GOVERNMENT OF THE REPUBLIC OF GHANA

Republic of Ghana

Ministry of Communication, Digital Technology and Innovations

INTERNATIONAL COMPETITIVE BIDDING

Request for Proposals for Information Systems Design, Supply, and Installation (Single Stage)

DESIGN, SUPPLY, IMPLEMENTATION AND TRAINING FOR THE NATIONAL DATA EXCHANGE HUB

Specific Procurement Notice – Request for Proposals without Prequalification

Request for Proposal
Information Systems
(Design, Supply and Installation)
(Without Prequalification)

Employer: Ministry of Communication, Digital Technology and Innovation

Project: Ghana Digital Accelerated Project

Contract title: Design, Supply, Implementation and Training for the National Data Exchange Hub

Country: Republic of Ghana

Credit No. IDA 70960-GH

RFB No: GDAP/Comp2.1.5 -GH-MOCDTI-512196-GO-RFB

Issued on: 1st June, 2026

1. The Government of the Republic of Ghana has received financing from the World Bank toward the cost of the Ghana Digital Acceleration Project (GDAP), and intends to apply part of the proceeds toward payments under the contract for **DESIGN, SUPPLY, IMPLEMENTATION AND TRAINING FOR THE NATIONAL DATA EXCHANGE HUB**. "**For this contract, the Borrower shall process the payments using the Direct Payment disbursement method, as defined in the World Bank's Disbursement Guidelines for Investment Project Financing, except for those payments, which the contract provides to be made through letter of credit or Bank Transfer.**"

2. The Ministry of Communication, Digital Technology and Innovation (MoCDTI) now invites sealed Proposals from eligible Proposers for the following;

No.	Description	Bid Security
1	Design, Supply, Implementation and Training for the National Data Exchange Hub	2% of the Proposal Amount in a Bank guarantee format or 6% in insurance bond.

3. The procurement process will be conducted through international competitive procurement using Request for Proposals (RFP) as specified in the World Bank's "Procurement Regulations for IPF Borrowers" 7th Edition, September 2025 ("Procurement Regulations"), and is open to all eligible Proposers as defined in the Procurement Regulations.

4. Bids will be evaluated in accordance with the evaluation process set out in the bidding documents. The following weightings shall apply for Rated Criteria (including technical and non-price factors): **80%** for technical and for Bid cost: **20%.**

5. Interested eligible Proposers may obtain further information from the address below and inspect the request for proposals document during office hours 0900 to 1700 at the address given below.

6. The request for proposals document in English may be purchased by interested eligible Proposers upon the submission of a written application to the address below and upon payment of a nonrefundable fee of **GH₵2,000.00**. The method of payment will be cash or bank draft in the name of the Ministry of Communication, Digital Technology and Innovations. The document will be sent by either email, courier or pickup. Cost of courier service to be borne by prospective bidder.

7. Proposals must be delivered to the address below on or before **10:00GMT, 4th August, 2026**. Electronic procurement **will not** be permitted. Late Proposals will be rejected. The outer Proposal envelopes marked "ORIGINAL PROPOSAL", and the inner envelopes marked "TECHNICAL PART" will be publicly opened in the presence of the Proposers' designated representatives and anyone who chooses to attend, at the address below on **10:00GMT, 4th August, 2026**. All envelopes marked "FINANCIAL PART" shall remain unopened and will be held in safe custody of the Purchaser until the second public Proposals opening.

8. All Proposals must be accompanied by a **Proposal Security** in the amount of 2% of the Proposal Amount in a Bank guarantee format or 6% in insurance bond.

9. Attention is drawn to the Procurement Regulations requiring the Borrower to disclose information on the successful Proposer's beneficial ownership, as part of the Contract Award Notice, using the Beneficial Ownership Disclosure Form as included in the request for proposal document.

