The determination of the Most Advantageous Bid will be made in accordance to one of the two options as defined in the BDS. The methodology options are:</p> <ul style="list-style-type: none">(a) when rated criteria are used: The Bidder that meets the qualification criteria and whose Bid:<ul style="list-style-type: none">(i) is substantially responsive; and(ii) is the best evaluated Bid (i.e. the Bid with the highest combined technical/quality/price score); or(b) when rated criteria are not used: The Bidder that meets the qualification criteria and whose Bid has been determined to be:<ul style="list-style-type: none">(i) substantially responsive to the bidding document; and(ii) the lowest evaluated cost. |
| 44. Purchaser's Right to Vary Quantities at Time of Award | <p>44.1 The Purchaser reserves the right at the time of Contract award to increase or decrease, by the percentage(s) for items as indicated in the BDS.</p> |
| 45. Notification of Award | <p>45.1 Prior to the expiration of the Bid Validity Period and upon expiry of the Standstill Period, specified in ITB 41.1 or any extension thereof, and, upon satisfactorily addressing any complaint that has been filed within the Standstill Period, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Contract Forms called the "Letter of Acceptance") shall specify the sum that the Purchaser will pay the Supplier in consideration of the execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").</p> |

45.2 Within ten (10) Business days after the date of transmission of the Letter of Acceptance, the Purchaser shall publish the Contract Award Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Purchaser;
- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
- (d) name of Bidders whose Bids were rejected and the reasons for their rejection;
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope; and
- (f) successful Bidder's Beneficial Ownership Disclosure Form, if specified in BDS ITB 47.1.

45.3 The Contract Award Notice shall be published on the Purchaser's website with free access if available, or in at least one newspaper of national circulation in the Purchaser's Country, or in the official gazette. The Purchaser shall also publish the Contract Award Notice in UNDB online.

45.4 Until a formal contract is prepared and executed, the Notification of Award shall constitute a binding Contract.

46. Debriefing by the Purchaser

46.1 On receipt of the Purchaser's Notification of Intention to Award referred to in ITB 42, an unsuccessful Bidder has three (3) Business Days to make a written request to the Purchaser for a debriefing. The Purchaser shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

46.2 Where a request for debriefing is received within the deadline, the Purchaser shall provide a debriefing within five (5) Business Days, unless the Purchaser decides, for justifiable reasons, to provide the debriefing outside this timeframe. In that case, the standstill period shall automatically be extended until five (5) Business Days after such debriefing is provided. If more than one debriefing is so delayed, the standstill period shall not end earlier than five (5) Business Days after the last debriefing takes place. The Purchaser shall promptly inform, by the quickest means available, all Bidders of the extended

standstill period.

46.3 Where a request for debriefing is received by the Purchaser later than the three (3)-Business Day deadline, the Purchaser should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.

46.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.

47. Signing of Contract

47.1 The Purchaser shall send to the successful Bidder the Letter of Acceptance including the Contract Agreement, and, if specified in the BDS, a request to submit the Beneficial Ownership Disclosure Form providing additional information on its beneficial ownership. The Beneficial Ownership Disclosure Form, if so requested, shall be submitted within eight (8) Business Days of receiving this request.

47.2 The successful Bidder shall sign, date and return to the Purchaser, the Contract Agreement within twenty-eight (28) days of its receipt.

47.3 Notwithstanding ITB 47.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the Information System to be supplied, where such export restrictions arise from trade regulations from a country supplying those Information System, the Bidder shall not be bound by its Bid, always provided, however, that the Bidder can demonstrate to the satisfaction of the Purchaser and of the Bank that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the Information System under the terms of the Contract.

-
- | | |
|--|---|
| 48. Performance Security | <p>48.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Purchaser, the successful Bidder shall furnish the performance security in accordance with the General Conditions, subject to ITB 38.2 (b), using for that purpose the Performance Security Form included in Section X, Contract Forms, or another form acceptable to the Purchaser. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Purchaser. A foreign institution providing a Performance Security shall have a correspondent financial institution located in the Purchaser's Country.</p> <p>48.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the Bidder offering the next Most Advantageous Bid.</p> |
| 49. Adjudicator | <p>49.1 Unless the BDS states otherwise, 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 43.1. 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 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 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 43.1.4, or if no Appointing Authority is specified there, the Contract will be implemented without an Adjudicator.</p> |
| 50. Procurement Related Complaint | <p>50.1 The procedures for making a Procurement-related Complaint are as specified in the BDS.</p> |

Section II - Bid Data Sheet (BDS)

The following specific data for the Information System to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Reference	A. GENERAL
ITB 1.1	<p>The reference number of the Request for Bids is: PW/SRP/RIDC/HP/SI/ICB-4</p> <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>Selection of a System Integrator for Design, Supply, Install, Integration, Commissioning, Testing, and Maintenance of an Integrated Management Information System (IMIS) for HPPWD and HPRIDC</p> <p><i>The primary objectives of the project “Development of ICT Infrastructure in HPPWD and HPRIDC are as follow:</i></p> <ul style="list-style-type: none"> • Modernization of existing infrastructure • Increased work force productivity • Capacity building and sensitization of various stake holders • Well informed and faster decision making • Streamlining of road maintenance activities • Efficient monitoring of complex projects • Improvement in cross functional communication 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 management, thereby improving the overall efficiency and effectiveness at the department

ITB 2.1	Name of the Borrower: Government of Himachal Pradesh through the Government of India Loan number: PPAF No. P4900-IN Name of Project: Himachal Pradesh State Roads Transformation Project								
ITB 4.1	Maximum number of members in the JV shall be: The number of joint venture partners including the Prime Bidder cannot exceed two. The joint venture partners should have experience in IT enabled services/IT Solutions/Process Automation.								
ITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr .								
B. BIDDING DOCUMENT									
ITB 7.1	For <u>Clarification of Bid purposes</u> only, the Purchaser's address is: 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 Web page: http://himachalservices.nic.in/hpridc/								
ITB 7.4	A Pre-Bid meeting shall take place at the following date, time and place: Date: :20/12/2018 Time: 11:00 hrs Place: 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 The queries for Pre-bid meeting should be necessarily be submitted in the following format in excel sheet only : <table><tr><th>S. No.</th><th>Bidding Document Reference(s) (Section No. & Page No.)</th><th>Content of Bidding Document requiring Clarification(s)</th><th>Points of clarification</th></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>	S. No.	Bidding Document Reference(s) (Section No. & Page No.)	Content of Bidding Document requiring Clarification(s)	Points of clarification				
S. No.	Bidding Document Reference(s) (Section No. & Page No.)	Content of Bidding Document requiring Clarification(s)	Points of clarification						

	1			
	2			
C. Preparation of Bids				
ITB 10.1	The language of the bid and of all correspondence and documents related to it is: English.			
ITB 13.1	Alternative Bids are not permitted.			
ITB 15.2	<p>Prequalification has not been undertaken (not been done separately) The bidders need to clear the pre-qualification criteria as mentioned in the Section III Evaluation & Qualification criteria</p> <p>The process of bids evaluation phase shall happen in four stages:</p> <ol style="list-style-type: none"> 1. Pre-Qualification 2. Technical Evaluation 3. Techno-Commercial Evaluation 4. Declaration of successful bidder. <p>Bidders will need to qualify in every stage to advance to the next stage.</p>			
ITB 16.2 (a)	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-change according to new SCC			
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 following limited number of specific items: As listed in Supply & Installation Form			
ITB 17.2	The Bidder “ <i>must</i> ” bid Recurrent Cost Items			
ITB 17.5	The Incoterms edition is: The Incoterms edition is: Applicable Incoterms are Incoterms 2010 ô ICC Official Rules for the Interpretation of Trade Terms published by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France			
ITB 17.5 (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</p>			

	<p>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 Bhawan, Nigam Vihar, Shimla 6 171 002</p>
ITB 17.5 (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 17.9	The prices quoted by the Bidder <i>shall be FIXED.</i>
ITB 18.1	The Bidder is required to quote in the currency of the Purchaser's Country the portion of the Bid price that corresponds to expenditures incurred in that currency.
ITB 19.1	<p>The Bid validity period shall be 120 days after the deadline for bid submission days.</p> <p>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</p>
ITB 20.1	<p>A <i>Bid Security</i> <i>shall be</i> required.</p> <p>A Bid-Securing Declaration shall be required.</p> <p>Bids need to be secured "by a Bid Security"</p> <p>The amount of Bid Security required is INR 4.5 Million/ USD 70965 or an equivalent amount in any freely convertible currency.</p>
ITB 20.10	If the Bidder incurs any of the actions prescribed in subparagraphs (a) or (b) of this provision, the Purchaser will declare the Bidder ineligible to be awarded contracts by the Purchaser for a period of 2 years.
ITB 21.1	<p>In addition to the original of the Bid, the number of copies is: 4</p> <p>Required number of bid copies, besides the original:</p> <p>4 Copies of Technical Bid</p> <p>In addition, soft copy of the documents must be enclosed in Portable Document Format(pdf)</p> <p>No copy of Financial bid except the original is required</p>
ITB 21.3	The written confirmation of authorization to sign on behalf of the Bidder shall

	consist of: Manufacturer's Authorization
D. Submission and Opening of Bids	
ITB 23.1	<p>For <u>Bid submission purposes</u> only, the Purchaser's address is :</p> <p>Chief Engineer-cum-Project Director HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla 171002 Tel:0177-2627602,2620663 Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p> <p>The deadline for Bid submission is: : 07/01/2019 Time: 15:00 hrs (IST)</p>
ITB 26.1	<p>The Bid opening shall take place at:</p> <p>Time, date, and place for bid opening are: Time: 15:30 hrs (IST) Date: 07/01/2019 Place: Chief Engineer-cum-Project Director HP State Roads Project, Nirman Bhawan, Nigam Vihar, Shimla 171002 Tel:0177-2627602,2620663 Fax: 0177 – 2620663 E-mail: pdsrp-hp@nic.in India</p>
E. Evaluation, and Comparison of Bids	
ITB 31.3	<p>The adjustment shall be based on the average price of the item or component as quoted in other substantially responsive Bids. If the price of the item or component cannot be derived from the price of other substantially responsive Bids, the Purchaser shall use its best estimate. If the missing Goods and Services are a scored technical feature, the relevant score will be set at zero.</p>
ITB 33.1	<p>The currency (ies) of the Bid shall be converted into a single currency as follows: INR</p> <p>The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies into a single currency is: INR</p> <p>The source of exchange rate shall be: Daily average rate of selling and buying</p>

	<p>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 for the exchange rate shall be: 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 35.4	The Purchaser's evaluation of responsive Bids will take into account technical factors, in addition to cost factors as specified in Section III, Bid Evaluation and Qualification Criteria.
ITB 35.4	Discounts for the award of multiple Subsystems, lots, or slices will not be considered in bid evaluation
ITB 35.8	Bids for individual Subsystems, lots, or slices of the overall Information System will not be accepted.
F. Award of Contract	
ITB 43	The award will be made on the basis of rated criteria pursuant to ITB 35.7, if applicable, in accordance with Section III, Evaluation and Qualification Criteria.
ITB 44	<p>The maximum percentage by which quantities may be increased is: Upto 25 %.</p> <p>The maximum percentage by which quantities may be decreased is: Upto 25 %.</p>
ITB 47.1	The successful Bidder <i>shall</i> submit the Beneficial Ownership Disclosure Form.
ITB 49	<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>
ITB 50.1	<p>The procedures for making a Procurement-related Complaint are detailed in the Procurement Regulations for IPF Borrowers (Annex III). If a Bidder wishes to make a Procurement-related Complaint, the Bidder should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to:</p> <p style="text-align: center;">For the attention: Chief Engineer -cum-Project Director</p>

	<p>Title/position: Chief Engineer & Project Director, SRP, HPRIDC</p> <p>Purchaser: HPRIDC</p> <p>Email address: pdsrp-hp@nic.in</p> <p>In summary, a Procurement-related Complaint may challenge any of the following:</p> <ol style="list-style-type: none">1. the terms of the Bidding Documents; and <p>the Purchaser's decision to award the contract.</p>
--	--

Section III - Evaluation and Qualification Criteria

Combined Evaluation

The Purchaser will evaluate and compare the Bids that have been determined to be substantially responsive, pursuant to ITB 30.

If indicated by the BDS, the Purchaser's evaluation of responsive Bids will take into account technical factors, in addition to cost factors.

In such a case, 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:

$$B \equiv \frac{C_{low}}{C} X + \frac{T}{T_{high}} (1 - X)$$

where

C = Evaluated Bid Price

C_{low} = the lowest of all Evaluated Bid Prices among responsive Bids

T = the total Technical Score awarded to the Bid

T_{high} = the Technical Score achieved by the Bid that was scored best among all responsive Bids

X = weight for the Price as specified in the BDS

The Bid with the best evaluated Bid Score (B) among responsive Bids shall be the Most Advantageous Bid provided the Bidder was prequalified and/or it was found to be qualified to perform the Contract in accordance with ITB 39.

The bid evaluation will take into account technical factors in addition to cost factors as below:

The weight of the Technical (1-X) = 70%, i.e. (1-X) = 0.7

The weight of the Price (X) = 30%, i.e. X=0.30

The process of bids evaluation phase shall happen in four stages:

1. Pre-Qualification
2. Technical Evaluation
3. Techno-Commercial Evaluation
4. Declaration of successful bidder.

Bidders will need to qualify in every stage to advance to the next stage.

a) Pre-Qualification Criteria

By submission of documentary evidence in its bid, the Bidder must establish to Purchaser's satisfaction:

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 prevailing	Certificate of Incorporation	Both Prime Bidder and Joint venture

	Companies Act of Govt. of India or under LLP as amended from time to time		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 years 2014-15, 2015-16, 2016-17 audited Balance Sheet	Certificate from practicing Chartered Accountants for Net worth	Both Prime Bidder and Joint venture Partner shall qualify Individually
3.	In case the Prime Bidder is the hardware partner, it should be ISO 9001:2008 certified. In such cases the application partner shall be minimum CMMi level 3 certified.	Copy of certification which is valid on date of Submission	ISO certification from Prime Bidder and CMMi level 3 certification from partner
4.	In case where the Prime Bidder is the software application partner, it should be minimum CMMi (Capability Maturity Model Integration) Level 3 or more. In such cases, the hardware partner shall be ISO 9001:2008	Relevant certificate needs to be attached which is valid on date of submission	Prime Bidder for CMMi level 3 certification and partner for ISO certification
5.	In case where the bidding firm is going to supply both the hardware and the software application, it should possess both the ISO 9001:2008 and the CMMi Level 3 certification	Copy of certification which is valid on date of submission	Prime Bidder
6.	Average Annual Turnover of Prime Bidder from its IT and ITES operations during the last three (3) financial years (FY 14-15, FY 15-16, FY 16-17) as per the last audited balance sheets of INR 220 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
7.	Average Annual Turnover of Joint Venture Partner from its IT and ITES operations during the last three (3) financial years (FY 14-15, FY 15-16, FY 16-17) as per the last audited balance sheets of INR 20 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
8.	Two(2) completed/ Substantially	Form 3.6.3a (Project	Prime Bidder

	completed (In the Go-live phase minimum) projects in IT, each of minimum value INR 5 Crores in Government/ Public Sector Undertaking (PSU). Of these at least 1 project should be in road sector & executed in the last five years as on bid submission date	Detail): 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	
9.	Prime Bidder should have minimum 250 fulltime employees working on its rolls on IT and IT Enabled Services (IT & ITES) during the last three years as on bid submission date	Certificate from HR Department for number of technically qualified professionals employed by the company	Prime Bidder
10.	Authorized Signatory of the Prime Bidder	Power of Attorney in the name of the signatory of the Proposal	Prime Bidder

Note:

- b) 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.
- c) Bidders can be allowed to offer an open source software & system if they ensure to provide all the functionalities in the system as per the RFP proposed.
- d) The legal & technical requirements to form Joint venture are mentioned below (In Addition to ITB 6.2)
- e) 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.
- f) The number of joint venture partners including the Prime Bidder cannot exceed two. The joint venture partners should have experience in IT enabled services/IT Solutions/Process Automation.
- g) 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.

- h) 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, installation and after sales service, so that a joint venture is not artificially created only to improve the pre-qualification/ Technical eligibility.
- i) 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.
- j) The Prime Bidder and Joint venture partners cannot be a partner in more than one joint venture
- k) 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.
- l) The term JV has been used in accordance with the WB observation, however no new company needs to be formed.

Bidders who qualify in the Pre-Qualification Evaluation shall be eligible for Technical Evaluation

Technical Evaluation (ITB 35.3 and ITB 35.4)

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), 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.

- (a) The technical features to be evaluated are generally defined below and specifically identified **in the BDS**:
- (b) As specified **in the BDS**, each category will be given a weight and within each category each feature may also be given a weight.
- (c) 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:

$$S_j \equiv \sum_{i=1}^k t_{ji} * w_{ji}$$

where:

t_{ji} = the technical score for feature \tilde{o}_i in category \tilde{o}_j

w_{ji} = the weight of feature \tilde{o}_i in category \tilde{o}_j

k = the number of scored features in category \tilde{o}_j

and $\sum_{i=1}^k w_{ji} = 1$

- (d) The Category Technical Scores will be combined in a weighted sum to form the total Technical Bid Score using the following formula:

$$T \equiv \sum_{j=1}^n S_j * W_j$$

where:

S_j = the Category Technical Score of category \tilde{o}_j

W_j = the weight of category \tilde{o}_j as specified in the BDS

n = the number of categories

and $\sum_{j=1}^n W_j = 1$

A. The technical evaluation will be done as per the scores mentioned in the table below:

Technical Evaluation Data

S. No.	Criteria	Max Criteria/ Sub Criteria Marks
1.	Past Experience of the Responding Firm	40
2.	Solution proposed for the Project by the responding firm	20
3.	Qualifications and experience of key personnel	40
	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			40
a.	Organizational Capability	The Prime Bidder or JV partner should have implemented	4 point each for first 2	10

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
		<p>minimum 2 ICT Project which includes:</p> <p>a) COTS/Open source software & system if it is ensured to provide all the functionalities in the system as per the RFP /Packaged Application/Application Development Implementation & Customization</p> <p>b) Hardware supply, installation</p> <p>c) O&M phase</p> <p>d) Change management & capacity building</p> <p>Minimum 2 projects</p>	<p>projects & 2 points for additional project ó up to 3 projects</p>	
b.	Software Solutions	<p>The Prime Bidder or JV partner should have implemented at least 3 projects in COTS/Packaged Application/application development software solution projects (at least project should be Go-Live). Each project must have any 2 of the following modulesó</p> <ol style="list-style-type: none"> 1. Works Module, e-Procurement, Asset Management, 2. Project Management System, 3. HRM (Human Resource Management), 4. Accounting & Finance 5. Budget Management & Contractor Management 	<p>Average value of these 3 projects >= 10 Cr =10marks; 8-10Cr=8marks; 6-8 Cr=6marks; Less than 6Cr =0marks</p>	10
c.	Hardware Supply & installation	<p>The bidder (prime or Joint Venture partner) should have experience of Implementing the ICT enabled system projects where bidder (prime or Joint</p>	<p>4 point each for first 2 projects & 2 points for additional project ó up</p>	10

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
		Venture partner) has delivered hardware products in the work orders of minimum Rs.5 crore. Min. 2 projects	to 3 projects	
d.	Operation & Maintenance Services/ Helpdesk	The Prime Bidder or JV partner should have provided Operation & Maintenance / Helpdesk services in the field of IT services with a minimum order size of INR 1 Crore (Value of O&M/Helpdesk component only) Min. 2 projects	4 point each for first 2 projects & 2 points for additional project up to 3 projects	10
Note: <ol style="list-style-type: none"> For all the above, the Completion Certificate of the projects completed in the last 5 years as on submission date need to be provided (issued to the responding firm by the respective customers). However, substantially completed project can be considered only in case they are at least in operation & maintenance phase. At least 1 project should be completed for each category in the above table. 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. One project can be cited against multiple categories for evaluation purpose. Works Module includes following sub-modules Estimation Preparation, Technical Sanction & Approval, Architecture Design, Work Allocation & Agreement, Progress Monitoring, Work Deviation, and Time Deviation 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. 				
2	Solution proposed			20
a.	Technical Solution	Evaluation Committee will evaluate the proposed solution on the basis of following parameters <ul style="list-style-type: none"> ▪ Solution/System Architecture <ul style="list-style-type: none"> - Technology and proposed platforms ▪ Project Implementation Plan 	Evaluation Committee will evaluate whether all the points/requirements mentioned in	20

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
		<ul style="list-style-type: none"> ▪ Application deployment and testing Strategy ▪ Quality Control Strategy ▪ Training and Change Management Plan ▪ Security Architecture ▪ IT Infrastructure 	the Bidding Document are addressed well and award.	
3	Resource Deployment			40
1	Project Manager Essential Requirements: <ul style="list-style-type: none"> • 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 	Experience as Project Manager in IT projects	<ul style="list-style-type: none"> • More than 10 years: 4 point • 8 to 10 Years: 2 point • Less than 8 years: 0 point 	10
		Experience in e-Governance Projects	<ul style="list-style-type: none"> • More than 3 e-Governanc e project (Complete life cycle): 2 point 	
		Relevant Certification (either of PMP /PMI /Prince2)	<ul style="list-style-type: none"> • Relevant Certificatio n: 2point 	
		Education Qualifications - (MBA or M. Tech.)	<ul style="list-style-type: none"> • Qualificatio n of MBA or M. Tech.:2 point 	

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
2	Domain Specialist Essential Requirements: <ul style="list-style-type: none"> • B.E. / B. Tech./M.Sc. in civil Engineering • Minimum 10 year experience, out of which minimum 4 years in Public works domain 	Proven professional experience in the Public Works Domain	<ul style="list-style-type: none"> • Experience of more than 4 years in PWD domain : 5 point • 3-4 years of Experience: 3 point • Less than 3years: 0 point 	5
3	Network Administrator Essential Requirements: <ul style="list-style-type: none"> • B.E. / B. Tech./ MCA / M.Sc. in the field of computer science/IT • Minimum 5 year experience as Network Administrator 	IT infrastructure management, networking, and troubleshooting experience in IT projects.	<ul style="list-style-type: none"> • Experience of more than 5 years: 5 point • 4 to 5 years of Experience: 3 point • Less than 4years: 0 Points 	5
4	Application Lead Essential Qualifications <ul style="list-style-type: none"> • B.E. / B. Tech./ MCA / M.Sc. in the field of computer science • Minimum 7 year 	Experience as application lead in IT projects	<ul style="list-style-type: none"> • Experience of more than 7years: 5 point • 5 to 7 years of Experience: 3 point • Less than 5years: 0 	5

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
	experience as application lead in IT projects		Points	
5	Training and Change Expert Essential Qualifications <ul style="list-style-type: none"> • 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 7years: 5 point • 5 to 7 years of Experience: 3 point • Less than 5years: 0 Points 	5
6	Database Administrator Essential Qualifications <ul style="list-style-type: none"> • B.E./ B. Tech. / MCA • Minimum 5 year experience as database administrator for IT projects 	Experience as Database Administrator for IT project	<ul style="list-style-type: none"> • Experience of more than 5 years: 5 point • 3 to 5 years of Experience: 3 point • years or Less than 5 years: 0 Points 	5
7	Help desk Executive	Essential Requirement: <ul style="list-style-type: none"> • Any Graduate • Mini. Experience of 1 years in handling Helpdesk operation • Knowledge and ticket Management System • Conversant with Local Language and English Language also 		0

S. No.	Criteria / Sub Criteria	Description	Point System	Max Criteria / Sub Criteria Points
8	Technical Support Executive (Field Level)	<p>Essential Requirement:</p> <ul style="list-style-type: none"> • B. E / B.Tech (CSE/ IT /MCA/ M.Sc (IT)) • Min 1 year of experience in IT / e-Governance related filed • Experience in the domain of IT projects, IT Infrastructure, Software Development, hardware, networking is preferred • Conversant with local knowledge of the State <p>*Note</p> <ol style="list-style-type: none"> 1. The bidder should provide the compliance sheet for the technical support executive qualifying the above said criteria in excel format 2. 90% of the proposed resources as technical support executive should be a domicile resident of Himachal Pradesh. <p>If the bidder fails to satisfy the above said criteria ,will be treated as non- compliant to the RFP</p>	If all 105 resources proposed by the bidder have minimum essential requirement 5 marks shall be awarded otherwise 0.	5
Total Points				100

1. Economic Evaluation

(a) Time Schedule:

Time to complete the Information System from the effective date specified in Article 3 of the Contract Agreement for determining time for completion of pre-commissioning activities is: Please refer the SCC clause (A)Contract and Interpretation(GCC 1.1(e)(x). No credit will be given for earlier completion.

Bids offering a completion date beyond the maximum designated period shall be rejected.

(b) Recurrent Costs

Since the operation and maintenance of the system being procured form a major part of the implementation, the resulting recurrent costs will be evaluated according to the principles given hereafter, including the cost of recurrent cost items for the initial period of operation stated below, based on prices furnished by each Bidder in Price Schedule Nos. 3.3 and 3.5.

Recurrent cost items for post- warranty service period if subject to evaluation shall be included in the main contract or a separate contract signed together with the main contract.

Such costs shall be added to the Bid price for evaluation.

Option 1: The recurrent costs factors for calculation of the implementation schedule are:

- (i) number of years for implementation
- (ii) hardware maintenance
- (iii) software licenses and updates
- (iv) technical services
- (v) telecommunication services, and
- (vi) other services (if any).

The Recurrent Costs (R) are reduced to net present value and determined using the following formula:

$$R \equiv \sum_{x=1}^{N+M} \frac{R_x}{(1+I)^x}$$

where

N = number of years of the Warranty Period, defined in SCC Clause 29.4

M = number of years of the Post-Warranty Services Period, as defined in SCC Clause 1.1.(e) (xii)

x = an index number 1, 2, 3, ... $N + M$ representing each year of the combined Warranty Service and Post-Warranty Service Periods.

R_x = total Recurrent Costs for year x , as recorded in the Recurrent Cost Sub-Table.

I = discount rate to be used for the Net Present Value calculation, as **specified in the BDS 35.3.**

or Option 2:

Reference to the methodology specified in the Specification or elsewhere in the bidding document.

Subcontractors/vendors/manufacturers

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:

All Services except SCC-20 representing GCC-20 required for the Project and undertaken by the Sub-Contractor on behalf of the bidder.

Failure to comply with this requirement will result in rejection of the subcontractor/vendor.

In the case of a Bidder who offers to supply and install major items of supply under the contract that the Bidder did not manufacture or otherwise produce, the Bidder shall provide the manufacturer's authorization, using the form provided in Section IV, showing that the Bidder has been duly authorized by the manufacturer or producer of the related sub system or component to supply and install that item in the Purchaser's Country. The Bidder is responsible for ensuring that the manufacturer or producer complies with the requirements of ITB 4 and 5 and meets the minimum criteria listed above for that item.

Section IV - Bidding Forms

Letter of Bid

The Bidder must prepare this Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Note: All italicized text is to help Bidders in preparing this form.

Date of this Bid submission: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *PW/SRP/RIDC/HP/ICT/ICB-4*

To: *[insert complete name of Purchaser]*

- (a) **No reservations:** We have examined and have no reservations to the bidding document, including Addenda issued in accordance with Instructions to Bidders (ITB 8);
- (b) **Eligibility:** We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) **Bid-Securing Declaration:** We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid-Securing Declaration or Proposal-Securing Declaration in the Purchaser's Country in accordance with ITB 4.7;
- (d) **Conformity:** We offer to provide design, supply and installation services in conformity with the bidding document of the following: *[insert a brief description of the IS Design, Supply and Installation Services]*;
- (e) **Bid Price:** The total price of our Bid, excluding any discounts offered in item (f) below is: *[Insert one of the options below as appropriate]*

[Option 1, in case of one lot:] Total price is: [insert the total price of the Bid in words and figures, indicating the various amounts and the respective currencies];

Or

[Option 2, in case of multiple lots:] (a) Total price of each lot [insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]; and (b) Total price of all lots (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];

- (f) **Discounts:** The discounts offered and the methodology for their application are:
 - (i) The discounts offered are: *[Specify in detail each discount offered.]*

- (ii) The exact method of calculations to determine the net price after application of discounts is shown below: *[Specify in detail the method that shall be used to apply the discounts]*;
- (g) **Bid Validity Period:** Our Bid shall be valid for the period specified in BDS ITB 19.1 (as amended if applicable) from the date fixed for the Bid submission deadline (specified in BDS ITB 23.1 (as amended if applicable)), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) **Performance Security:** If our Bid is accepted, we commit to obtain a Performance Security in accordance with the bidding document;
- (i) **One Bid Per Bidder:** We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other Bid(s) as a Joint Venture member, and meet the requirements of ITB 4.3, other than alternative Bids submitted in accordance with ITB 13;
- (j) **Suspension and Debarment:** We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the World Bank Group or a debarment imposed by the World Bank Group in accordance with the Agreement for Mutual Enforcement of Debarment Decisions between the World Bank and other development banks. Further, we are not ineligible under the Purchaser's Country laws or official regulations or pursuant to a decision of the United Nations Security Council;
- (k) **State-owned enterprise or institution:** *[select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITB 4.6]*;
- (l) **Commissions, gratuities and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Bidding process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

- (m) **Binding Contract:** We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (n) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Bid, the Most Advantageous Bid or any other Bid that you may receive; and
- (o) **Fraud and Corruption:** We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.

Name of the Bidder: *[insert complete name of person signing the Bid]

Name of the person duly authorized to sign the Bid on behalf of the Bidder: **[insert complete name of person duly authorized to sign the Bid]

Title of the person signing the Bid: [insert complete title of the person signing the Bid]

Signature of the person named above: [insert signature of person whose name and capacity are shown above]

Date signed [insert date of signing] **day of** [insert month], [insert year]

Bid Submission Form (Single-Stage Bidding)

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

Loan/Credit No.: **PPAF No. P4900-IN**

IFB: PW/SRP/RIDC/HP/ICT/ICB-4

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]***

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.
As specified in ITB Documents comprising the bid		

PRICE SCHEDULE FORMS

NOTES TO BIDDERS ON WORKING WITH THE PRICE SCHEDULES

General

1. The Price Schedules are divided into separate Schedules as follows:
 - 1.1 Grand Summary Cost Table
 - 1.2 Supply and Installation Cost Summary Table for Application software
 - 1.3 Supply and Installation Cost Summary Table of Hardware
 - 1.4 Recurrent Cost Summary Table
 - 1.5 Country of Origin Code Table

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 18.1 and ITB 18.2. 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 32.
7. Payments will be made to the Supplier in the currency or currencies indicated under each respective item. As specified in ITB 18.2, no more than three foreign currencies may be used.

1.1 Grand Summary Cost Table

		<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.	Application Software Cost				
2.	Hardware Cost				
3	Field level Technical Support Executives- Manpower cost				
4	Operations & Maintenance Support Cost				
	Grand Totals (to Bid Submission Form)				

Name of Bidder:		
Authorized Signature of Bidder:		

1.2 Supply and Installation Cost Summary Table for Application software

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.

				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.	Application Development, Customization, Installation and Implementation Charges (Module wise Details to be provided)	--	--	--	--	--	--	--	--	--			
2.	Training and Change Management Cost												

				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.	Services for Data Digitization (scanned documents per pages)												
	Size of Page -												
3.1.	A3		20,000										
3.2	A4		20,000										
3.3	A0		20,000										
3.4	Legal Sheets		20,000										
*The defined page count are indicative numbers of pages which may vary & the payment shall be made on the actual number of pages digitized.													
3.5	Data Migration (per GB)		25 GB										
3.6	Data Entry (Per Page)		Minimum 1000000 Pages (1 million pages) *										

Note: - - indicates not applicable. øIndicates 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:		

1.3 Supply and Installation Cost Summary Table of Hardware

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.

				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	DC&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										
1.1.5	Load Balancer		2										
1.2	Software DR	--	--	--	--	--	--	--					
1.2.1	Operating Systems for servers		4										

				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]
1.2.2	RDBMS		1										
1.2.3	HIPS (Host Intrusion Prevention System)		4										
2	Field Hardware												
2.1	Desktop		1035										
2.2	Laptop		10										
2.3	Tablet		1265										
2.4	MFP		451										
2.5	UPS		962										

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:	
---------------------------------	--

1.4 Recurrent Cost 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 [<i>insert: currency</i>]
		Incl. in Warranty	Incl. in Post Warranty	Incl. in Post Warranty	
1	Annual Operations & maintenance Cost for Application				
2	Annual Operations & Maintenance Support cost for Hardware and Licenses (Field DC & DR site)				
3	Manpower Cost				
3.1	Zone Level (8 resources)				
3.2	Circle level (20 resources)				
3.3	Division level (77 resources)				

Component No.	Component	Y1	Y2	Y3	Sub-total for [insert: currency]
4	Any Other Cost (if any, specify)				
	Annual Subtotals:				--

1.5 Country of Origin Code Table

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

Form ELI 2.1.1

Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. In case of JV, legal name of each member : <i>[insert legal name of each member in JV]</i>
3. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
5. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
6. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITB 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Bidder is not under the supervision of the Purchaser
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]</i>

Form ELI 2.1.2

Bidder's JV Members Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture].

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and they are not under the supervision of the Purchaser in accordance with ITB 4.6.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. <i>[If required under BDS ITB 47.1, the successful Bidder shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]</i>

Form CON – 2**Historical Contract Non-Performance and Pending Litigation**

In case a prequalification process was conducted this form should be used only if the information submitted at the time of prequalification requires updating

Bidder's Legal Name: _____ Date: _____

JV member Legal Name: _____

RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Page _____ of _____ pages

Non-Performing Contracts in accordance with Section III, Evaluation and Qualification Criteria			
Contract non-performance did not occur during the stipulated period, in accordance with Sub- Factor 2.2.1 of Section III, Evaluation Criteria			
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
No pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation Criteria			
Pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation Criteria, as indicated below			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
_____	_____	Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute:	_____

Form EXP 2.4.1

Experience - General Experience

Bidder's Legal Name: _____ Date: _____

JV Member Legal Name: _____

RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4** _____

Page _____ of _____ pages

Starting Month / Year	Ending Month / Year	Years *	Contract Identification	Role of Bidder
_____	_____	_____	Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____
_____	_____	_____	Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____
_____	_____	_____	Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____
_____	_____	_____	Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____

Starting Month / Year	Ending Month / Year	Years *	Contract Identification	Role of Bidder
_____	_____		Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____
_____	_____		Contract name: Brief Description of the Information System performed by the Bidder: Name of Purchaser: Address:	_____

*List calendar year for years with contracts with at least nine (9) months activity per year starting with the earliest year

Form EXP – 2.4.2

Specific Experience

Bidder's Legal Name: _____ Date: _____

JV Member Legal Name: _____ RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Page _____ of _____ pages

Similar Contract Number: ____ of ____ required.	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	Prime Supplier	Management Contractor	Subcontractor
Total contract amount	_____		US\$_____
	_____		_____
If member in a JV or subcontractor, specify participation of total contract amount	_____ %	_____	US\$_____
Purchaser's Name:	_____		
Address:	_____		

Telephone/fax number:	_____		
E-mail:	_____		

Form EXP – 2.4.2 (cont.)
Specific Experience (cont.)

Bidder's Legal Name: _____ Page _____ of _____ pages

JV Member Legal Name: _____

Similar Contract No. __[insert specific number] of [total number of contracts] __ required	Information
Description of the similarity in accordance with Sub-Factor 2.4.2 of Section III:	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Key Activities	_____

Form CCC**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 US\$ equivalent)	Estimated completion date	Average monthly invoicing over last 6 months (US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.				

Form FIN – 2.3.1

Financial Situation**Historical Financial Performance**

Bidder's Legal Name: _____ Date: _____

JV Member Legal Name: _____ RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Page _____ of _____ pages

To be completed by the Bidder and, if JV, by each member

Financial information in US\$ equivalent	Historic information for previous _____ () years (US\$ equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ...	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- Must reflect the financial situation of the Bidder or member to a JV, and not sister or parent companies
- Historic financial statements must be audited by a certified accountant
- Historic financial statements must be complete, including all notes to the financial statements
- Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

Form FIN – 2.3.2

Average Annual Turnover

Bidder's Legal Name: _____ Date: _____

JV Member Legal Name: _____ RFB No.: **PW/SRP/RIDC/HP/ICT/ICB-4**

Page _____ of _____ pages

Annual turnover data (applicable activities only)		
Year	Amount and Currency	US\$ equivalent
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
*Average Annual Turnover	_____	_____

*Average annual turnover calculated as total certified payments received for work in progress or completed, divided by the number of years specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.2.

Form FIN 2.3.3

Financial Resources

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 cash flow demands of the subject contract or contracts as indicated in Section III, Evaluation and Qualification Criteria

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

Personnel Capabilities

Key Personnel

Name of Bidder or partner of a Joint Venture
--

Bidders should provide the names and details of the suitably qualified Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

Key Personnel

1.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
2.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
3.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>

	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
4.	Title of position: ..	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
6...	Title of position: ..	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>

Candidate Summary

Name of Bidder or partner of a Joint Venture
--

Position		Candidate Prime 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	email
	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

Technical Capabilities

Name of Bidder or partner of a Joint Venture
--

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 that the Bidder proposes to utilize in the execution of the Contract or Contracts.

Manufacturer's Authorization

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.

Invitation for Bids Title and No.: *[Purchaser insert: **RFB Title and Number**]*

To: *[Purchaser insert: **Purchaser's Officer to receive the Manufacturer's Authorization**]*

WHEREAS *[insert: **Name of Manufacturer**]* who are official producers of *[insert: **items of supply by Manufacturer**]* and having production facilities at *[insert: **address of Manufacturer**]* do hereby authorize *[insert: **name of Bidder or Joint Venture**]* located at *[insert: **address of Bidder or Joint Venture**]* (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 *[insert: **Name of Officer**]* in the capacity of *[insert: **Title of Officer**]*

Signed _____

Duly authorized to sign the authorization for and on behalf of: *[insert: **Name of Manufacturer**]*

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

[add Corporate Seal (where appropriate)]

Subcontractor's Agreement

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

Invitation for Bids Title and No.: *[Purchaser insert: **RFB Title and Number**]*

To: *[Purchaser insert: **Purchaser's Officer to receive the Subcontractor's Agreement**]*

WHEREAS *[insert: **Name of Subcontractor**]*, having head offices at *[insert: **address of Subcontractor**]*, have been informed by *[insert: **name of Bidder or Joint Venture**]* located at *[insert: **address of Bidder or Joint Venture**]* (hereinafter, the "Bidder") that it will submit a bid in which *[insert: **Name of Subcontractor**]* will provide *[insert: **items of supply or services provided by the Subcontractor**]*. We hereby commit to provide the above named items, in the instance that the Bidder is awarded the Contract.