10. The address (es) referred to above is (are):

Address for Download and/or Purchase of Bidding Documents	**Address for Submission of Bids**
The Chief Director Attn: The Project Coordinator: Ghana Digital Acceleration Project (GDAP) Project Rooms 39 Fifth Floor, Ministry of Communication, Digital Technology and Innovation Office Complex Abdul Diouf Street, near Kofi Annan ICT Centre of Excellence P.O. Box M.38, Ministries, Accra Ghana Digital Address: GA-079-0539 To Email: pcu.gdap@moc.gov.gh URL.: www.moc.gov.gh	The Chief Director Attn: The Project Coordinator: Ghana Digital Acceleration Project (GDAP) Six Floor, Conference Room Ministry of Communication, Digital Technology and Innovation Office Complex Abdul Diouf Street, near Kofi Annan ICT Centre of Excellence P.O. Box M.38, Ministries, Accra Ghana Digital Address: GA-079-0539

Request for Proposals
Information Systems
Design, Supply and Installation

Procurement of:
DESIGN, SUPPLY, IMPLEMENTATION AND TRAINING FOR THE NATIONAL DATA EXCHANGE HUB

Employer: Ministry of Communication, Digital Technology and Innovation
Project: Ghana Digital Accelerated Project
Contract title: Design, Supply, Implementation and Training for the National Data Exchange Hub
Country: Republic of Ghana
Credit No. IDA 70960-GH
RFB No: GDAP/Comp2.1.5 - GH-MOCDTI-512196-GO-RFB
Issued on: 1st June, 2026

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PART 1 – REQUEST FOR PROPOSALS PROCEDURES

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Section I - Instructions to Proposers

A. GENERAL

1. Scope of Proposal

1.1. The Purchaser, as indicated in the PDS, or its duly authorized Purchasing Agent if so specified in the PDS (interchangeably referred to as "the Purchaser" issues this request for proposals 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 RFP are specified in the PDS.

1.2. Unless otherwise stated, throughout this request for proposals document definitions and interpretations shall be as prescribed in the Section VIII, General Conditions of Contract.

Throughout this request for proposals document:

(a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including if specified in the PDS, 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.

(d) "ES" means environmental and social (including Sexual Exploitation and Abuse (SEA), and Sexual Harassment (SH));

(e) "Sexual Exploitation and Abuse" "(SEA)" means the following:

Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.

(f) "Sexual Harassment" "(SH)" is defined as unwelcome sexual advances, requests for sexual favors, and other verbal

or physical conduct of a sexual nature by the Supplier's Personnel with other Supplier's Personnel or Purchaser's Personnel.

(g) "Supplier's Personnel" is as defined in GCC Clause 1.1; and

(h) "Purchaser's Personnel" is as defined in GCC Clause 1.1.

A non-exhaustive list of (i) behaviors which constitute SEA and (ii) behaviors which constitute SH is attached to the Code of Conduct form in Section IV

2. Source of Funds

2.1. The Borrower or Recipient (hereinafter called "Borrower") indicated in the PDS has applied for or received financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified in the PDS toward the project named in the PDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this request for proposals 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, Proposers shall permit and shall cause their agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and 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 Proposers

4.1. A Proposer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITP 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 procurement process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the PDS, there is no limit on the number of members in a JV.

4.2. A Proposer shall not have a conflict of interest. Any Proposer found to have a conflict of interest shall be disqualified. A Proposer may be considered to have a conflict of interest for the purpose of this procurement process, if the Proposer:

(a) directly or indirectly controls, is controlled by or is under common control with another Proposer; or

(b) receives or has received any direct or indirect subsidy from another Proposer; or

(c) has the same legal representative as another Proposer; or

(d) has a relationship with another Proposer, directly or through common third parties, that puts it in a position to influence the Proposal of another Proposer, or influence the decisions of the Purchaser regarding this procurement 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 Proposal; 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 PDS ITP 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 request for proposals document or specifications of the Contract, and/or the Proposal 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 procurement process and execution of the Contract.

4.3. A firm that is a Proposer (either individually or as a JV member) shall not participate as a Proposer or as JV member in more than one Proposal except for permitted alternative Proposals. Such participation shall result in the disqualification of all Proposals in which the firm is involved. However, this does not limit the participation of a Proposer as subcontractor in another Proposal or of a firm as a subcontractor in more than one Proposal.

4.4. A Proposer may have the nationality of any country, subject to the restrictions pursuant to ITP 4.8. A Proposer shall be deemed to have the nationality of a country if the Proposer 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 Proposer 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 PDS.

4.6. Proposers 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 Proposer shall not be under suspension from bidding or submitting proposals 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 request for proposal process is open for all eligible Proposers, unless otherwise specified in ITP 15.2.