Name *[insert: **Name of Officer**]* in the capacity of *[insert: **Title of Officer**]*

Signed _____

Duly authorized to sign the authorization for and on behalf of: *[insert: **Name of Subcontractor**]*

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

[add Corporate Seal (where appropriate)]

List of Proposed Subcontractors

	Item	Proposed Subcontractor	Place of Registration & Qualifications

INTELLECTUAL PROPERTY FORMS

NOTES TO BIDDERS ON WORKING WITH THE INTELLECTUAL PROPERTY FORMS

In accordance with ITB 11.1(j), 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. These categorizations are needed to support the Intellectual Property in the GCC and SCC.

Software List

	(select one per item)			(select one per item)	
Software Item	System Software	General-Purpose Software	Application Software	Standard Software	Custom Software

List of Custom Materials

Custom Materials

CONFORMANCE OF INFORMATION SYSTEM MATERIALS

Format of the Technical Bid

In accordance with ITB 16.2, the documentary evidence of conformity of the Information System to the bidding documents includes (but is not restricted to):

- (a). The Bidder's Preliminary Project Plan, including, but not restricted, to the topics specified in the BDS ITB 16.2. 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.
- (b). A written confirmation by the Bidder 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 Technical Requirements.
- (c). Item-by-Item Commentary on the Technical Requirements demonstrating the substantial responsiveness of the overall design of the System and the individual Information Technologies, Goods, and Services offered to those Technical Requirements.

In demonstrating the responsiveness of its bid, the Bidder must use the Technical Responsiveness Checklist (Format). 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 supporting materials included in the Bidder's Technical Bid.

Note: The Technical Requirements are voiced as requirements of the *Supplier* and/or the *System*. The Bidder's response must provide clear evidence for the evaluation team to assess the credibility of the response. A response of "yes" or "will do" is unlikely to convey the credibility of the response. The Bidder should indicate *that* *it* and to the greatest extent practical *how* the Bidder would comply with the requirements if awarded the contract. Whenever the technical requirements relate to feature(s) of existing products (e.g., hardware or software), the features should be described and the relevant product literature referenced. When the technical requirements relate to professional services (e.g., analysis, configuration, integration, training, etc.) some effort should be expended to describe how they would be rendered *it* not just a commitment to perform the [cut-and-paste] requirement. Whenever a technical requirement is for the Supplier to provide certifications (e.g., ISO 9001), copies of these certifications must be included in the Technical Bid.

Note: The Manufacturer's Authorizations (and any Subcontractor Agreements) are to be included in Attachment 2 (Bidder Qualifications), in accordance with and ITB 15.

Note: As a matter of practice, the contract cannot be awarded to a Bidder whose Technical Bid deviates (materially) from the Technical Requirements *it* on any *Technical Requirement*. Such deviations include omissions (e.g., non-responses) and responses that do not meet or

exceed the requirement. Extreme care must be exercised in the preparation and presentation of the responses to all the Technical Requirements.

- (d). Supporting materials to underpin the Item-by-item Commentary on the Technical Requirements (e.g., product literature, white-papers, narrative descriptions of technical approaches to be employed, etc.). In the interest of timely bid evaluation and contract award, Bidders are encouraged not to overload the supporting materials with documents that do not directly address the Purchaser's requirements.
- (e). Any separate and enforceable contract(s) for Recurrent Cost items which the BDS ITB 17.2 required Bidders to bid.

Note: To facilitate bid evaluation and contract award, Bidders encouraged to provide electronic copies of their Technical Bid 6 preferably in a format that the evaluation team can extract text from to facilitate the bid clarification process and to facilitate the preparation of the Bid Evaluation Report.

Technical Responsiveness Checklist (Format)

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

Form of Bid Security (Bank Guarantee)

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[Purchaser to insert its name and address]* _____

RFB No.: *PW/SRP/RIDC/HP/ICT/ICB-4*

Alternative No.: *[Insert identification No if this is a Bid for an alternative]*

Date: _____ *[Insert date of issue]*

BID GUARANTEE No.: *[Insert guarantee reference number]* _____

We have been informed that _____ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called *the Applicant*) has submitted or will submit the Beneficiary its bid _____ (hereinafter called *the Bid*) for the execution of _____ under Request for Bids No. _____ (*the RFB*).

Furthermore, we understand that, according to the Beneficiary, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying the demand, stating that either the Applicant:

- (a) has withdrawn its Bid during the period of bid validity set forth in the Applicant's Letter of Bid (*the Bid Validity Period*), or any extension thereof provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the period of Bid validity or any extension thereof provided by the Applicant has failed to: (i) execute the Contract Agreement, if required, or (ii) furnish the performance security, in accordance with the Instructions to Bidders (*ITB*) of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security issued to the Beneficiary in relation to such Contract Agreement; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the expiration of the Bidder's Bid Validity Period.

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 (URDG) 2010 Revision, ICC Publication No. 758.

[signature(s)]

Form of Bid Security (Bid Bond)

BOND NO. _____

BY THIS BOND _____ as Principal (hereinafter called the Principal), and _____, **authorized to transact business in** _____, as Surety (hereinafter called the Surety), are held and firmly bound unto _____ as Oblige (hereinafter called the Purchaser) in the sum of _____¹ (_____), 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 or will submit a written Bid to the Purchaser dated the ____ day of _____, 20____, for the supply of ____ *[name of Contract]* _____ (hereinafter called the Bid).

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

- (a) Has withdrawn its Bid during the period of bid validity set forth in the Principal's Letter of Bid (the Bid Validity Period), or any extension provided by the Principal; or
- (b) Having been notified of the acceptance of its Bid by the Purchaser during the Bid Validity Period or any extension thereto provided by the Applicant has failed to; (i) execute the Contract Agreement, or (ii) furnish the Performance Security in accordance with the Instructions to Bidders (ITB) of the Purchaser's bidding document.

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 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 Validity Period set forth in the Principal's Letter of Bid or extended thereto provided by the Principal.

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: _____
Corporate Seal (where appropriate)

(Signature)

(Signature)

(Printed name and title)

(Printed name and title)

¹ The amount of the Bond shall be denominated in the currency of the Purchaser's Country or the equivalent amount in a freely convertible currency.

Form of Bid-Securing Declaration

[The Bidder shall fill in this Form in accordance with the instructions indicated.]

Date: *[date (as day, month and year)]*

Bid No.: *[number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[complete name 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 will automatically be suspended from being eligible for bidding or submitting proposals in any contract with the Purchaser for the period of time of *[number of months or years]* _____, starting on *[date]* _____, if we are in breach of our obligation(s) under the bid conditions, because we:

- (a) have withdrawn our Bid during the period of bid validity specified in the Letter of Bid; or
- (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the ITB.

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 our Bid.

Name of the Bidder* _____

Name of the person duly authorized to sign the Bid on behalf of the Bidder** _____

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____, _____

*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

** : Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the bid.]

Section V - Eligible Countries

Eligibility for the Provision of Information System

In reference to ITB 4.8 and ITB 5.1, for the information of the Bidders, at the present time firms and information systems from the following countries are excluded from this bidding process:

Under ITB 4.8(a) and ITB 5.1: *None*

Under ITB 4.8(b) and ITB 5.1: *None*

Section VI - Fraud and Corruption

1. Purpose

1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:
 - i. "corrupt practice" 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" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
 - iii. "collusive practice" 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" 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:
 - (a) 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 any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or

indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

PART 2 – PURCHASER’S REQUIREMENTS

Section VII - Requirements of the Information System

Technical Requirements

Table of Content

A. ACRONYMS USED IN THE TECHNICAL REQUIREMENTS.....	115
0.1 Acronym Table	115
B. FUNCTIONAL, ARCHITECTURAL AND PERFORMANCE REQUIREMENTS.....	117
1.1 Legal and Regulatory Requirements to be met by the Information System	117
1.2 Business Function Requirements to be met by the Information System.....	117
1.3 Project Scope of Work	125
1.4 Data Digitization.....	134
1.6 Technical Requirements	139
1.7 Minimum Application User Requirements	141
1.8 Functional Performance Requirements of the System.....	141
1.9 Proposed Field Level Infrastructure.....	142
1.10 DR Site Infrastructure	143
1.11 DC Site Infrastructure*	143
C. SERVICE SPECIFICATIONS – SUPPLY & INSTALL ITEMS.....	149
2.1 System Integration (to other existing systems).....	149
2.2 Training and Training Materials	150
2.3 Data Conversion and Migration.....	150
2.4 Documentation Requirements	150
2.5 Requirements of the Supplier's Technical Team.....	150
D. TECHNOLOGY SPECIFICATIONS – SUPPLY & INSTALL ITEMS	150
3.1 Computing Hardware Specifications	150
E. TESTING AND QUALITY ASSURANCE REQUIREMENTS.....	163
4.1 Inspections	163
4.2 Pre-commissioning Tests	164
4.3 Operational Acceptance Tests	165
F. SERVICE SPECIFICATIONS – RECURRENT COST ITEMS	166
5.1 Warranty Defect Repair	166
5.2 Technical Support	166
5.3 Requirements of the Supplier's Technical Team.....	166

A. ACRONYMS USED IN THE TECHNICAL REQUIREMENTS

0.1 Acronym Table

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

Abbreviation	Meaning
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. FUNCTIONAL, ARCHITECTURAL AND PERFORMANCE REQUIREMENTS

1.1 Legal and Regulatory Requirements to be met by the Information System

During its assessment and design, System integrator will have to ensure that the new system abides with all the relevant legal codes, rules and Acts of Government of Himachal Pradesh and Government of India.

1.2 Business Function Requirements to be met by the Information System

1.2.1 Overview of As Is 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 ó RIDF)
20.	Release of funds by NABARD under RIDF

Sr. No.	Name of the Process
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

Sr. No.	Name of the Process
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 ó Payment on Retirement
12.	GPF Number Allotment

1.2.2 Overview of To Be Business Processes

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
Work Execution <ul style="list-style-type: none"> Estimation Preparation 	This module takes care of all the work execution	1. Preparation of estimate for Road work and its Administrative Approval(State Budget)	COTS/ Packaged Application/ Application

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
<ul style="list-style-type: none"> • Technical sanction & approval • Architecture Design Process • Tender Management • Work Allocation & Agreement • Progress Monitoring of Work • Work Deviation • Time Extension 	related activities of Department like estimation and DPR preparation, technical sanction and approval of competent authorities.	<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 under CRF, ISC, EI scheme (Ministry of Roads, Transport & Highway) 14. Approval of works under NABARD (Rural Infrastructure Development Fund ó RIDF) 15. Approval of work under 	Development

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
		PMGSY 16. Approval for repair of Government vehicles / Machinery 17. Preparation of estimate for Bridge work and its approval (Mechanical work) 18. Preparation of Estimate for electrical installation at site and its approval 19. Preparation of estimate for NH works 20. Annual Plan for NHs (Ministry of Road & Highway, GOI) 21. NOC for retail outlet / access to private properties / construction of new buildings 22. Land Acquisition process of National Highway (Under the National highway act,1956) 23. Release of NOC (Other than NH) 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	This module	1. Annual Maintenance	COTS/ Packaged

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
<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 	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 respect of the roads in the state. The outputs shall be viewable on textual and map interfaces	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	Application/ Application Development
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 /	1. File Movement in PWD Office	COTS/ Packaged Application/ Application Development

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
	resource required for completion of activities.		
Financial Accounts Management <ul style="list-style-type: none"> • Budget Planning • Budget Approval Process • Budget Allocation System • Budget Monitoring • Billing and payment to Contractor • Billing and payments 	& Pre 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 computerize the key aspects of budgeting and accounting operations	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 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	COTS/ Packaged Application/ Application Development
Purchase & Store	The purchase and Store Management System should consist of computerized database	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

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
	of the store inventory, including records of receipts & issues, stock-in-hand etc.		
Quality and Control	This module will help in working of quality and control cell like testing of material and test report generation	<ol style="list-style-type: none"> 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 will comprise of Master Data for various Scheme PMGSY and Scheme Codes	<p>To manage Scheme wise database like</p> <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 	COTS/ Packaged Application/ Application 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	<ol style="list-style-type: none"> 1. Revision of SOR 	COTS/ Packaged Application/ Application Development

Module / Sub Module	Description	Mapped To-Be Process	Proposed Application Type
	department of PWD or any other engineering wing		
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 work) 	COTS/ Packaged Application/ Application Development
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

1.3 Project Scope of Work

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

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

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
Scope of Design, Development & Implementation phase		
1	General	Supply, Installation, Design, Develop, Customize, Deliver, Configure and provide necessary support software on servers and/or desktops that will cater to the English language requirements of application system. Providing the specified manpower for continuing operations and maintenance of the system during the service delivery phase
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 deliver 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 of the Project. Deliverables to be submitted include but not limited to:</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 Change Management Policy - Design of Quality Assurance Plan & Methodology - Design of Transition policy and Plan, during and at the end of the tenure of the agreement or termination of the agreement <p>The COTS/Packaged Application/Application</p>

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<p>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</p> <p>The SI will have to install the servers at the DR site in consultation with the Purchaser</p> <p>SI will have to comply with the security policies and procedures as developed by the Departments (DIT, Shimla & DeitY). 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 - E-mail Security training - Business Continuity plan and Disaster Recovery

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<ul style="list-style-type: none"> - 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 - UAT scripts - Training and Change Management Plan <p>Other 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). So developed solution should be compatible with the State Data Center (Shimla).</p> <p>Deliverables:</p> <ul style="list-style-type: none"> - Solution Software including source code, 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	Supply and Installation of Hardware	<p>Bidder has to supply the requisite hardware as defined in <u>Section B 1.2 (Bill Of Material)</u> of Technical Requirement</p>
6	Develop Mobile Platform	<p>SI will Develop mobile platform and identify services that can be developed through mobile devices, facilitating ease of</p>

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		use and faster adoption
7	Develop Data Warehouse	SI will Develop Data Warehouse for consolidation of transactional data across the system on a common platform and provide tools for analyzing data and facilitate informed decision making
8	Proposed Modules	<p>Proposed modules are</p> <ul style="list-style-type: none"> - Work Execution - Asset Management - Project Planning - File Management - Financial & Accounts Management - Store and Purchase - Quality and Control - Legal and Arbitration - Contract Management - Document Management System - Freight and Logistics Management System (detailed module functionalities mentioned in FRS)
9	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) - 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 - Setting up infrastructure at DR site - 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</p>

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<p>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
10	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 HPPWD 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"> - 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.
11	External Tie Ups & Certification 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

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<ul style="list-style-type: none"> - Network Security - Protocols / Services - User Security - Data Storage Security - Passwords - System Administration • In case of any changes suggested by Third Party Auditors, the SI shall implement the changes in consultation with the Purchaser. • 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)/ Disaster Recovery Centre • The system shall be audited through a STQC empanelled audit agency.
12	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 analyze 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 - 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

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<p>approval to SI for Assessing Network Connectivity requirement.</p> <ul style="list-style-type: none"> - Purchaser will also assist SI in coordinating with government agency for providing subsidize rate
13	Comprehensive Training and Change Management	<p>The SI is required to carry out the following activities:</p> <p>Train/re-train 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>Activities and Deliverables</p> <ul style="list-style-type: none"> - Change Management interventions - 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 exceed 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
14	Data Digitization	<p>SI has to perform the data digitization activities which includes data entry, data scanning, and data migration. The detailed activities are defined in “Data Digitization Section”</p>
15	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

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity
		<ul style="list-style-type: none"> - Documentation of IP and Subnet Addressing Scheme, Routing Tables and ACL deployed for Intranet
Scope of Service Delivery / Managed IT Phase		
1	Operational Support and Maintenance (O & 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 system's 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 (of 12 months) including post warranty (24 months after expiry of warranty period) shall remain valid for a period of 36 months from the 'Go-Live' date.
3	Help Desk	<p>The SI will set up the help Desk immediately after the Go-Live. The System Integrator will set up a Help Desk on a 9 hrs. X 6 days from 9:00 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 requirement. SI will provide three helpdesk executive for helpdesk activities</p> <ul style="list-style-type: none"> - SI will procure all hardware/ equipment to setup the helpdesk in E-in-C office Shimla. - SI has to put in place a complaint logging system

S. No.	Scope of Work Area	Description of Scope of Work/Deliverables for the Activity																
		(Portal, Voice and E-Mail) for the Help Desk <ul style="list-style-type: none">- Department will only provide required space to SI for setting Help Desk																
4	Manpower	<p>The SI will Deploy Field Level Technical Support Executive immediately after the Go-Live at offices. SI will deploy following manpower during the Operational Support and Maintenance (O & M) phase of 3 years</p> <ul style="list-style-type: none">- Well-trained and qualified minimum staff óProject Manager, DBA, Domain Expert, Application Lead, Network Administrator at E-in-C Office, HPPWD Shimla- Three helpdesk executives to ensure trouble free and smooth functioning of the Project to meet the requirements as specified in the Bidding Document per the defined SLAs. <p>Field level Technical Support Executive as per below table:</p> <table><tr><td>Office</td><td>No. of offices</td><td>Resources per office</td><td>Total</td></tr><tr><td>Zone</td><td>4</td><td>2</td><td>8</td></tr><tr><td>Circle</td><td>20</td><td>1</td><td>20</td></tr><tr><td>Division</td><td>77</td><td>1</td><td>77</td></tr></table>	Office	No. of offices	Resources per office	Total	Zone	4	2	8	Circle	20	1	20	Division	77	1	77
Office	No. of offices	Resources per office	Total															
Zone	4	2	8															
Circle	20	1	20															
Division	77	1	77															
Note :- SI will provide above manpower with minimum qualification and experience defined in Section III																		

1.4 Data Digitization

SI has to perform following activities but not limited to:

- Software for data entry ó 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 ó SI need to strategize data digitization Plan and get approval from purchaser before stating Digitization work
- Language of data entry ó Hindi/English
- Back-up responsibility ó 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 ó 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. The data entry/digitization shall be carried out at division level offices of HPPWD around the state.
- Manner in which the records would be handed over and taken back ó 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
- The specification of pages for digitization is as follows-

S. No.	Size of page	Count
1	A3	20,000*
2	A4	20,000*
3	A0	20,000*
4	Legal Sheets	20,000*

*The defined page count are indicative numbers of pages which may vary & the payment shall be made on the actual number of pages digitized. The bidder shall quote for duplex scanning of documents.

1.5 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

Training Program

Sr. 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

Change Management

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

Sr. No.	Training Type	Audience	Batch	Location
	Workshops	(Nominated)	participants per workshop	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)

1.6 Technical Requirements

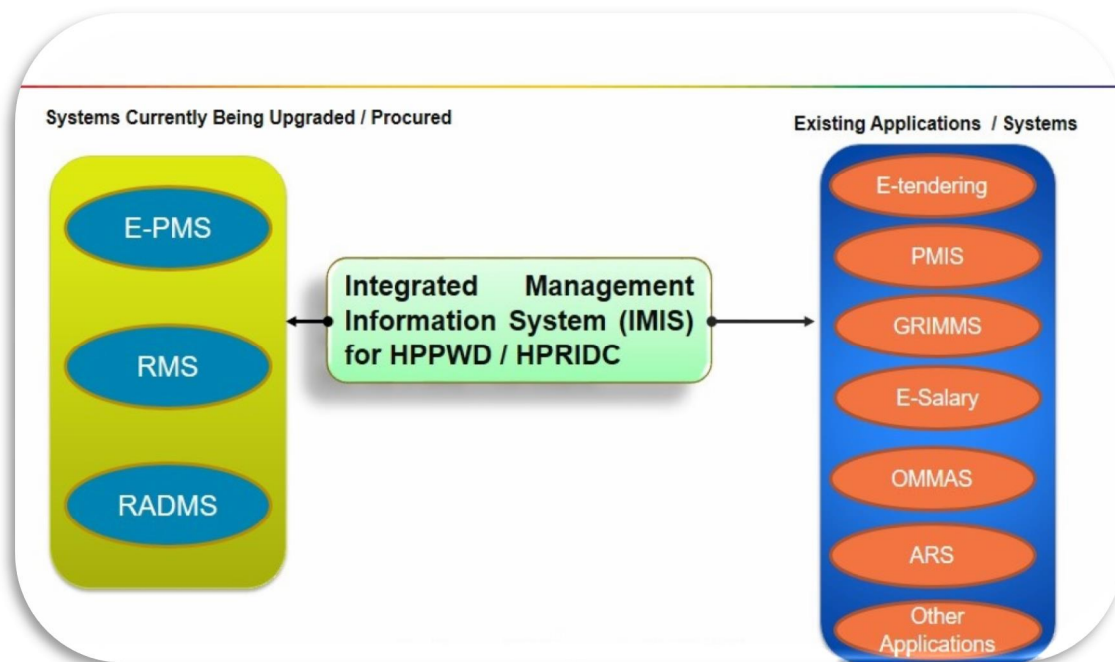
The sections below provide only brief of the technical requirements to be made by the system.

- 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 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
 - Personnel MIS
 - IFMS (HIMKOSH)
 - E- Tendering (PMGSY & Non PMGSY)
 - OMMAS (Online Management Monitoring and Accounting)
 - GRIMMS (GIS-based Road Information Management and Monitoring System)
 - RMMS (Road Maintenance Management System)
 - E-Samadhan
 - ARS (Attendance Recording System)
 - RADMS
 - RMS
 - e-PMS

- 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.
- SI shall follow n-tier application architecture
- 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.
- 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
- All software licenses shall be in the name of HPRIDC.
- For any version change in the software license, Supplier shall have to deliver operational training to designated staff for making changes in the adapter.
- Certified and licensed copies in the name of the application software, RDBMS and any other software required, shall be supplied.
- 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.
- 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.

- The Application should be capable enough to be hosted on State Data Center (Shimla)
- Both Horizontal & Vertical Connectivity will be taken from HIMSWAN. The State and Districts are assumed to be connected through a HIMSWAN

1.7 Minimum Application User Requirements

Sr. No.	Core Modules	HO	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

1.8 Functional Performance Requirements of the System

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 to 40 seconds considering average 5 scanned documents of .5 Mb over 128kbps speed

1.9 Proposed Field Level Infrastructure

Sr. No.	Name of Office	No. of Offices	Item description	Qty. proposed	Total
1	Head Office	1	Desktop (Incl. OS + AV)	20	20
			Laptop (Incl. OS + AV + MS Office Suite)	3	3
			3-in-1 Printer	10	10
2	Shimla Zone	1	Desktop (Incl. OS + AV)	10	10
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	5	5
3	HPRIDC	1	Desktop (Incl. OS + AV)	5	5
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	3	3
4	Quality Control & Design	1	Desktop (Incl. OS + AV)	3	3
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	2	2
5	National Highway	1	Desktop (Incl. OS + AV)	5	5
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	2	2
6	Mandi Zone	1	Desktop (Incl. OS + AV)	10	10
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	5	5
7	Hamirpur Zone	1	Desktop (Incl. OS + AV)	10	10
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	5	5
8	Kangra Zone	1	Desktop (Incl. OS + AV)	10	10
			Laptop (Incl. OS + AV)	1	1
			3-in-1 Printer	5	5
9	Circle offices	20	Desktop (Incl. OS + AV + MS Office Suite+600 VA UPS)	2	40
			3-in-1 Printer	2	40
10	Divisional offices	77	Desktop (Incl. OS + AV + 600 VA UPS)	3	231
			3-in-1 Printer	1	77
11	Sub-Divisional offices	294	Desktop (Incl. OS + AV + 600 VA UPS)	2	588
			3-in-1 Printer	1	294
12	L.A.O Offices	3	Desktop (Incl. OS + AV + 600 VA UPS)	1	3
			3-in-1 Printer	1	3
13	Section Office	1365	Tablet with external mouse, Pen drive(JE,site)	1	1265

			Desktop (Incl. OS + AV + 600 VA UPS) for JE(store)	1	100
--	--	--	---	---	-----

1.10 DR Site Infrastructure

1	Licenses & Software	Quantity
a	Server OS	4
b	RDBMS	1
c	HIPS	4
2	Hardware	Quantity
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, HIMSWAN, State Portal, etc. The DR location is NIC New Delhi.

1.11 DC Site Infrastructure*

1	Hardware	Quantity
A	Load Balancer	2

*The application is to be hosted at the State Data Centre, Shimla (cloud). In case at the time of application development the SDC, Shimla does not have enough space to host the HPPWD application, the requisite hardware (servers etc.) for DC at that time shall be the purchaser's responsibility & the cost for the same shall be borne by the purchaser.

1. The hardware collocated at SDC would be monitored through EMS to be implemented/ being implemented at SDC, however the selected SI has to arrange the necessary CAL for the same as per the rate being discovered in SDC tender and SI will be paid on actual basis.
2. Backup software is also being procured at SDC and selected SI may use the same by arranging requisite licenses.
3. Space at SAN Storage available at SDC would be provided. SI needs to propose the requisite storage space.
4. Tape library is being procured at SDC under SDC scheme and SI needs to arrange necessary LTOs for data backup as per backup policy
5. Antivirus software for servers to be collocated at SDC will be provided by HP SITEG, however Implementation Agency needs to arrange necessary CALs for the same and arrange the antivirus for field offices equipment
6. Development server can be used in virtualization environment for development & testing. SI should also consider Operating System licenses for virtualized environment

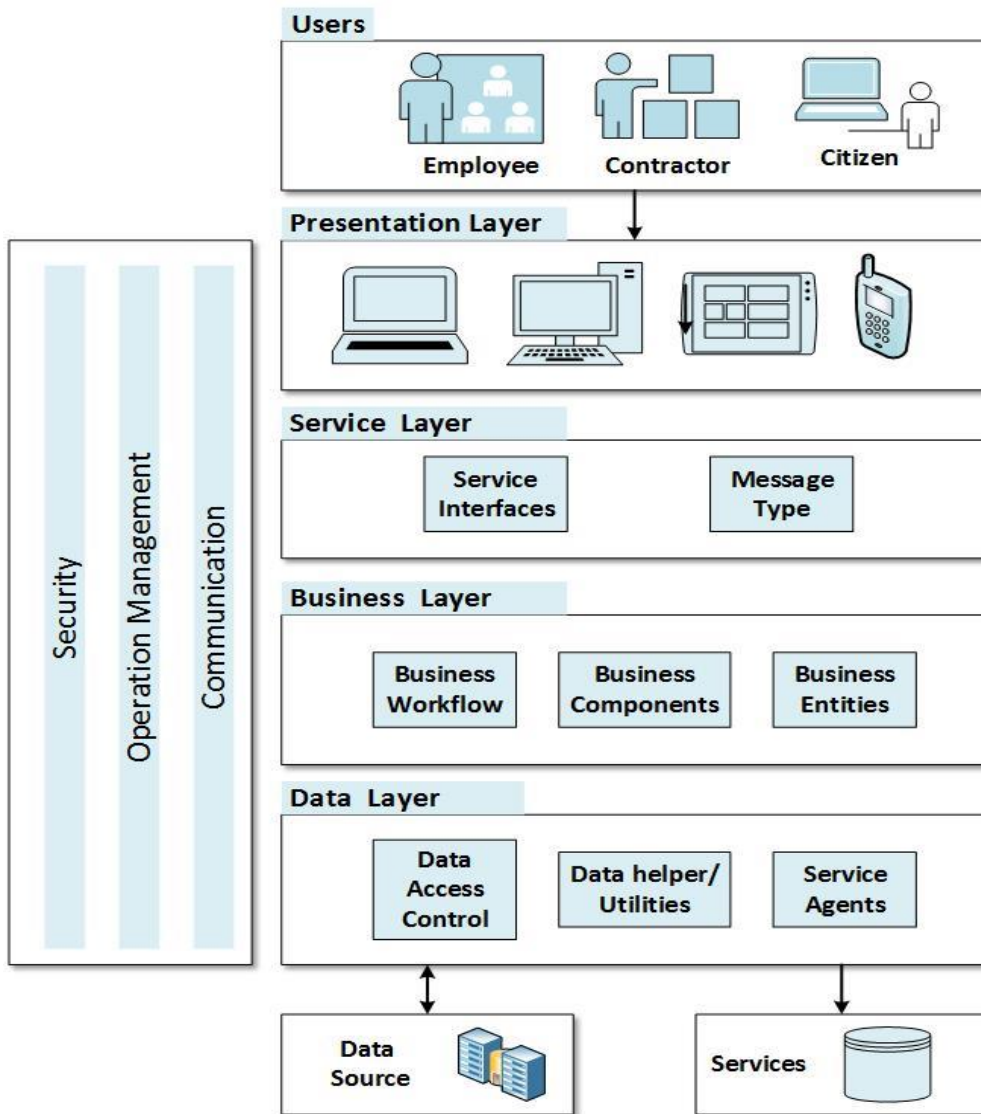
7. Implementation Agency is required to carry out the sizing and may reduce/increase the quantity accordingly as per their proposed solution
8. Quantity mentioned in bill of material can vary up to 50 % on either side as per requirement of purchaser

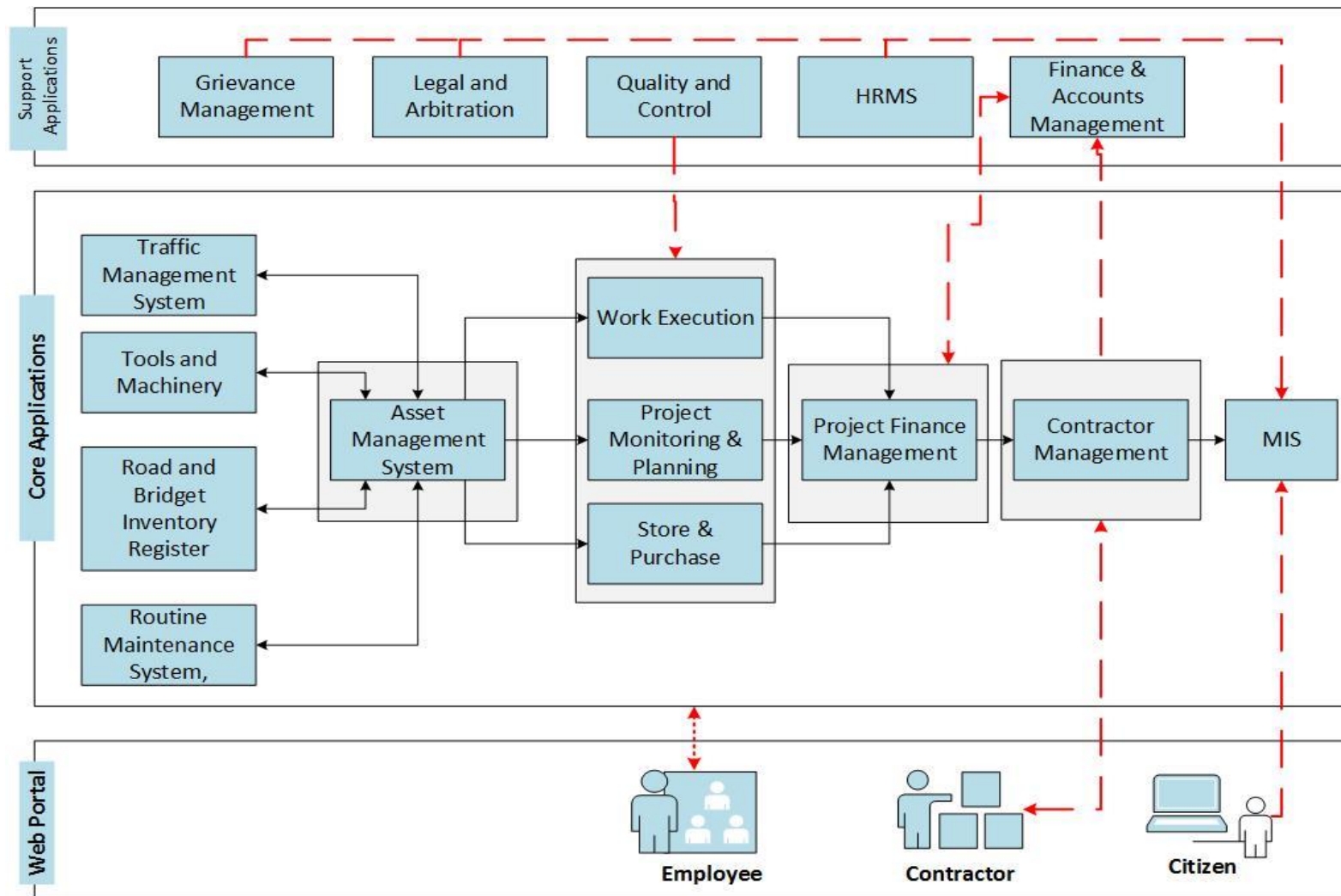
1.3 Architectural Requirements to be met by the Information System

1.3.1 The Information System MUST be supplied and configured to implement the following architecture.

1.3.1.2 Software & Hardware Architecture:

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:





1.4 Systems Administration and Management Functions Required to be met by the Information System

1.4.1 The Information System MUST provide for the following management, administration, and security features at the overall System level in an integrated fashion.

1.4.1.2 Installation, Configuration and Change Management: Refer scope of SI

1.4.1.3 Operational Monitoring, Diagnostics, and Troubleshooting:

- The SI must provide the specifications, installation, configuration and troubleshooting guides for various equipment installed. ·
- SI shall provide maintenance manuals related to service and repair of a technical product as well as its safe disposal. ·
- SI must prepare all implementation documents such as the requirements document, functional design/setup document, technical design document for customizations, technical documentation for programs, screens, interfaces, files formats used and reports generated, data migration strategy document, user acceptance testing documents

1.4.1.4 User Administration and Access Control:

- The Portal will be designed to be a single service delivery channel for all stakeholders of HPPWD. The Portals would provide the following benefits:
 - Personalized interface for various stakeholders
 - Robust Role based Access Controls for access to appropriate information and / or applications/utilities
 - Self-Registration for employees. The same would be managed centrally and would be used by portal and applications.

1.4.1.5 System and Information Security and Security Policies:

SI will have to comply with the security policies and procedures as developed by the Department. Below is the indicative list of security policies that need to follow (only indicative but not restricted to):

- Design of Information Security Policy
- Design of a Business Continuity Plan
- IT Risk Management Policy
- Information Security Organization
- Information Classification
- Third Party Service provider
- Access Control
- User ID and Password Management
- Asset Management
- Physical and environmental security
- Incident Management
- E-mail Security training

- Business Continuity plan and Disaster Recovery
- Backup and archival

1.4.1.6 Back-up and Disaster-Recovery:

Backup & Recovery

- The proposed solution must support mirrored drives.
- The proposed solution must include backup capabilities for the document repository and database(s).
- The proposed solution should provide support for incremental and full Backups
- The proposed solution should provide Support for replicating data onto remote sites.
- The proposed solution should provide monthly validation of database backup. Service includes restoration of database from backup media and validation that all database components are present and not defective. An electronic report of the results is provided at completion of validation.

Disaster Recovery

- Should provide management, monitoring, and automation software infrastructure to create and maintain one or more standby databases to protect data from failures, disasters, errors, and data corruptions.
- Administrators should be able to choose either manual or automatic failover of production to a standby system if the primary fails in order to maintain high availability for mission critical applications.
- Database should provide capabilities to use DR environment to offload production load. Database should have built-in DR solution to replicate the changes happening in the database across multiple DR Sites with an option to run real-time reports from DR Sites without stopping the recovery mechanism.

1.5 Performance Requirements of the Information System

The SLA parameters have been specified in Attachment 2

C. SERVICE SPECIFICATIONS – SUPPLY & INSTALL ITEMS

2.1 System Integration (to other existing systems)

- 2.1.1 Following Legacy Application need to be integrated with proposed solution
 - Personnel MIS
 - IFMS (HIMKOSH)

- E- Tendering (PMGSY & Non PMGSY)
- OMMAS (Online Management Monitoring and Accounting)
- GRIMMS (GIS-based Road Information Management and Monitoring System)
- RMMS (Road Maintenance Management System)
- E-Samadhan
- ARS (Attendance Recording System)
- RADMS
- RMS
- e-PMS

2.2 Training and Training Materials

Please refer the scope of SI

2.3 Data Conversion and Migration

Please refer the scope of SI

2.4 Documentation Requirements

Please refer the scope of SI

2.5 Requirements of the Supplier's Technical Team

Refer to Technical Qualification criteria under section III

D. TECHNOLOGY SPECIFICATIONS – SUPPLY & INSTALL ITEMS

3.1 Computing Hardware Specifications

A. 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.

S. No.	Features	Specifications
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	HBA	2 X dual port 8 Gbps Fibre Channel Adapter with external fiber ports for redundant connectivity to external storage.
9	Optical Drive	DVD ROM
10	Power Supply	Hot Pluggable/Swappable Dual Redundant Power Supply
11	Fans	Hot Pluggable/Swappable Dual Redundant Fans
12	Operating System	System should support Windows Server Datacenter Edition, Enterprise Linux, VMware ESX Operating systems
13	Networking	dual port 10 Gbps Ethernet Adapter, with no single point of failure
14	Ports	2XUSB 2.0 support
15	Hot Swap Component	Hard Disk Drives, Power supplies and fans
16	RAID	RAID 0,1 & 5 with 512 MB battery backed cache
17	Bus Slots	Minimum Four PCI-Express slots
18	Industry Standard Compliance	PCI 2.0 Compliant, PCIe 3.0 Compliant, USB 2.0 Support

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

B. 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

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

C. 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.	The HIPS should be supported on the following platforms: Microsoft Windows <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

D. 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.	Inbuilt snapshot Replication support with log based Change Capture mechanism to facilitate high performance.
10.	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.
11.	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.
12.	Parallel execution of DML and Index scan to be possible for Database
13.	Database should support the separation of security functionality from application functionality and database administration functionality.
14.	Database should Provide controls over who, when, where and how applications, data and databases can be accessed.
15.	Database should provide multi-factor authentication based controls and policies taking account of IP addresses, application context etc.ö
16.	Database should help in addressing regulatory compliance requirements by protecting sensitive data whether in transit or at rest from unauthorized disclosure.
17.	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.
18.	Database should support native optional database level encryption on the table columns, tables and backups.
19.	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.
20.	The database should provide integrated tools for analyzing SQLs, managing, monitoring, maintaining and administering the database.
21.	Database backend development tools should be included in RDBMS.
22.	Should allow users to store XML document in database in its native format
23.	Database should support creation of an index on the column of the table which stores XML in its native format.
24.	Database should have the ability to support 64-bit support for Windows, Linux

	distributions, and UNIX
--	-------------------------

E. 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

F. Load Balancer for DC site

S. No.	Features	Specifications
1	Form Factor	19ö Rack mounting
2	Architecture	<ul style="list-style-type: none"> Should be an ASIC based or multiple CPU based appliance for high performance Should support Dynamic routing protocols like OSPF,