4.10. A Proposer 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 request for proposals 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 design, supply and install under the Contract, plus all associated documentation, and all other materials and goods to be designed, 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 Proposer and as specified in the Contract.

5.3. For purposes of ITP 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 THE REQUEST FOR PROPOSALS DOCUMENT

6. Sections of the Request for Proposals Document

6.1. The request for proposals 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 ITP 8:

PART 1 - Request for Proposals Procedures

Section I - Instructions to Proposers (ITP)

Section II - Proposal Data Sheet (PDS)

Section III - Evaluation and Qualification Criteria

Section IV - Proposal 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 – Request for Proposals (RFP) issued by the Purchaser is not part of this request for proposals 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-Proposal meeting (if any), or Addenda to the request for proposals document in accordance with ITP 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.

6.4. The Proposer is expected to examine all instructions, forms, terms, and specifications in the request for proposals document and to furnish with its Proposal all information or documentation as is required by the request for proposals document.

7. Clarification of Request for Proposals Document, Site Visit, Pre-Proposal Meeting

7.1. A Proposer requiring any clarification of the request for proposals document shall contact the Purchaser in writing at the Purchaser's address specified in the PDS or raise its enquiries during the pre-Proposal meeting if provided for in accordance with ITP 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 Proposals within a period specified in the PDS. The Purchaser's shall forward copies of its response to all Proposers who have acquired the request for proposals document in accordance with ITP 6.3, including a description of the inquiry but without identifying its source. If so specified in the PDS, the Purchaser shall also promptly publish its response at the web page identified in the PDS. Should the Purchaser deem it necessary to amend the request for proposals document as a result of a request for clarification, it shall do so following the procedure under ITP 8 and ITP 23.2.

7.2. The Proposer 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 Proposal and entering into a contract. The costs of visiting the site shall be at the Proposer's own expense.

7.3. The Proposer 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 Proposer, 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 Proposer's designated representative is invited to attend a pre-Proposal meeting and/or a site visit, if provided for in the PDS. 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 Proposer 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-Proposal 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 Proposers who have acquired the request for proposals document in accordance with ITP 6.3. Any

modification to the request for proposals document that may become necessary as a result of the pre-Proposal meeting shall be made by the Purchaser exclusively through the issue of an Addendum pursuant to ITP 8 and not through the minutes of the pre-Proposal meeting.

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

8. Amendment of Request for Proposals Document

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

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

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

C. PREPARATION OF PROPOSALS

9. Cost of Proposals

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

10. Language of Proposal

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

11. Documents Comprising the Proposal

11.1. The Proposal shall comprise two Parts, namely the Technical Part and the Financial Part. These two Parts shall be submitted simultaneously in two separate sealed envelopes (two-envelope procurement process). One envelope shall contain only information relating to the Technical Part and the other, only information relating to the Financial Part. These two envelopes

shall be enclosed in a separate sealed outer envelope marked "Original Proposal'.

11.2. The Technical Part shall contain the following:

(a) **Letter of Proposal**-Technical Part, prepared in accordance with ITP 12;

(b) **Proposal Security or Proposal-Securing Declaration** in accordance with ITP 20;

(c) **Alternative Proposal**- Technical Part**:** if permissible, in accordance with ITP 13, the Technical Part of any Alternative Proposal;

(d) **Authorization:** written confirmation authorizing the signatory of the Proposal to commit the Proposer, in accordance with ITP 21.3;

(e) **Eligibility of Information System:** documentary evidence established in accordance with ITP 14.1 that the Information System offered by the Proposer in its Proposal or in any alternative Proposal, if permitted, are eligible;

(f) **Proposer's Eligibility and qualifications:** documentary evidence in accordance with ITP 15 establishing the Proposer's eligibility and qualifications to perform the contract if its Proposal is accepted;

(g) **Conformity:** documentary evidence established in accordance with ITP 16 that the Information System offered by the Proposer conform to the **request for proposals** document;

(h) **Subcontractors:** list of subcontractors, in accordance with ITP 16.4;

(i) **Intellectual Property**: a list of: Intellectual Property as defined in GCC Clause 15;

(i) all Software included in the Proposal, 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 Proposal;

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

(j) any other document required **in the PDS.**

11.3. **The Financial Part shall contain the following:**

(a) Letter of Proposal – Financial Part: prepared in accordance with ITP 12 and ITP 17;

(b) Schedule: Price Schedules completed in accordance with ITP 12 and ITP 17;

(c) Alternative Proposal - Financial Part: if permissible in accordance with ITP 13, the Financial Part of any Alternative Proposal; and

(d) any other document required in the PDS.