S. No.	Features	Specifications
		<p>RIP1, RIP2</p> <ul style="list-style-type: none"> Next generation multi-tenant platform must support traffic isolation, fault isolation and network isolation in order to meet the architectural environment
3	Ports	4x10 Gig ports
4	Memory	Should have 32 GB RAM and 1*SSL ASICS/FGPA/cards with virtual function support
5	Connections	Should support 2 Million concurrent connections per second
6	IP Support	<ul style="list-style-type: none"> Should support IPv4 & IPv6 Must provide support for dual stack, DNS64, NAT 64, DNS 46, NAT 46, IPv6 NAT
7	Throughput	<ul style="list-style-type: none"> 12 Gbps 5 Gbps SSL throughput
8	Load Balancing Mechanism	<ul style="list-style-type: none"> Cyclic, Hash, Least numbers of users Weighted Cyclic, Least Amount of Traffic Response Time
9	Redundancy	<ul style="list-style-type: none"> Hardware level Redundancy Provision for SLB to work in Active-Active mode VRRP /or equivalent protocol support Segmentation / Virtualization support along with Resource Allocation and dedicated access control on per segment basis
10	Routing	Should support RIP, OSPF and BGP
11	Load Balancing Feature	<ul style="list-style-type: none"> Server and Client process coexist UDP Stateless Service Failover Backup/Overflow Direct Server Return Client NAT Port Multiplexing-Virtual Ports to Real Ports Mapping

S. No.	Features	Specifications
		<ul style="list-style-type: none"> DNS Load Balancing
12	Load Balancing Applications	<ul style="list-style-type: none"> Should able to load balancer both TCP and UDP based applications with layer 2 to layer 7 load balancing support The appliance should support server load balancing algorithms i.e. round robin, weighted round robin, least connection, Persistent IP, Hash IP, Hash Cookie, consistent hash IP, shortest response, proximity, snmp, SIP session ID, hash header etc. Should support Multi-level virtual service policy routing 6 Static, default and backup policies for intelligent traffic distribution to backend servers Traffic load balancing using ePolicies should support algorithms including round robin, least connections, shortest response, persistence ip, hash ip, hash ip and port, consistent hash ip and snmp Should provide application & server health checks for well-known protocols such as ARP, ICMP, TCP, DNS, RADIUS, HTTP/HTTPS, RTSP etc.
13	Management Option	<ul style="list-style-type: none"> Should support simplified configuration with wizards Should support web-based configuration Should support web-based monitoring and analysis interface Solution Should Support Restful API The appliance should have SSH CLI, Direct Console, SNMP, Single Console per Cluster with inbuilt reporting. Should support XML-RPC for integration with 3rd party management and monitoring Should support role based access control with different privilege levels for configuration management and monitoring. The appliance should provide detailed logs and graphs for real time and time based statistics

S. No.	Features	Specifications
		<ul style="list-style-type: none"> Should enable SNMP system logging and able to send alerts to a centralized EMS solution
14	Other	<ul style="list-style-type: none"> Should have support for HTTP caching Should have 6Gbps of hardware compression support default Content Intelligent SLB HTTP Header Super Farm URL-Based SLB Layer 7 Request Per second should not be less than 1200 K per Instance Minimum of 200K L4 CPS per Instance Minimum of 8000 SSL transaction Per Second per instance Dedicated Management Interface Dedicated integrated/external performance optimization module
15	Warranty	3 Year on-site Comprehensive warranty & Maintenance

G. Desktop

S. No.	Features	Specifications
1	Processor	X-86 Architecture based, 64-bit Supported Quad Core AMD A10 latest Generation or higher or Intel Core-i5 latest Generation or higher Processor
2	Motherboard	Compatible OEM chipset
3	Chipset	Compatible chipset
4	RAM	Memory 4GB (1x4GB) expandable to 64 GB Non-ECC DDR4 2133 MHz SDRAM Memory, minimum Two DIMM slots
5	Hard Disk Drive & controller	HDD 500 GB 7200 RPM 3.5" SATA Hard Drive
6	Optical Drive	Optical Drive 8X Max DVD+/- RW

7	Graphics	Integrated Graphics
8	Audio	High Definition Audio Card
9	Ethernet	10/100/1000Mbps
10	Slots	3 PCI / PCI Express slots & at least one M.2 PCIe slot
11	Ports	Front:2 USB 2.0; 2 USB 3.1 Gen 1; 1 Headphone/microphone; 1 Headphone connector Back: 2 USB 2.0; 4 USB 3.1 Gen 1; 1 serial; 2 PS/2 (keyboard & mouse); 1 VGA; 1 audio line in; 1 audio line out; 1 RJ-45
12	Keyboard	Bilingual Keyboard preferred. If not, sticker of local language
13	Monitor	19.5 " LED Backlit Monitor, TCO 6.0 or higher Certified
14	Mouse	Optical
15	Operating System	Preinstalled Windows 10 Pro with latest antivirus to take care of all and latest viruses
16	MS Office 2016 Professional	Bundled
17	Compliance And Certification	EPEAT India certified for given CPU & Monitor Energy star certified for CPU FCC, RoHS, UL Certified, CE Certified
18	Drivers for different Operating systems	Drivers should be freely available on OEM's web site and should be supplied in media along with PC

H. MFP

Function	Print, copy, scan
Print Speed	22 ppm
Output Resolution	Up to 600 x 600 dpi

Monthly Duty Cycle	10,000 pages
Processor	600 MHz
Copy speed	21 cpm
Scan technology	Flatbed
Scan resolution	Up to 1200 x 1200 dpi (mono, flatbed)/ 24 bit (color)
Formats	JPG, RAW (BMP), PNG, TIFF, PDF
Paper Support	Legal, A4
OS Support & OCR	MS Windows 10, OEM Scanning Software including OCR
Accessories	Power cable, USB cable

I. Laptop

Particulars	Description
Processor	CPU - Intel Core i5, 3 MB L3 Cache and 2.2 GHz
Memory	8 GB 1600 MHz or higher DDR3 RAM
Hard Disk Drive	500 GB 5400 rpm Serial ATA HDD.
Display	15.6 inch, HD LED, 1366 x 768 pixels
Ports	3 USB Ports, 2x USB 2.0, 1 x USB 3.0, 1 Serial, Audio ports for microphone and headphone in front.
Optical Drive	DVD Writer
Networking facility	10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up. IPV 6 Compatible,
Power	65 W AC Adapter, 4 cell
GRAPHICS	Dedicated Graphics Memory Type DDR3, Dedicated Graphics Memory Capacity 2GB
Product Certifications	Windows 8 and Linux Certification, UL, FCC

J. Tablet

Particulars	Description
-------------	-------------

Processor	2.2 GHz
ROM	8 GB
RAM	1 GB
Display	10 inch, 2048 x 1536 pixels
USB	Yes, USB 2.0
Connectivity	3G, Single SIM
Camera	8 MP Rear Camera
Battery	1300 hrs, 6700 Lithium
OS	Android 4.4.4 (KitKat)
Internet Connectivity	4G, 3G, Wifi enabled

K. UPS (Min. 600VA)

S. No.	Features	Specifications
1.	Capacity	600 VA Offline
2.	Technology	Mosfet / IGBT
3.	Certifications	1) CE/Equivalent Certificate. 2) Should be EU RoHS / WEEE/ ISO 14001 Compliant
4.	Input Voltage	160 V AC - 270V AC
5.	Operating Frequency	50 Hz +/-2.5 Hz
6.	Nominal Output	220/230/240 VAC +/- 3%
7.	Frequency	50 Hz +/- 5 Hz
8.	Output Voltage regulation	230+/- 3 % (on Battery)
9.	Frequency	50 HZ \pm 1%
10.	Load Power Factor	0.6 (lag) or better

11.	Output Load	600 VA
12.	Overload	At 120% load minimum 1 Min
14.	Total Harmonic	< 8 %
15.	Overall Efficiency	85%
16.	Storage / Operating Temp.	0 6 45 °C
17.	BATTERY	168 VAH; Sealed Maintenance Free with 30 Min backup on full load
18.	Short Circuit	Electronic current limit on inverter mode/ MCB protection on Mains mode
19.	Surge / Spikes	Through Line Filters
20.	DC under	Yes
21.	Overload	Yes
22.	DISPLAY	LED Display (UPS Status, Load Status, Battery Status/ Low Battery)
23.	ALARMS	Mains failure, Fault conditions, Low battery, Overload
24.	Warranty	3 Year on-site Comprehensive warranty & Maintenance (UPS & Batteries)

E. TESTING AND QUALITY ASSURANCE REQUIREMENTS

4.1 Inspections

4.1.0 Factory Inspections: **Not applicable**

4.1.1 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.

4.2 Pre-commissioning Tests

4.2.0 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.

- 4.2.1 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

4.3 Operational Acceptance Tests

- 4.3.0 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
 - User Acceptance Test
- 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

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.

F. SERVICE SPECIFICATIONS – RECURRENT COST ITEMS

5.1 Warranty Defect Repair

5.1.1 The Supplier MUST provide the following services under the Contract or, as appropriate under separate contracts (as specified in the bidding documents).

5.1.1.1 Warranty Defect Repair Service

5.2 Technical Support

Please refer section III Technical criteria

5.3 Requirements of the Supplier's Technical Team

Please refer section III Technical criteria

Note: The Technical Assistance Team specification may be used to develop bid prices for technical support Recurrent Costs. These may be included in the

main Contract or be subject to separate contracts. In either regard, to obtain meaningful and comparable bid prices, the Purchaser will need to specify the roles of the technical support team members in this section and indicate the quantities of the corresponding inputs in the Systems Inventory Tables for Recurrent Cost items.

Implementation Schedule

Implementation Schedule Table

Table of Content

A.	IMPLEMENTATION SCHEDULE TABLE	169
B.	SITE TABLE(S).....	173
C.	TABLE OF HOLIDAYS AND OTHER NON-WORKING DAYS	186

A. IMPLEMENTATION SCHEDULE TABLE

The HPPWD 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

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	(T+48 weeks)+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																		

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	(T+48 weeks)+36 Months
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 updating based on Phase-I testing and feedback																		
Security Audit																		
Go Live Phase –II																		
Deployment of Hardware																		

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	(T+48 weeks)+36 Months
Phase-I																		
Installation of Hardware and Software DR & DC																		
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

B. 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
		Theog Division	Sub-Division, Theog

CE	SE	EE	AE
			Sub-Division, Matiana
			Sub-Division, Sainj
	11th Circle Rampur	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	Sub-Division, Rampur

CE	SE	EE	AE
		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
		Jubbal Division	Sub-Division, Jubbal

CE	SE	EE	AE
			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, No-I Dharamshala
			Sub-Division, No-II Dharamshala
			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

CE	SE	EE	AE
			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

CE	SE	EE	AE
	9th Circle, Nurpur		Sub-Division, Garola
			Sub-Division, Holi
			Sub-Division, Rakh
		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

CE	SE	EE	AE
		Sundernagar Division	Sub-Division, Suket
			Project Sub-Division
			Sundernagar
			Engineering College Sub Division
			Sub-Division, Dhanotu
	Jogindernagar Circle	Bajjnath Division	Sub-Division, Bajjnath
			Sub-Division, Panchrukhi
			Project Sub-Division, Bajjnath
		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

CE	SE	EE	AE
		Mechanical Division Shamshi	Mechanical Sub Divison No-I, Shamshi
			Mechanical Sub Divison 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

CE	SE	EE	AE
	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	Ist 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

CE	SE	EE	AE
			Sub-Division, DharmShala
			Sub-Division, Nurpur
			Sub-Division, Dehra
			Sub-Division, Tanda
Mechanical Wing	Mechanical Circle	Mechanical Division Shimla	Sub-Division No-II, Sanjauli (Bhatakuffar)
			Sub-Division Dhalli, Steel Bridge Const.
			Sub-Division, Tara Devi
		Mechanical Division, Bilaspur	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

CE	SE	EE	AE
			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

C. TABLE OF HOLIDAYS AND OTHER NON-WORKING DAYS

[Specify: the days for each month for each year that are non-working days, due to Holidays or other business reasons (other than weekends).]

Background and Informational Materials

Table of Content

A. BACKGROUND.....	188
0.01 The Purchaser	188
0.1.1 Overview of Organization	188
0.1.2 Organization Structure - HPPWD.....	188
0.1.3 Organization Structure HPRIDC	190
0.1.4 Functions performed by HPPWD & HPRIDC	190
0.1.5 Stakeholders	193
0.2 Business Objectives of the Purchaser	195
B. INFORMATIONAL MATERIALS.....	196
0.1 The Legal, Regulatory, and Normative Context for the Information System.....	196
0.2 Existing Information Systems / Information Technologies Relevant to the	196
C. ATTACHMENTS	209
Attachment 1. Project Governance Structure.....	209
Attachment 2. Service Level Agreement	210
Attachment 3 Functional Requirements and Specifications (FRS).....	230

A. BACKGROUND

0.01 The Purchaser

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

0.1.1 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 elaborated and exhaustive in terms of:

- Project proposals and preparation of estimates
- Arranging approval of project proposals 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 ó 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

0.1.2 Organization Structure - HPPWD

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 is 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

0.1.3 Organization Structure 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/>

0.1.4 Functions performed by HPPWD & HPRIDC

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
- 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

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.

0.1.5 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 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
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

1. Access to all necessary information of PWD with minimum physical interaction.
2. Faster turnaround time of queries.
3. Transparency in the process.
4. Efficiency in execution of works as public is subjected to inconvenience during construction period of works.
5. Early availability of a facility as result of timely completion of work

0.2 Business Objectives of the Purchaser

1. Modernization of Existing Infrastructure
2. Increased Work Force Productivity
3. Capacity Building and sensitization 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

B. INFORMATIONAL MATERIALS

0.1 The Legal, Regulatory, and Normative Context for the Information System

During its assessment and design, System integrator will have to ensure that the new system abides with all the relevant legal codes, rules and Acts of Government of Himachal Pradesh and Government of India

0.2 Existing Information Systems / Information Technologies Relevant to the

The PWD department used various software(s) for their day to day activities. This software is 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 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

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 (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

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

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

2.8 RMS

Front End: Angular JS, ASP.Net, C#.net

Database: SQL Server 2014

Back end: SQL Server 2014, Web Services (JSON)

HPPWD/HPRIDC intends to upgrade RMMS to RMS to significantly improve and rationalize decision making in planning, programming, funding, and procurement in the allocation of resources in road sector, in order to make the best use of public funds in preserving the road networks at an acceptable level of serviceability. The proposed upgrade of RMMS will improve technical capacities, skills and management capabilities of HPPWD/HPRIDC thus improving

to manage efficiently and cost-effectively road maintenance and improvement activities.

The functionalities include:

- Review the existing MS-Access based Road Information System in use at HQ and Field Units;
- Creation of additional fields and other information in RIS for its use in latest version of Highway Development & Management Model (HDM-4) software;
- Carry out any changes in the MS Access software for compatibility of data for producing reports/outputs as per the needs of the Client including enhancing Querying/Reporting;
- Develop and establish a middleware for linking modified RIS with HDM for smooth transfer of data between the two, or linking will include data import and export facilitates between the RMS and other applications and between various applications and report generation modules. RMS shall be configured and customized to meet technical, functional and administrative requirements of the Client;
- Carry out compliance/pilot testing and validation of all various modules/every sub-program/sub-systems and entire upgraded system after full interface with HDM software;
- Transfer skills and procedures to adequate number of staff in the HPPWD/HPRIDC for hand-holding and training of trainers to sustain the use of HDM and RMS during as well as after the end of these services;
- Providing implementation, operation and maintenance support (intermittent) to HPPWD and HPRIDC for 24 months after all mandatory testing and validations and third party user acceptance test-Response time of not more than 24 hours and rectification time not more than 72 hours. That will include trouble shooting, resolving any problems faced by the HPPWD/HPRIDC, minor modifications and refinements required in the system to improve its effectiveness based on the feedback information collected from its use, and removing bugs from the Software.

Main features:

- Upgrade RMS with following components, using Commercial Off the Shelf (COTS):
- GIS linked Road Information System (RIS);
- Bridge Information System (BIS);
- Pavement Management System (PMS);
- Road Maintenance Management System (RMMS);
- Right-of-Way Features Information Management System (RWFIMS);
- Traffic Information System (TIS);
- HDM Planning Tool for road investment maintenance prioritization

2.9 e-PMS

Front End: Web Browser

Database: Microsoft SQL server 2012 R2

Back end: Microsoft .NET Framework Version: 2.0, ASP.NET Version: 2.0

Backend Project Management System or PMS is a fully integrated centralized web-based

enterprise level software solution for infrastructure project management comprising of monitoring daily activities system, mobilising and demobilising staff and equipment management system, planning management system, subcontractor management system, contract administration system, store management system, equipment maintenance system, tools and report generation. PMS helps to manage various infrastructure project resources by integrating

a project into a single web based system that can serve different departments' particular needs thereby helping various departments to easily share information and communicate with each other.

The functionalities include:

- A. **Planning**- Outlining and design critical project plan.
- B. **Monitoring**- Control physical and Financial Progress.
- C. **Contract Management**-Manage contract related documents
- D. **Tracking**-Tracking of quality, constraints, claims.
- E. **Reporting**- Summaries project information across geographical location.

Main features:

- **Planning** ó This module helps to manage master tables, plan project activity, plan project resources.
- **Monitoring & Alerts** - This module allows users to enter daily activities, approve daily entries, track on Quality tests, Upload Progress Photos and receive activity alerts.
- **Mob & Demob** - This module features in mobilizing staff/equipment in to a project and demobilizing staff/equipment from a project.
- **Quality** - This module features in defining the quality test types and entering the number of tests conducted against the number of tests that have passed.
- **Contract Administration** - This module features in managing of contract documents, Correspondence, Claims, Complaints, Instructions, Bill creation.
- **Constraints & Compliance's** ó This module features recording and rating different types of constraints and compliance's.
- **Dashboard & Reports** - This summaries physical work progress, Financial Progress, Quality control, Compliance.

2.10 RADMS

Category	Current iMAAP RADMS Application	New version under development by the Consultant
Front End:	ASP.NET, Silverlight, JQuery,	Angular 6, Wijmo Controls,

	Javascript, OpenLayers, Component One Libraries, Grape City libraries	DevExpress Controls, Stimulsoft Reports, OpenLayers
Database:	SQL Server 2012	PostgreSQL 9.6 / SQL Server 2016
Back end:	ASP.NET, C#, NHibernate, LINQ, GeoServer, Sharpshooter Reports, Component One Libraries	.NET Core 2.x, EF Core 2.x, GeoServer, LINQ, Node JS, Stimulsoft Reports, Python
Brief description of the system / application:	Road Safety Management System	Road Safety Management System
The System / application functionalities :	Proprietary Software product used to scientifically manage road safety developed through road safety research at Transport Research Laboratory, UK	Proprietary Software product used to scientifically manage road safety developed through road safety research at Transport Research Laboratory, UK
Its main features:	Road Safety countermeasures, Crash data management, black spot detection and treatments	Road Safety countermeasures, Crash data management, black spot detection and treatments

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 analysisô Make use of hundreds of scientifically based analysis tools as well as 2D, 3D, and temporal visualization capabilities.
- Data managementô Collect information that is spatially organized and allows versioning and multiple user editing. It maintains data integrity with QA/Q tools.
- Operational awarenessô Empower decision makers with simple Web-based applications that reveal key decision points in a geographic context.
- Field workforceô 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

C. 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-óChief - 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.

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:
$$\frac{\{(\text{Scheduled Operation Time} - \text{System Downtime})\}}{(\text{Scheduled Operation Time})} * 100\%$$
- (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:

- (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) 24x7 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	Measure ment Interval	Reporting Period	Hours of Support	Service Level Dependency	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	Completeness and integrity of source data	> 98%	30% of Data Digitization Cost.
Deployment of Manpower	Timely deployment of manpower						Delay in deployment of manpower post signing off contract		10% of first scheduled payment per week

Deliverable /milestone Before Go-Live	Timely completion of milestones						Delay in deliverable		10% of value of deliverable/milestone delay per week

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 excluding the SDC Hardware/network downtimes, if any as per the SDC performance reports. 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	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 Installment 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 Installment 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/HPRI DC after each training session. HPPWD/HPRI DC 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 Team Mobilization/Kick off

Penalty of Rs. 10000 per week should be levied in case of delay in team mobilization/Kick off.

4.5 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
			High	2 Hours	
			Medium	3 Hours	
			Low	4 Hours	

					for analysis Respond to initiator informing of assignment for further 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 **öCriticalö**: 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 **öHighö**: 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 **öMediumö**: 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

Type of Service	Metric	Threshold	Penalty	Basis of Measurement
Average wait time of call pick-up (up to 15 sec)	24*7	>=95% of calls answered	Rs.50 per unanswered calls	Feedback and log details
		<95% and >=90% of calls answered	Rs.100 per unanswered	
		<90% to >=75% calls answered	Rs.150 per unanswered calls	
		< 75 % of the calls answered	Rs.200 per unanswered calls	
Service Level for SMS Gateway (Minimum Uptime of the gateway)	24*7	>= 99.50 %	Nil	Log Details
		< 99.50% and >= 98%	Rs.250 per day	
		<98% and >= 96 %	Rs.500 per day	
		< 96 %	Rs.750 per day	

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

4.6 Manpower support

- 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 & Technical support Executive

Sr. No.	Parameter	SLA	Penalty
1.	Attendance (i.e. absenteeism of resource without any replacement) (SI will follow Himachal	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

	Government calendar)		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

4.7 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.
Supply, installation and Commissioning of hardware of Field Offices	Sign-off by the State-level representative.	As per agreed commissioning schedule	<ul style="list-style-type: none"> - Necessary approval from the Department 	INR 25,000 for every week's delay beyond the agreed commissioning schedule.

5. Operation and Maintenance (O&M) Support

S. No.	SLA Terms	Description
1.	System Uptime	<ul style="list-style-type: none">- Time for which user is able to access the applications, website and other components of the IT solution during the working hours. The system can be down due to any of the reasons including failure of hardware, network, system software, application etc.- Scheduled downtime for example, backup time, batch processing time, routine maintenance time will not be considered while evaluating the system uptime. However, the selected SI will be required to schedule such downtime with prior approval of <i>HPHDP</i>. The selected SI will plan scheduled downtime outside working time. In exceptional circumstances, <i>HPHDP</i> may allow the SI to plan scheduled downtime in the working hours.

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Service Level	Minimum Service Level	Service Level Dependency	Increased Impact	Penalty
Availability of system in DR	6 Availability of system	<ul style="list-style-type: none"> Time for which user is able to access the applications, website and other components of the IT solution during the working hours. If the system is down due to any failure of at DR software, application Scheduled downtime for example, backup time, batch processing time, routine 	No. of recorded hours on server logs of uninterrupted usage of the system by users during working hours	Quarterly	Quarterly	24x7	99.9%	97% (8 Am to 11 PM) & 90% (11PM to 8 AM)	<ul style="list-style-type: none"> Power Backup Upgrades System Restores 	To be base lined for first 6 months	<p>10% of the Quarterly AMC</p> <p>Charges shall be levied on the selected bidder.</p> <p>for every drop in percentage point of uptime below 97% (8 Am to 11 PM) & 90% (11PM to 8 AM)</p> <p>[The non-availability for application service, website measured on quarterly basis and</p>

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Service Level	Minimum Service Level	Service Level Dependency	Increased Impact	Penalty
		<p>maintenance time will not be considered while evaluating the system uptime. However, the selected SI will be required to schedule such downtime with prior approval of <i>HPHDP</i>. The selected SI vendor will plan scheduled downtime outside working time. In</p>									<p>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]</p>

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Service Level	Minimum Service Level	Service Level Dependency	Increased Impact	Penalty
		exceptional circumstances, <i>HPHDP</i> may allow the SI vendor to plan scheduled downtime in the working hours.									
System Uptime and Performance of Field Offices	System uptime and performance of the system of Field Offices	Availability of each hardware & peripheral at each of the designated field office location	No. of recorded hours on manual logs of uninterrupted usage of each hardware & peripheral by users during working hours	Monthly	Monthly	7 x 6	>96%	>92%	<ul style="list-style-type: none"> Power Backup 	To be based for first 6 months	2% of the total value of hardware for a drop in uptime between <92% and >=90%. Additional INR 750 per instance of violation for every 5% drop in percentage

Service Category	Service Level Title / Objective	Definition	Data Capture	Measurement Interval	Reporting Period	Hours of Support	Target Service Level	Minimum Service Level	Service Level Dependency	Increased Impact	Penalty
											point of uptime below 90%.

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 sends 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 comprise 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 comprise 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 allows 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 ó 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 facilitate 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 having 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 be 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 be 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.

9.0 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. 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

Query / Views on Following Should Provide

- User Management, user creation, role assignment etc is part of overall solution, so we request to delete this clause.
- The system should provide search option to retrieve documents from repository
- System should have facility to show inward and outward document details through MIS reports

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.

Folder/File Structure

- The system shall provide the standard structure of folders and sub-folders to allow users and groups of users to manage and organize their documents

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.

Broad Availability

- The system should provide an interface to upload scanned documents and retrieval of the same. Users should be able to search, retrieve and view documents with any web browser

Comprehensive Security

- The system should allow the system administrator to manage folders and documents that users can see, and actions (edit, copy, delete, etc.) they can perform on those documents.

10. System Functional Requirements and Specifications

10.1 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

10.2 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

10.3 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 ó in ó 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

10.4 General & MIS Reporting

The proposed solution should generate dynamic MIS reports based on the user quires. 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
- System should generate annual reports of HPPWD and the sector
- MIS is expected to facilitate decision making by compiling the information from different functional areas of the organisation in the required format

11. Freight and Logistics Management System

The Freight & Logistics Management System shall include a detailed inventory of existing conditions, a projection of the future, and an assessment of current and future needs for the study area of HPPWD & HPRIDC. These two tasks shall be combined for analysis and documentation purposes, because of the related nature of inventory and assessment activities. The inventory shall begin with a review of previously completed local, regional, and state plans that are relevant to the study areas of the department. Data related to the existence, condition, and performance of the transportation network lying under HPPWD & HPRIDC will be collected

and documented. Data collection for the Freight & Logistics Management System shall include at least the following core elements:

1. System should maintain the record of Transportation System, state of Goods Repair / Operations and Maintenance
2. System should provide data for Roadway Network Characteristics and Performance
3. System should maintain the record of Crash history
4. System should generate reports on Transit Operations
5. System should capture data for Bike/Pedestrian Infrastructure
6. System should be able to capture data for Transportation Demand Management (TDM) Programs
7. System should include the features of Technology / Intelligent Transportation Systems (ITS) / Connected and Autonomous Vehicle Infrastructure
8. System should ensure easy data capture for Transportation Assets
9. Accident and incident reports along with consolidation and regular reporting for status check
10. System should be able to eliminate unnecessary charges and automate the time consuming and error prone processes of freight payment
11. System should maintain Performance Monitoring and Reporting

In addition to the aforementioned core elements, additional data shall be collected & system should be made functional on the following aspects of freight & logistics management:

1. System should fetch data for designated truck routes ó local, regional, state, and national
2. System should be able to capture data for Routes with truck prohibition
3. System should capture freight origin/destination patterns
4. Bridges ó sufficiency ratings, weight restrictions, and low bridges
5. Authorized and unauthorized truck parking locations for overnight and staging needs
6. Rail crossing locations and safety issues (passenger and freight)
7. Freight rail facilities ó intermodal, bulk transfer, and carload
8. Relevant truck/vehicles related signage adequacy and effectiveness
9. Locations of all fuel facilities, including alternative fuel facilities ó CNG, LNG, electric
10. Generators of truck trips (locally, regionally, and statewide) that impact Gateway85.
11. Locations for potential growth, with a focus on road infrastructure growth
12. Data capturing provision should be made in the system for existing land use/zoning conflicts between industrial, commercial and residential areas
13. Other relevant data specific to the PWD

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VIII - General Conditions of Contract

Table of Content

A. CONTRACT AND INTERPRETATION	252
1. Definitions	252
2. Contract Documents	260
3. Interpretation	260
4. Notices	263
5. Governing Law	265
6. Fraud and Corruption	265
B. SUBJECT MATTER OF CONTRACT.....	266
7. Scope of the System.....	266
8. Time for Commencement and Operational Acceptance	266
9. Supplier's Responsibilities	267
10. Purchaser's Responsibilities	269
C. PAYMENT	271
11. Contract Price.....	271
12. Terms of Payment	271
13. Securities	272
14. Taxes and Duties	274
D. INTELLECTUAL PROPERTY.....	275
15. Copyright	275
16. Software License Agreements	276
17. Confidential Information	278
E. SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM	280
18. Representatives	280
19. Project Plan	282
20. Subcontracting	284
21. Design and Engineering.....	285
22. Procurement, Delivery, and Transport	288
23. Product Upgrades.....	290
24. Implementation, Installation, and Other Services.....	291
25. Inspections and Tests.....	292
26. Installation of the System	293

27. Commissioning and Operational Acceptance	294
F. GUARANTEES AND LIABILITIES	298
28. Operational Acceptance Time Guarantee	298
29. Defect Liability	299
30. Functional Guarantees	302
31. Intellectual Property Rights Warranty	303
32. Intellectual Property Rights Indemnity	303
33. Limitation of Liability	306
G. RISK DISTRIBUTION	306
34. Transfer of Ownership	306
35. Care of the System	308
36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification	309
37. Insurances	311
38. Force Majeure	313
H. CHANGE IN CONTRACT ELEMENTS.....	315
39. Changes to the System.....	315
40. Extension of Time for Achieving Operational Acceptance.....	321
41. Termination.....	321
42. Assignment	329
I. SETTLEMENT OF DISPUTES.....	329
43. Settlement of Disputes.....	329

General Conditions of Contract

A. CONTRACT AND INTERPRETATION

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated below.

(a) contract elements

(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.

(ii) "Contract Documents" means the documents specified in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments to these Documents).

(iii) "Contract Agreement" means the agreement entered into between the Purchaser and the Supplier using the form of Contract Agreement contained in the Sample Contractual 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.

(iv) "GCC" means the General Conditions of Contract.

(v) "SCC" means the Special Conditions of Contract.

(vi) "Technical Requirements" means the Technical Requirements in Section VII of the bidding documents.

(vii) "Implementation Schedule" means the Implementation Schedule in Section VII of the

bidding documents.

- viii) "Contract Price" means the price or prices defined in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
- (ix) "Procurement Regulations" refers to the edition **specified in the SCC** of the World Bank "Procurement Regulations for IPF Borrowers".
- (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 Regulations that the Purchaser is obligated to follow during procurement and administration of this Contract.

(b) entities

- (i) "Purchaser" means the entity purchasing the Information System, as **specified in the SCC**.
- (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.
- (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.
- (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.

- (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 Services, is subcontracted directly or indirectly by the Supplier.
- (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 43.1 (Adjudication).
- (vii) "The World Bank" (also called "The Bank") means the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).

(c) scope

- (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.
- (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.
- (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.
- (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.

- (v) "Services" means all technical, logistical, management, and any other Services to be 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.
- (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 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.
- (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.
- (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.

- (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 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.
- (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.
- (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.
- (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.
- (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).
- (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.

(xv) "Standard Materials" means all Materials not specified as Custom Materials.

(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 Materials as the parties may agree in writing to be Custom Materials. Custom Materials includes Materials created from Standard Materials.

(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.

(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.

(d) activities

(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.

(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).

(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 Clause 26 (Installation).

(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).

(v) "Operational Acceptance Tests" means the tests specified in the Technical Requirements and Agreed 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 Project Plan, in accordance with the provisions of GCC Clause 27.2 (Operational Acceptance Test).

(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).

(e) place and time

(i) "Purchaser's Country" is the **country named in the SCC**.

(ii) "Supplier's Country" is the country in which the Supplier is legally organized, as named in the Contract Agreement.

(iii) **Unless otherwise specified in the SCC** "Project Site(s)" means the place(s) in the Site Table in the Technical Requirements Section for the supply and installation of the System.

- (iv) "Eligible Country" means the countries and territories eligible for participation in procurements financed by the World Bank as defined in the Procurement Regulations.
- (v) "Day" means calendar day of the Gregorian Calendar.
- (vi) "Week" means seven (7) consecutive Days, beginning the day of the week as is customary in the Purchaser's Country.
- (vii) "Month" means calendar month of the Gregorian Calendar.
- (viii) "Year" means twelve (12) consecutive Months.
- (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).
- (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 **unless otherwise specified in the SCC**, the Contract shall continue in force until the Information System and all the Services have been provided, unless the Contract is terminated earlier in accordance with the terms set out in the Contract.
- (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).
- (xii) "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.

(xiii) 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 provide Software licenses, maintenance, and/or technical support services for the System, either under this Contract or under separate contract(s).

2. Contract Documents

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.

3. Interpretation

3.1 Governing Language

3.1.1 **Unless otherwise specified in the SCC**, all Contract Documents and related correspondence exchanged between Purchaser and Supplier shall be written in the language of these bidding documents (English), and the Contract shall be construed and interpreted in accordance with that language.

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.

3.2 Singular and Plural

The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3 Headings

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.

3.4 Persons

Words importing persons or parties shall include firms, corporations, and government entities.

3.5 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties there under shall be as prescribed by the Incoterms

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1^{er}, 75008 Paris, France.

3.6 Entire Agreement

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.

3.7 Amendment

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.

3.8 Independent Supplier

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.

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.

3.9 Joint Venture

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.

3.10 Nonwaiver

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.

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.

3.11 Severability

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.

3.12 Country of Origin

“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.

4. Notices

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, facsimile, electronic mail, or Electronic Data Interchange (EDI), with the following provisions.

4.1.1 Any notice sent by 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.

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.

4.1.3 Any notice delivered personally or sent by facsimile, electronic mail, or EDI shall be deemed to have been delivered on the date of its dispatch.

4.1.4 Either party may change its postal, facsimile, electronic mail, or EDI addresses for receipt of such notices by ten (10) days notice to the other party in writing.

4.2 Notices shall be deemed to include any approvals, consents, instructions, orders, certificates, information and other communication to be given under the Contract.

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 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.

5. Governing Law

- 5.1 The Contract shall be governed by and interpreted in accordance with the laws of the country **specified in the SCC**.
- 5.2 Throughout the execution of the Contract, the Supplier shall comply with the import of goods and services prohibitions in the Purchaser's Country when
- (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country; or
- 5.3 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 any country, person, or entity in that country.

6. Fraud and Corruption

- 6.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in the Appendix to the GCC.
- 6.2 The Purchaser requires the Suppliers to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

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 Project Plan.</p> <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 and any refinements made in the Agreed 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) in accordance with the time schedule specified in the Implementation Schedule and any refinements made in the Agreed Project Plan, or within such extended time to which the Supplier shall be entitled under GCC Clause 40</p> |

(Extension of Time for Achieving Operational Acceptance).

9. Supplier's Responsibilities

- 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.
- 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.
- 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 Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule. Failure to provide such resources, information, and decision-making may constitute grounds for termination pursuant to GCC Clause 41.2.
- 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.

- 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 to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of the Purchaser.
- 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.
- 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).
- 9.8 Pursuant to paragraph 2.2 e. of Appendix B to the General Conditions the Supplier shall permit and shall cause its subcontractors and subconsultants to permit, the Bank and/or persons appointed by the Bank to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors' and subconsultants' attention is drawn to Sub-Clause 6.1 which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures).
- 9.9 The Supplier shall conform to the sustainable procurement

contractual provisions, if and as **specified in the SCC**.

9.10 **Unless otherwise specified in the SCC** the Supplier shall have no other Supplier responsibilities.

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.

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 Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.3.1 (b).

10.3 The Purchaser shall be responsible for acquiring and providing legal and physical possession of the site and access to it, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract.

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.

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 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.

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 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.

- 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 Implementation Schedule and the Agreed Project Plan.
- 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 Project Plan, or other parts of the Contract.
- 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.
- 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.
- 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.
- 10.12 **Unless otherwise specified in the SCC** the Purchaser shall have no other Purchaser responsibilities.

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.
- 11.2 Unless an adjustment clause is **provided for in the SCC**, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the System pursuant to GCC Clause 39 or to other clauses in the Contract;
- 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-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.
- The Contract Price shall be paid as **specified in the SCC**.
- 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).
- 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.
- 12.4 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 **as specified in the SCC**.

- 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.

13. Securities

13.1 Issuance of Securities

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.

13.2 Advance Payment Security

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 GCC Clause 12.1 above and valid until the System is Operationally Accepted.

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. **Unless otherwise specified in the SCC**, the reduction in value and expiration of the Advance Payment Security are calculated as follows:

$$P \cdot a / (100 - a)$$
, where \bar{P} is the sum of all payments effected so far to the Supplier (excluding the Advance Payment), and \bar{a} is the Advance Payment expressed as a percentage of the Contract Price pursuant to the

SCC for GCC Clause 12.1.

The security shall be returned to the Supplier immediately after its expiration.

13.3 Performance Security

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**.

13.3.2 The security shall be a bank guarantee in the form provided in the Sample Contractual Forms Section of the bidding documents, or it shall be in another form acceptable to the Purchaser.

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.

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 the Operational Acceptance, so that the reduced security would only cover the remaining warranty obligations of the Supplier.

14. Taxes and Duties

- 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 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.
- 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.
- 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.
- 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.

D. INTELLECTUAL PROPERTY

15. Copyright

- 15.1 The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such rights.
- 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.
- 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 **unless otherwise specified in the SCC** to a legally constituted successor organization (e.g., a reorganization of a public entity formally authorized by the government or through a merger or acquisition of a private entity).
- 15.4 **Unless otherwise specified in 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.

15.5 **Unless otherwise specified in the SCC**, escrow arrangements shall NOT be required.

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.

Such license to access and use the Software shall:

- (a) be:
 - (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) **unless otherwise specified in the SCC** valid throughout the territory of the Purchaser's Country;
 - (iv) **unless otherwise specified in the SCC** subject to NO additional restrictions.
- (b) permit the Software to be:
 - (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) 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, 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 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;
- (iv) reproduced for safekeeping or backup purposes;
- (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;
- (vi) **unless otherwise 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
- (vii) **unless otherwise specified in the SCC** disclosed to, and reproduced for use by, NO other parties.

16.2 The Supplier has the right to audit the Standard Software to verify compliance with the above license agreements. **Unless otherwise specified in the SCC**, the Purchaser will make available to the Supplier, within seven (7) days of a written request, 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. If and only if, expressly agreed in writing between the Purchaser and the Supplier, Purchaser will allow, under a pre-specified agreed procedure, the execution of embedded software functions under Supplier's control, and unencumbered transmission of resulting information on software usage.

17. Confidential Information

17.1 Unless 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.

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 relating to the businesses, finances, suppliers, employees, or other contacts of the Purchaser or the Purchaser's use of the System.

17.3 Notwithstanding GCC Clauses 17.1 and 17.2:

- (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,

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.

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.

17.5 The obligation of a party under GCC Clauses 17.1 through 17.4 above, however, shall not apply to that information which:

- (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 confidentiality.

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.

17.7 **Unless otherwise specified in the SCC**, the provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for three (3) years.

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

18. Representatives 18.1 Project Manager

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. **Unless otherwise 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.

18.2 Supplier's Representative

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 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.

- 18.2.2 **Unless otherwise 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.
- 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.
- 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.
- 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 delivered.
- 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.

18.3 Objections and Removals

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.

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.