11.4. The Technical Part shall not include any information related to the Proposal price. Where material financial information related to the Proposal price is contained in the Technical Part the Proposal shall be declared non-responsive.

11.5. In addition to the requirements under ITP 11.2, Proposals submitted by a JV shall include in the Technical Part 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 Proposal shall be signed by all members and submitted with the Proposal, together with a copy of the proposed Agreement indicating at least the parts of the Information System to be executed by the respective members.

11.6. The Proposer shall furnish in the Letter of Proposal - Financial Part information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this procurement process.

12. Letters of Proposal and Price Schedules

12.1. The Letter of Proposal - Technical Part, Letter of Proposal-Financial Part and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Proposal Forms. The forms must be completed without any alterations to the text, and no

substitutes shall be accepted except as provided under ITP 21.3. All blank spaces shall be filled in with the information requested.

13. Alternative Proposals

13.1. The PDS indicates whether alternative Proposals are allowed. If they are allowed, the PDS will also indicate whether they are permitted in accordance with ITP 13.3, or invited in accordance with ITP 13.2 and/or ITP 13.4.

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

13.3. Except as provided under ITP 13.4 below, Proposers wishing to offer technical alternatives to the Purchaser's requirements as described in the request for proposals 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 Proposer with the Most Advantageous Proposal conforming to the basic technical requirements shall be considered by the Purchaser.

13.4. When Proposers are invited in the PDS 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 ITP 32.

14. Documents Establishing the Eligibility of the Information System

14.1. To establish the eligibility of the Information System in accordance with ITP 5, Proposers shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Proposal Forms.

15. Documents Establishing the Eligibility and Qualifications of the Proposer

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

15.2. In the event that prequalification of potential Proposers has been undertaken as stated in the PDS, only Proposals from prequalified

Proposers shall be considered for award of Contract. These qualified Proposers should submit with their Proposals any information updating their original prequalification applications or, alternatively, confirm in their Proposals that the originally submitted prequalification information remains essentially correct as of the date of Proposal submission.

15.3. Any change in the structure or formation of a Proposer after being prequalified and invited to submit Proposals, if applicable, (including, in the case of a JV, any change in the structure or formation of any member and also including any change in any specialized subcontractor whose qualifications were considered to prequalify the Applicant) shall be subject to the written approval of the Purchaser prior to the deadline for submission of Proposals. Such approval shall be denied if (i) a Proposer proposes to associate with a disqualified Proposer or in case of a disqualified joint venture, any of its members; (ii) as a consequence of the change, the Proposer no longer substantially meets the qualification criteria; or (iii) in the opinion of the Purchaser, the change may result in a substantial reduction in competition. Any such change should be submitted to the Purchaser not later than fourteen (14) days after the date of the notice for RFP sent to the prequalified Proposers.

16. Documents Establishing Conformity of the Information System

16.1. Pursuant to ITP 11.2 (g), the Proposer shall furnish, as part of its Proposal, documents establishing the conformity to the request for proposals documents of the Information System that the Proposer proposes to design, supply and install under the Contract.

16.2. The documentary evidence of conformity of the Information System to the request for proposals documents including:

(a) Preliminary Project Plan describing, among other things, the methods by which the Proposer will carry out its overall management and coordination responsibilities if awarded the Contract, and the human and other resources the Proposer proposes to use. The Preliminary Project Plan must also address any other topics specified in the PDS. In addition, the Preliminary Project Plan should state the Proposer'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 Proposer proposes to coordinate the activities of all involved parties;

(b) written confirmation that the Proposer accepts responsibility for the successful integration and inter-operability of all

components of the Information System as required by the request for proposals 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 Proposer should use the Technical Responsiveness Checklist (or Checklist Format) in the Sample Proposal Forms (Section IV). The commentary shall include explicit cross-references to the relevant pages in the supporting materials included in the Proposal. Whenever a discrepancy arises between the item-by-item commentary and any catalogs, technical specifications, or other preprinted materials submitted with the Proposal, 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 PDS ITP 17.2 requires Proposers to propose.