19. Project Plan

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.

19.2 **Unless otherwise specified in the SCC**, within thirty (30) days from the Effective Date of the Contract, the Supplier shall present a Project Plan to the Purchaser. The Purchaser shall, within fourteen (14) 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 five (5) days of receipt of such notification, correct the Project Plan and resubmit to the Purchaser. The Purchaser shall, within five (5) 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 Project Plan) shall be contractually binding on the Purchaser and the Supplier.

19.3 If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 39 and 40.

19.4 The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed Project Plan and the Contract.

19.5 **Unless otherwise specified in the SCC**, the Supplier shall submit to the Purchaser Monthly Progress Reports summarizing:

- (i) results accomplished during the prior period;
- (ii) cumulative deviations to date from schedule of progress milestones as specified in the Agreed 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.

19.6 The Supplier shall submit to the Purchaser other (periodic) reports **as specified in the SCC**.

- 20. Subcontracting**
- 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.
- 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.
- 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, or in Appendix 3 of the Contract Agreement.

21. Design and Engineering

21.1 Technical Specifications and Drawings

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.

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.

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.

21.2 Codes and Standards

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. 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.

21.3 Approval/Review of Controlling Technical Documents by the Project Manager

21.3.1 **Unless otherwise specified in the SCC**, there will NO Controlling Technical Documents required. However, **if the SCC specifies** Controlling Technical Documents, the Supplier shall prepare and furnish

such documents for the Project Manager's approval or review.

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 approval of these documents.

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.

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.

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.

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.

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 43.1 (Adjudication). If 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 43.1.2, 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.

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.

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.

22. Procurement, Delivery, and Transport

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.

22.2 Delivery of the Information Technologies, Materials, and other Goods shall be made by the Supplier in accordance with the Technical Requirements.

22.3 Early or partial deliveries require the explicit written consent of the Purchaser, which consent shall not be unreasonably withheld.

22.4 Transportation

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.

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.

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.

22.5 **Unless otherwise specified in the SCC**, the Supplier will provide the Purchaser with shipping and other documents, as specified below:

22.5.1 For Goods supplied from outside the Purchaser's Country:

Upon shipment, the Supplier shall notify the Purchaser and the insurance company contracted by the Supplier to provide cargo insurance by 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:

- (a) two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount;
- (b) usual transportation documents;
- (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.

22.5.2 For Goods supplied locally (i.e., from within the Purchaser's country):

Upon shipment, the Supplier shall notify the Purchaser by 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:

- (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.

22.6 Customs Clearance

- (a) The Purchaser will bear responsibility for, and cost of, customs clearance into the Purchaser's country in accordance with 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:

- (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 compensate the Supplier for any additional storage charges that the Supplier may incur as a result of the delay.

23. Product Upgrades

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).

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).

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.

23.4 **Unless otherwise specified in the SCC**, during the Warranty Period, 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.

- 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 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 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, 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.
- 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 43 (Settlement of Disputes), starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.

26. Installation of the System

- 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 Project Plan, the Supplier shall so notify the Purchaser in writing.
- 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 Contractual 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 this GCC Clause 26.2 shall be repeated, as necessary, until an Installation Certificate is issued.
- 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.

27. Commissioning and Operational Acceptance

27.1 Commissioning

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:

- (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 Project Plan; or
- (c) immediately after Installation is deemed to have occurred, under GCC Clause 26.3.

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.

Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing.

27.2 Operational Acceptance Tests

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]), 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. **Unless otherwise specified in the SCC**, the Operational Acceptance Tests during Commissioning will be conducted as specified in the Technical Requirements and/or the Agreed Project Plan.

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.

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 ninety (90) days 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 Project Plan, and GCC Clause 28.2 and 28.3 shall not apply.

27.3 Operational Acceptance

27.3.1 Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when

- (a) the Operational Acceptance Tests, as specified in the Technical Requirements, and/or SCC and/or the Agreed 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 specified in GCC Clause 27.2.2 above; or
- (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.

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.

27.3.3 After consultation with the Purchaser, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall:

- (a) issue an Operational Acceptance Certificate; or
- (b) notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or
- (c) issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.3.1 (b) arises.

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 Operational Acceptance Certificate is issued.

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:

- (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.

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.

27.4 Partial Acceptance

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.

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 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.

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.

F. GUARANTEES AND LIABILITIES

28. Operational Acceptance Time Guarantee

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 and/or the Agreed 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).

28.2 **Unless otherwise specified in the SCC**, 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 or the Agreed 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 of one half of one percent per week as a percentage of the Contract Price (exclusive of Recurrent Costs if any), 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 of ten (10) percent of the Contract Price (exclusive of Recurrent Costs if any). Once the Maximum is reached, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2.

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 and/or Agreed 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.

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.

- 29. Defect Liability**
- 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. **Unless otherwise specified in the SCC**, there will be NO exceptions and/or limitations to this warranty with respect to Software (or categories of Software). 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.
- 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.
- 29.3 **Unless otherwise specified in the SCC**, 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, and (ii) they have been previously released to the market.
- 29.4 **Unless otherwise specified in the SCC**, the Warranty Period shall commence from the date of 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 thirty-six (36) months.

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.

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:

- (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.

29.7 The Supplier's obligations under this GCC Clause 29 shall not apply to:

- (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.

29.8 The Purchaser shall give the Supplier a notice promptly 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.

- 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.

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.

- 29.10 **Unless otherwise specified in the SCC**, the response times and repair/replacement times for Warranty Defect Repair are specified in the Technical Requirements. Nevertheless, if the Supplier fails to commence the work necessary to remedy such defect or any damage to the System caused by such defect within two weeks 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.

- 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.

- 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,

whichever is greater. For reasons of information security, the Purchaser may choose to retain physical possession of any replaced defective information storage devices.

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 licensors 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.

30. Functional Guarantees

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.

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.

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.

**31. Intellectual
Property Rights
Warranty**

31.1 The Supplier hereby represents and warrants that:

- (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 Purchaser in accordance with the Contract

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.

**32. Intellectual
Property Rights
Indemnity**

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:

- (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
- (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.

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.

32.3 Such indemnities shall also not apply if any claim of infringement:

- (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.

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.

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.

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 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.

32.6 Such indemnity shall not cover

- (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.

32.7 Such indemnities shall also not apply:

- (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.

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 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:

- (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
- (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.

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.

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.

- 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.

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 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.

35.2 If any loss or damage occurs to the System or any part of the System by reason of:

- (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,

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.
- 36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification**
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- 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.

37. Insurances

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.

(a) Cargo Insurance During Transport

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.

(b) Installation "All Risks" Insurance

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.

(c) Third-Party Liability Insurance

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.

(d) Automobile Liability Insurance

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.

(e) Other Insurance (if any), as **specified in the SCC**.

- 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 policies.
- 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.
- 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.
- 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.
- 37.6 Unless otherwise provided in the Contract, the Supplier shall prepare and conduct all and any claims made under the policies affected 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.

38. Force Majeure

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:

- (a) war, hostilities, or warlike operations (whether a state of war be declared or not), invasion, act of foreign enemy, and civil war;
- (b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, and terrorist acts;
- (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;
- (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;
- (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;
- (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.

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.

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).

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.

38.5 No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall:

- (a) constitute a default or breach of the Contract;
- (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,

if, and to the extent that, such delay or nonperformance is caused by the occurrence of an event of Force Majeure.

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.

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.

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.

H. CHANGE IN CONTRACT ELEMENTS

39.1 Introducing a Change

39. Changes to the System

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 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.

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).

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.

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.

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 Contractual Forms Section in the bidding documents.

- 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.

39.2 Changes Originating from Purchaser

- 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:

- (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.

- 39.2.2 Prior to preparing and submitting the "Change Proposal," the Supplier shall submit to the Project Manager a "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:

- (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.

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 with GCC Clause 39.2.6, then GCC Clause 39.2.7 shall apply.

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.

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.

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.

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 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.

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).

39.3 Changes Originating from Supplier

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.

39.4 Value engineering. The Supplier may prepare, at its own cost, a value engineering proposal at any time during the performance of the Contract. The value engineering proposal shall, at a minimum, include the following;

- (a) the proposed change(s), and a description of the difference to the existing Contract requirements;
- (b) a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Purchaser may incur in implementing the value engineering proposal; and
- (c) a description of any effect(s) of the change on performance/functionality.

The Purchaser may accept the value engineering proposal if the proposal demonstrates benefits that:

- (a) accelerates the delivery period; or
- (b) reduces the Contract Price or the life cycle costs to the Purchaser; or
- (c) improves the quality, efficiency, safety or sustainability of the systems; or
- (d) yields any other benefits to the Purchaser,

without compromising the necessary functions of the systems.

If the value engineering proposal is approved by the Purchaser and results in:

- (a) a reduction of the Contract Price; the amount to be paid to the Supplier shall be the percentage specified in the SCC of the reduction in the

Contract Price; or

(b) an increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in (a) to (d) above, the amount to be paid to the Supplier shall be the full increase in the Contract Price.

40. Extension of Time for Achieving Operational Acceptance

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:

- (a) any Change in the System as provided in GCC Clause 39 (Change in the Information System);
- (b) any occurrence of Force Majeure as provided in GCC Clause 38 (Force Majeure);
- (c) default of the Purchaser; or
- (d) any other matter specifically mentioned in the Contract;

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.

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 43.

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.

41.1 Termination for Purchaser's Convenience

41. Termination

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.

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

(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 safe condition;

(b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.1.2 (d) (ii) below;

(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;

(d) in addition, the Supplier, subject to the payment specified in GCC Clause 41.1.3, shall

(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 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;

(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.

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:

- (a) the Contract Price, properly attributable to the parts of the System executed by the Supplier as of the date of termination;
- (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;
- (c) any amount to be paid by the Supplier to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;
- (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
- (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.

41.2 Termination for Supplier's Default

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:

- (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;

- (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
- (c) if the Supplier, in the judgment of the Purchaser has engaged in Fraud and Corruption, as defined in paragraph 2.2 a. of the Appendix to the GCC, 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.

41.2.2 If the Supplier:

- (a) has abandoned or repudiated the Contract;
- (b) has without valid reason failed to commence work on the System promptly;
- (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;
- (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 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;

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.

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:

- (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 safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.2.3 (d) below;
- (c) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;
- (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;
- (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.

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.

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 Supplier under this Contract.

- 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.

41.3 Termination by Supplier

41.3.1 If:

- (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

- (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 or failure to obtain any governmental permit necessary for the execution and/or completion of the System;

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.

- 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.

- 41.3.3 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, then the Supplier shall immediately:

- (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.

(d) In addition, the Supplier, subject to the payment specified in GCC Clause 41.3.4, shall:

(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.

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.

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.

41.4 In this GCC Clause 41, the expression "portion of the

System executedö 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.

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 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.

I. SETTLEMENT OF DISPUTES

43.1 Adjudication

43. Settlement of Disputes

43.1.1 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 43.2.1.

43.1.2 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.

43.1.3 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.

43.1.4 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.

43.2 Arbitration

43.2.1 If

- (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 43.1.2, or

- (b) the Adjudicator fails to give a decision within the allotted time from referral of the dispute pursuant to GCC Clause 43.1.2, 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 43.1.1 expires without resolution of the dispute and the Purchaser or the Supplier acts within the following fourteen (14) days,

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 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.

43.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Clause 43.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after Installation of the Information System.

43.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC.**

43.3 Notwithstanding any reference to the Adjudicator or arbitration in this clause,

- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree;
- (b) the Purchaser shall pay the Supplier any monies due the Supplier.

APPENDIX

Fraud and Corruption *(Text in this Appendix shall not be modified)*

1. Purpose

- 1.1 The Bank's Anti-Corruption Guidelines and this annex apply with respect to procurement under Bank Investment Project Financing operations.

2. Requirements

- 2.1 The Bank requires that Borrowers (including beneficiaries of Bank financing); bidders (applicants/proposers), consultants, contractors and suppliers; any sub-contractors, sub-consultants, service providers or suppliers; any agents (whether declared or not); and any of their personnel, observe the highest standard of ethics during the procurement process, selection and contract execution of Bank-financed contracts, and refrain from Fraud and Corruption.

- 2.2 To this end, the Bank:

- a. Defines, for the purposes of this provision, the terms set forth below as follows:

- i. "corrupt practice" 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" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" 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" 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:
 - (a) 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 any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
- d. Pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹ (ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
- e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders (applicants/proposers), consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the Bank.

¹ For the avoidance of doubt, a sanctioned party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and bidding, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

² A nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider (different names are used depending on the particular bidding document) is one which has been: (i) included by the bidder in its pre-qualification application or bid because it brings specific and critical experience and know-how that allow the bidder to meet the qualification requirements for the particular bid; or (ii) appointed by the Borrower.

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

Section IX - Special Conditions of Contract

Table of Content

A. CONTRACT AND INTERPRETATION	336
1. Definitions (GCC Clause 1)	336
2. Contract Documents (GCC Clause 2).....	337
3. Interpretation (GCC Clause 3)	337
4. Notices (GCC Clause 4).....	337
5. Governing Law (GCC Clause 5)	337
6. Fraud and Corruption (GCC Clause 6)	337
B. SUBJECT MATTER OF CONTRACT.....	338
7. Scope of the System (GCC Clause 7).....	338
8. Time for Commencement and Operational Acceptance (GCC Clause 8)	338
9. Supplier's Responsibilities (GCC Clause 9)	338
10.Purchaser's Responsibilities (GCC Clause 10).....	339
C. Payment	339
11.Contract Price (GCC Clause 11).....	339
12.Terms of Payment (GCC Clause 12).....	339
13.Securities (GCC Clause 13).....	342
14.Taxes and Duties (GCC Clause 14)	342
D. INTELLECTUAL PROPERTY.....	344
15.Copyright (GCC Clause 15)	344
16.Software License Agreements (GCC Clause 16).....	345
17.Confidential Information (GCC Clause 17)	346
E. SUPPLY, INSTALLATION, TESTING, COMMISSIONING, AND ACCEPTANCE OF THE SYSTEM	346
18.Representatives (GCC Clause 18).....	346
19.Project Plan (GCC Clause 19)	346
20.Subcontracting (GCC Clause 20).....	348
21.Design and Engineering (GCC Clause 21)	348
22.Procurement, Delivery, and Transport (GCC Clause 22).....	351
23.Product Upgrades (GCC Clause 23)	351

24.Implementation, Installation, and Other Services (GCC Clause 24)	351
25.Inspections and Tests (GCC Clause 25)	352
26.Installation of the System (GCC Clause 26).....	352
27.Commissioning and Operational Acceptance (GCC Clause 27)	352
F. GUARANTEES AND LIABILITIES	352
28.Operational Acceptance Time Guarantee (GCC Clause 28)	352
29.Defect Liability (GCC Clause 29).....	353
30.Functional Guarantees (GCC Clause 30)	353
31.Intellectual Property Rights Warranty (GCC Clause 31)	353
32.Intellectual Property Rights Indemnity (GCC Clause 32).....	353
33.Limitation of Liability (GCC Clause 33)	354
G. RISK DISTRIBUTION	354
34.Transfer of Ownership (GCC Clause 34)	354
35.Care of the System (GCC Clause 35).....	354
36. Loss of or Damage to Property; Accident or Injury to Workers; Indemnification (GCC Clause 36)	354
37.Insurances (GCC Clause 37).....	354
38.Force Majeure (GCC Clause 38)	355
H. CHANGE IN CONTRACT ELEMENTS.....	355
39.Changes to the System (GCC Clause 39)	355
40.Extension of Time for Achieving Operational Acceptance (GCC Clause 40)	355
41.Termination (GCC Clause 41)	355
42.Assignment (GCC Clause 42).....	355
I. SETTLEMENT OF DISPUTES.....	355
43. Settlement of Disputes (GCC Clause 43)	355

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: <i>January 2011 and Revised July 2014</i>
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) HPPWDö
GCC 1.1 (e) (i)	The Purchaser’s Country is: <i>India</i>
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)	<i>Contract Period:</i> a) Development Phase- 1 Year b) Service Delivery Phase/Managed IT Phase ö 3 Years from the date of System Go-Live sign off, inclusive of one year of the warranty period & 2 years of post-warranty on expiry of the warranty period. “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.”
GCC 1.1. (e) (xii)	The Post- Warranty Services Period shall be 2 years starting from the date of expiry of Warranty period (i.e. 1 year after go live) as defined in clause ö Defect Liability, SCC 29.4.

2. Contract Documents (GCC Clause 2)

GCC 2	<i>“There are no Special Conditions of Contract applicable to GCC Clause 2.”</i>
-------	---

3. Interpretation (GCC Clause 3)

GCC 3.1.1	The Contract's governing language is English
-----------	--

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 6 171 002 Tel: 0177 6 2627602, 2620663 Fax: 0177 6 2620663 E-mail: pdsrp-hp@nic.in India</p>
---------	--

5. Governing Law (GCC Clause 5)

GCC 5.1	The Contract shall be interpreted in accordance with the laws of Indian Union
---------	--

6. Fraud and Corruption (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-</p>
-----------	---

	Clause, the term "Indian Supplier" means a Supplier who is registered in 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 Sub clause, 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 consumables, 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 consumables, 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 consumables, spare parts, technical services and all other costs and expenses (including the Supplier's fees).</p>
---------	--

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	The Supplier shall have the following additional responsibilities: The
---------	--

	<p>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 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>
--	--

10. Purchaser's Responsibilities (GCC Clause 10)

GCC 10.12	The Purchaser shall have the following additional responsibilities : None
-----------	--

C. Payment

11. Contract Price (GCC Clause 11)

GCC 11.2 (b)	Adjustments to the Contract Price shall be as follows: None
--------------	--

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.			
Terms of payment for the supply of Software Application				
Sr. No.	Payment Milestone	Payment Formula linked to Pricing Form	Basis of approval	
Payment Milestone for Application Software				
1..	Advance Payment against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2.	5 % of the table 2.3 Supply and Installation Cost Summary Table for	Minutes of meeting of Committee approving the	

		Application software	report
2.	SRS sign-off (including Use cases, ER Diagram, Data Flow diagram, Alerts, Notifications, Dashboards, Output Reports, Interface Design)	10 % of the table 2.3 Supply and Installation Cost Summary Table for Application software	Minutes of meeting of Committee approving the report
3.	1.System User Acceptance Testing (UAT) 2.Submission & Approval of Following Reports/Documents <ul style="list-style-type: none"> User Acceptance Testing (UAT) Report and Sign off on Report Application Architecture/design 	20 % of the table 2.3 Supply and Installation Cost Summary Table for Application software	Minutes of meeting of Committee approving the report
4.	System Go oLive	35% of the table 2.3 Supply and Installation Cost Summary Table for Application software	Minutes of meeting of Committee approving the report
Payment Milestone for O&M Phase			
5.	Twelve equal quarterly installments spread over three (3) years from the oGo-Liveo date depending upon the quarterly performance level assessed on the basis of SLAs defined in this RFP	30 % of the table 2.3 Supply and Installation Cost Summary Table for Application software and 100% of point no. 1, O&M for Application software of table 2.5 Recurrent cost table	Minutes of meeting of Committee approving the report
Terms of Payment Schedule for DR,DC & Field Office Hardware			
Sr. No.	Payment Milestone	Payment Formula linked to Pricing Form	Basis of approval
Payment Milestone for Implementation Phase			

	1..	Supply & Successful Installation of DR and Field office Infrastructure (Field Acceptance Report)	80% of the table 2.4 Supply and Installation Cost Summary Table for Hardware	Minutes of meeting of Committee approving the report
	Payment Milestone for O&M Phase			
	2.	Twelve equal installments over three (3) years from the "Go-Live" date depending upon the quarterly performance level assessed on the basis of SLAs defined in this RFP	20% of the table 2.4 Supply and Installation Cost Summary Table for Hardware And 100% of point no. 2, Annual O&M for hardware of table 2.5 Recurrent cost table	Minutes of meeting of Committee approving the report
	Terms of Payment Schedule for Manpower Supply			
	Sr. No.	Payment Milestone	Payment Formula linked to Pricing Form	Basis of approval
	Payment Milestone for O&M Phase			
	1.	Twelve equal installments over three (3) years from the "Go-Live" date depending upon the quarterly performance level assessed on the basis of SLAs defined in this RFP	100% of point no. 3, manpower cost of table 2.5 Recurrent cost table	Minutes of meeting of Committee approving the report
	*DR & Field Office Infrastructure projected to be deployed at UAT stage; however, the client reserves the right to revise the deployment date.			
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 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	<p>Performance Security will be returned to the selected bidder in following manner:</p> <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.,
--------	---

	<p>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 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>
--	---

D. INTELLECTUAL PROPERTY

15. Copyright (GCC Clause 15)

GCC 15.3	<p>The Purchaser may assign, license, or otherwise voluntarily transfer its contractual rights to use the Standard Software or elements of the 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 <ul style="list-style-type: none"> 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
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> <ol style="list-style-type: none"> 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. 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 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	Chapters in the Project Plan shall address the following subject: <ul style="list-style-type: none"> a) <i>Project Organization, implementation and Management Plan;</i> b) <i>Procurement Plan</i> c) <i>Delivery and Installation Plan</i> d) <i>Training Plan</i> e) <i>Quality Assurance Plan</i>
----------	---

	<p>f) <i>Risk Management Plan</i></p> <p>g) <i>Communication Plan</i></p> <p>h) <i>Change Management Plan</i></p> <p>i) <i>Network Connectivity Requirement Report</i></p> <p>j) <i>Pre-commissioning and Operational Acceptance Testing Plan</i></p> <p>k) <i>Warranty Service Plan</i></p> <p>l) <i>Task, Time, and Resource Schedules</i></p> <p>m) <i>Technical Support Plan</i></p> <p>n) <i>Exist management Plan</i></p> <p>o) <i>Data digitization plan</i></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) <i>Monthly (Quarterly) progress reports, summarizing:</i></p> <p style="padding-left: 40px;">(i) <i>results accomplished during the prior period;</i></p> <p style="padding-left: 40px;">(ii) <i>cumulative deviations to date from schedule of progress milestones as specified in the Agreed and Finalized Project Plan;</i></p> <p style="padding-left: 40px;">(iii) <i>corrective actions to be taken to return to planned</i></p>

	<p><i>schedule of progress; proposed revisions to planned schedule;</i></p> <p><i>(iv) other issues and outstanding problems; proposed actions to be taken;</i></p> <p><i>(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;</i></p> <p><i>(vi) other issues or potential problems the Supplier foresees that could impact on project progress and/or effectiveness.</i></p> <p><i>(vi) Plan for the Next Month</i></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>
--	---

20. Subcontracting (GCC Clause 20)

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

21. Design and Engineering (GCC Clause 21)

GCC 21.2	As specified in the GCC
GCC 21.3.1	<i>The Supplier shall prepare and furnish to the Project Manager the</i>

	<p><i>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</i></p> <p>Key Deliverable – I (Requirement Gathering)</p> <ol style="list-style-type: none"> 1. Detailed Project Plan 2. Procurement Schedule 3. Acceptance Criteria 4. Updated Risk Management Plan 5. Communication Strategy 6. Change Management Plan 7. Change Management Workshop(s) Execution Report ó 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
--	---

	<p>18. Network connectivity solution Architecture</p> <p>19. Design of LAN and Internet connectivity</p> <p>Key Deliverable – III (Hardware Readiness)</p> <p>20. Installation Report - all sites and locations</p> <p>Key Deliverable – IV (Network Readiness)</p> <p>21. Installation Report of LAN</p> <p>Key Deliverable – V (DR site Readiness)</p> <p>22. Installation Report - DR equipment</p> <p>23. Installation Report - System Software(s)</p> <p>24. Domain Migration Report</p> <p>25. Site Readiness Report (Hosting site)</p> <p>26. Firewall Configuration Documentation</p> <p>27. Security Policy</p> <p>28. Security Policy Compliance Report</p> <p>Key Deliverable – VI (Pre-Commissioning Testing)</p> <p>29. Test Plan Report</p> <p>30. Test Cases Report</p> <p>31. Change Management Workshop(s) Execution Report of 2</p> <p>32. Pre-commissioning Test issue sheet</p> <p>33. User Acceptance Test (UAT) Report</p> <p>34. Sign-off on Reports</p> <p>35. Sign-off on Pre-Commissioning Test</p> <p>Key Deliverable – VII (User Training)</p> <p>36. Training Plan</p>
--	--

	<p>37. Training Execution Reports</p> <p>38. CBT Application sign-off</p> <p>39. CBT Application Manual</p> <p>Key Deliverable – VIII (Operational Acceptance)</p> <p>40. Installation Roll-out Plan</p> <p>41. Data Migration Strategy</p> <p>42. Data Migration Sign-off</p> <p>43. Operational Acceptance Plan</p> <p>44. Administration/ technical Manual</p> <p>45. User Manual</p> <p>46. 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>
--	---

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
------------	--

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
----------	---

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.
--------	--

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>
--------	---

26. Installation of the System (GCC Clause 26)

GCC 26	<p>There are no Special Conditions of Contract applicable to GCC Clause 26</p>
--------	--

27. Commissioning and Operational Acceptance (GCC Clause 27)

GCC 27.2.1	<p>Operational Acceptance Testing for the entire system shall be conducted in accordance with Section VI: Technical Requirements (D. Testing and Quality Assurance Requirements).</p>
GCC 27.2.2	<p>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.</p>

F. GUARANTEES AND LIABILITIES

28. Operational Acceptance Time Guarantee (GCC Clause 28)

GCC 28.2	<p>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</p>
----------	--

	Subsystem.
GCC 28.3	Liquidated damages shall be assessed at the Pre-Commissioning Test (Key Deliverable – VI), Operational Acceptance Test (Key Deliverable – VIII) 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) of 12 months shall begin from the date of “ Go-Live ” of the System or Subsystem and post warranty shall be for 24 months after expiry of warranty period.
GCC 29.10	During the Warranty Period, the Supplier must commence the work necessary to remedy defects or damage within 12 hours of notification

30. Functional Guarantees (GCC Clause 30)

GCC 30	There are no Special Conditions of Contract applicable to GCC Clause 30.
--------	--

31. Intellectual Property Rights Warranty (GCC Clause 31)

GCC 31	There are no Special Conditions of Contract applicable to GCC Clause 31.
--------	--

32. Intellectual Property Rights Indemnity (GCC Clause 32)

GCC 32	There are no Special Conditions of Contract applicable to GCC Clause 32
--------	---

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.
--------	---

G. RISK DISTRIBUTION

34. Transfer of Ownership (GCC Clause 34)

GCC 34	There are no Special Conditions of Contract applicable to GCC Clause 34.
--------	--

35. Care of the System (GCC Clause 35)

GCC 35	There are no Special Conditions of Contract applicable to GCC Clause 35
--------	---

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.
--------	--

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</p>

	until expiration date, relative to the Effective Date of Contract or its completion.
--	--

38. Force Majeure (GCC Clause 38)

GCC 38	There are no Special Conditions of Contract applicable to GCC Clause 38
--------	---

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
--------	---

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.
--------	--

41. Termination (GCC Clause 41)

GCC 41	There are no Special Conditions of Contract applicable to GCC Clause 41
--------	---

42. Assignment (GCC Clause 42)

GCC 42	There are no Special Conditions of Contract applicable to GCC Clause 42.
--------	--

I. SETTLEMENT OF DISPUTES

43. Settlement of Disputes (GCC Clause 43)

GCC 43.1.4	Disputes shall be settled by arbitration in accordance with the following
------------	---

	<p>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 India and is a juridical firm created under Indian law as well as a joint venture between such a Supplier and a Foreign Supplier.</p>
GCC 43.2.3	<p>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 Sub clause, the term "Foreign Supplier" means a Supplier who is not registered in India and is not a juridical person created under Indian Law.</p>

Section X - Contract Forms

Table of Contract Forms

Notification of Intention to Award	359
Beneficial Ownership Disclosure Form	364
Letter of Acceptance	367
1. Contract Agreement.....	368
Appendix 1. Supplier's Representative	372

Appendix 2. Adjudicator	373
Appendix 3. List of Approved Subcontractors	374
Appendix 4. Categories of Software	375
Appendix 5. Custom Materials	376
Appendix 6. Revised Price Schedules.....	377
Appendix 7. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments	378
2. Performance and Advance Payment Security Forms	379
2.1 Performance Security Form (Bank Guarantee).....	380
2.2 Advance Payment Security	382
Bank Guarantee.....	382
3. Installation and Acceptance Certificates	384
3. Installation and Acceptance Certificates	384
3.1 Installation Certificate	385
3.2 Operational Acceptance Certificate	386
4. Change Order Procedures and Forms	387
4.1 Request for Change Proposal Form	388
4.2 Change Estimate Proposal Form.....	390
4.3 Estimate Acceptance Form	392
4.4 Change Proposal Form	394
4.5 Change Order Form.....	396
4.6 Application for Change Proposal Form.....	398

NOTIFICATION OF INTENTION TO AWARD

[This Notification of Intention to Award shall be sent to each Bidder that submitted a Bid.]

[Send this Notification to the Bidder's Authorized Representative named in the Bidder Information Form]

For the attention of Bidder's Authorized Representative

Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to all participating Bidders. The Notification must be sent to all Bidders simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[email/fax]* on *[date]* (local time)

Notification of Intention to Award

[Purchaser]: *[insert the name of the Purchaser]*

Project: *[insert name of project]*

Contract title: *[insert the name of the contract]*

Country: *[insert country where RFB is issued]*

Loan No. /Credit No. / Grant No.: *[insert reference number for loan/credit/grant]*

RFB No: *[insert RFB reference number from Procurement Plan]*

This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period you may:

- a) request a debriefing in relation to the evaluation of your Bid, and/or
- b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Bidder

Name:	[insert name of successful Bidder]
Address:	[insert address of the successful Bidder]
Contract price:	[insert contract price of the successful Bidder]
Total combined score:	[insert the total combined score of the successful Bidder]

2. Other Bidders *[INSTRUCTIONS: insert names of all Bidders that submitted a Bid. If the Bid's price was evaluated include the evaluated price as well as the Bid price as read out.]*

Name of Bidder	Technical Score (If applicable)	Bid price	Evaluated Bid Cost	Combined Score (if applicable)
[insert name]	[insert Technical score]	[insert Bid price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Bid price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Bid price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Bid price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Bid price]	[insert evaluated cost]	[insert combined score]

3. Reason/s why your Bid was unsuccessful *[Delete if the combined score already reveals the reason]*

[INSTRUCTIONS; State the reason/s why this Bidder's Bid was unsuccessful. Do NOT include: (a) a point by point comparison with another Bidder's Bid or (b) information that is marked confidential by the Bidder in its Bid.]

4. How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).

You may request a debriefing in relation to the results of the evaluation of your Bid. If you decide to request a debriefing your written request must be made within three (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Bidder, contact details; and address the request for debriefing as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number] delete if not used*

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (5) Business Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of the Contract Award Notice.

5. How to make a complaint

DEADLINE: The deadline for submitting a Procurement-related Complaint challenging the decision to award the contract expires on midnight, *[insert date]* (local time).

Provide the contract name, reference number, name of the Bidder, contact details; and address the Procurement-related Complaint as follows:

Attention: *[insert full name of person, if applicable]*

Title/position: *[insert title/position]*

Agency: *[insert name of Purchaser]*

Email address: *[insert email address]*

Fax number: *[insert fax number] delete if not used*

At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have

requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

Further information:

For more information see the [Procurement Regulations for IPF Borrowers \(Procurement Regulations\)](#) (Annex III). You should read these provisions before preparing and submitting your complaint. In addition, the World Bank's Guidance [How to make a Procurement-related Complaint](#) provides a useful explanation of the process, as well as a sample letter of complaint.

In summary, there are four essential requirements:

1. You must be an interested party. In this case, that means a Bidder who submitted a Bid in this procurement, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the deadline stated above.
4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

6. Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended. This may happen where we are unable to provide a debriefing within the five (5) Business Day deadline. If this happens we will notify you of the extension.

If you have any questions regarding this Notification please do not hesitate to contact us.

On behalf of the Purchaser:

Signature: _____

Name: _____

Title/position: _____

Telephone: _____

Email: _____

BENEFICIAL OWNERSHIP DISCLOSURE FORM

INSTRUCTIONS TO BIDDERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful Bidder. In case of joint venture, the Bidder must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Bidder is any natural person who ultimately owns or controls the Bidder by meeting one or more of the following conditions:

- *directly or indirectly holding 25% or more of the shares*
- *directly or indirectly holding 25% or more of the voting rights*
- *directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder*

RFB No.: [insert number of RFB process]

Request for Bid No.: [insert identification]

To: [insert complete name of Purchaser]

In response to your request in the Letter of Acceptance dated [insert date of letter of Acceptance] to furnish additional information on beneficial ownership: [select one option as applicable and delete the options that are not applicable]

(i) we hereby provide the following beneficial ownership information.

Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Bidder (Yes / No)

<i>[include full name (last, middle, first), nationality, country of residence]</i>			
---	--	--	--

OR

(ii) *We declare that there is no Beneficial Owner meeting one or more of the following conditions:*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder

OR

(iii) *We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Bidder shall provide explanation on why it is unable to identify any Beneficial Owner]*

- directly or indirectly holding 25% or more of the shares
- directly or indirectly holding 25% or more of the voting rights
- directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Bidder]

Name of the Bidder: **[insert complete name of the Bidder]*_____

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ***[insert complete name of person duly authorized to sign the Bid]*_____

Title of the person signing the Bid: *[insert complete title of the person signing the Bid]*_____

Signature of the person named above: *[insert signature of person whose name and capacity are shown above]*_____

Date signed *[insert date of signing]* day of *[insert month]*, *[insert year]*_____

* In the case of the Bid submitted by a Joint Venture specify the name of the Joint Venture as Bidder. In the event that the Bidder is a joint venture, each reference to "Bidder" in the Beneficial Ownership Disclosure Form (including this Introduction thereto) shall be read to refer to the joint venture member.

** Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

LETTER OF ACCEPTANCE

To: _____

This is to notify you that your Bid dated _____ for execution of the _____ for the Contract Price in the aggregate of _____, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish (i) the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms and (ii) the additional information on beneficial ownership in accordance with BDS ITB 47.1 within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X, - Contract Forms, of the Bidding Document.

Authorized Signature: _____

Name and Title of Signatory: _____

Name of Agency: _____

Attachment: Contract Agreement

1. 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:

Article 1.

1.1 Contract Documents (Reference GCC Clause 1.1 (a) (ii))

Contract Documents

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:

- (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]**

1.2 Order of Precedence (Reference GCC Clause 2)

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.

1.3 Definitions (Reference GCC Clause 1)

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.

Article 2.

Contract Price and
Terms of Payment

2.1 Contract Price (Reference GCC Clause 1.1(a)(viii) and GCC Clause 11)

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.

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.

Article 3.

Effective Date for
Determining Time
for Operational
Acceptance

3.1 Effective Date (Reference GCC Clause 1.1 (e) (ix))

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:

- (a) This Contract Agreement has been duly executed for and on behalf of the Purchaser and the Supplier;
- (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;

- (c) The Purchaser has paid the Supplier the advance payment, in accordance with GCC Clause 12;

Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

- 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.

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, facsimile, electronic mail, and/or EDI addresses.]*

Fallback address of the Supplier: *[as appropriate, insert: personal delivery, postal, cable, 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 43.1.3, the agreed-upon fees and reimbursable expenses are:

Hourly Fees: *[insert: hourly fees]*

Reimbursable Expenses: *[list: reimbursables]*

Pursuant to GCC Clause 43.1.4, 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.]

<i>Item</i>	Approved Subcontractors	Place of Registration

Appendix 4. Categories of Software

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.

	(select one per item)			(select one per item)	
Software Item	System Software	General-Purpose Software	Application Software	Standard Software	Custom Software

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 30.3 and 38.2.

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).

2. PERFORMANCE AND ADVANCE PAYMENT SECURITY FORMS

2.1 Performance Security Form (Bank Guarantee) (Bank Guarantee)

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

[Guarantor letterhead or SWIFT identifier code]

*[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**]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

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 which in the case of a joint venture shall be in the name of the joint venture**]* (hereinafter called "the Applicant"). Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor hereby irrevocably undertake to pay you any sum(s) not exceeding *[insert: **amount(s)¹ in figures and words**]* such sum being payable in the types and proportions of currencies which the Contract Price is payable upon receipt by us of the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the contract without the Beneficiary needing to prove or to show grounds or reasons for their 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

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.

Certificate for the System,¹ 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, (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under 15 (a) is hereby excluded.

[Signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

¹ *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.*

2.2 Advance Payment Security

Bank Guarantee

[Guarantor letterhead or SWIFT identifier code]

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

Date: *[insert date of issue]*

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

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

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, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant").

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 Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (_____) *[insert amount in words]*¹ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has used the advance payment for purposes other than toward delivery of Goods;
or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

¹ The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency(ies) of the advance payment as specified in the Contract, or in a freely convertible currency acceptable to the Purchaser.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number *[insert number]* at *[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, has been certified for payment, or on the *[insert day]* day of *[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

.

[signature(s)]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

3. INSTALLATION AND ACCEPTANCE CERTIFICATES

3. Installation and Acceptance Certificates

3.1 Installation Certificate

Date: *[insert: date]*

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

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

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]*

3.2 Operational Acceptance Certificate

Date: *[insert: date]*

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

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

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]*

4. CHANGE ORDER PROCEDURES AND FORMS

Date: *[insert: date]*

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

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

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

- 4.1 Request for Change Proposal Form
- 4.2 Change Estimate Proposal Form
- 4.3 Estimate Acceptance Form
- 4.4 Change Proposal Form
- 4.5 Change Order Form
- 4.6 Application for Change Proposal Form

4.1 Request for Change Proposal Form

(Purchaser's Letterhead)

Date: *[insert: date]*

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

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

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

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]***

4.2 Change Estimate Proposal Form

(Supplier's Letterhead)

Date: *[insert: date]*

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

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

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.

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]*

4.3 Estimate Acceptance Form

(Purchaser's Letterhead)

Date: *[insert: date]*

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

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

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

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]*

4.4 Change Proposal Form

(Supplier's Letterhead)

Date: *[insert: date]*

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

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

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:

- | Document or Drawing No. | Description |
|-------------------------|---|
| 8. | <p>Estimate of the increase/decrease to the Contract Price resulting from the proposed Change: <i>[insert: amount in currencies of Contract]</i>, 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: <i>[insert: amount in days / weeks]</i></p> |
| 10. | <p>Effect on the Functional Guarantees: <i>[insert: description]</i></p> |
| 11. | <p>Effect on the other terms and conditions of the Contract: <i>[insert: description]</i></p> |
| 12. | <p>Validity of this Proposal: for a period of <i>[insert: number]</i> 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 <i>[insert: number]</i> 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]***

4.5 Change Order Form

(Purchaser's Letterhead)

Date: *[insert: date]*

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

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

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]*

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]*

4.6 Application for Change Proposal Form

(Supplier's Letterhead)

Date: *[insert: date]*

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

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

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]*

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*