16.3. References to brand names or model numbers or national or proprietary standards designated by the Purchaser in the request for proposals documents are intended to be descriptive and not restrictive. Except as specified in the PDS for specific items or standards, the Proposer may substitute alternative brand/model names or standards in its Proposal, 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 Proposer intends to purchase or subcontract, the Proposer shall give details of the name and nationality of the proposed subcontractors, including manufacturers, for each of those items. In addition, the Proposer shall include in its Proposal 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 Proposer shall be responsible for ensuring that any subcontractor proposed complies with the requirements of ITP 4, and that any goods or services to be provided by the subcontractor comply with the requirements of ITP 5 and ITP 16.1.

17. Proposal 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 Proposer to fulfill the requirements of the Information System, must be priced separately and summarized in the corresponding cost tables in the Sample Proposal 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 PDS, the Proposer must also propose 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 Proposal Forms (Section IV), in accordance with the instructions provided in the tables and in the manner specified below:

(a) if specified **in the PDS,** the Proposer must also propose 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 Proposer'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 – Terms of Payment. Proposers 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 Proposer has left blank in the cost tables provided in the Sample Proposal 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 Proposal and, provided that the Proposal is substantially

responsive, an adjustment to the Proposal price will be made during Proposal evaluation in accordance with ITP 34.1.

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 PDS, as follows:

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

Unless otherwise specified **in the PDS**, 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 Proposer shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Proposer 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 PDS, 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 ITP 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 ITP 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 PDS, 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 requests for proposals documents (as, e.g., a requirement for the Proposer to include the travel and subsistence costs of trainees).

17.9. Unless otherwise specified in the PDS, prices quoted by the Proposer shall be fixed during the Proposer's performance of the Contract and not subject to increases on any account. Proposals submitted that are subject to price adjustment will be rejected.

18. Currencies of Proposal and Payment

18.1. The currency(ies) of the Proposal and currencies of payment shall be the same. The Proposer shall quote in the currency of the Purchaser's Country the portion of the Proposal price that corresponds to expenditures incurred in the currency of the Purchaser's Country, unless otherwise specified in the PDS.

18.2. The Proposer may express the Proposal price in any currency. If the Proposer 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 Proposals

19.1. Proposals shall remain valid until the date specified in the PDS or any extended date if amended by the Purchaser in accordance with ITP 8. A Proposal that is not valid until the date specified in the PDS, or any extended date if amended by the Purchaser in accordance with ITP 8, shall be rejected by the Purchaser as nonresponsive.

19.2. In exceptional circumstances, prior to the date of expiry of the Proposal validity, the Purchaser may request Proposers to extend the date of validity until a specified date. The request and the responses shall be made in writing. If a Proposal Security is requested in accordance with ITP 20, it shall also be extended for twenty-eight days (28) beyond the deadline of the extended validity period. A Proposer may refuse the request without forfeiting its Proposal Security. A Proposer granting the request shall not be required or permitted to modify its Proposal, except as provided in ITP 19.3.

19.3. If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial Proposal validity specified in

accordance with ITP 19.1, the Contract price shall be determined as follows:

(a) in case of fixed price contracts, the contract price shall be the Proposal price adjusted by a factor or factors specified **in the PDS**;

(b) in the case of an adjustable price contracts, no adjustments shall be made;

(c) in any case, Proposal evaluation shall be based on the Proposal Price without taking into consideration the applicable correction from those indicated above.

20. Proposal Security

20.1. The Proposer shall furnish as part of the Technical Part of its Proposal, either a Proposal-Securing Declaration or a Proposal Security as specified in the PDS, in original form and, in the case of a Proposal Security, in the amount and currency specified in the PDS.

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

20.3. If a Proposal Security is specified pursuant to ITP 20.1, the Proposal security shall be a demand guarantee in any of the following forms at the Proposer'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 PDS,**

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 Proposal submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Proposal Security shall be submitted either using the Proposal Security Form included in Section IV, Proposal Forms or in another substantially similar format approved by the Purchaser prior to Proposal submission. In either case, the form must include the complete name of the Proposer. The Proposal Security shall be valid for twenty-eight (28) days beyond the original date of expiry of the Proposal validity, or beyond any extended date if requested under ITP 19.2.

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

20.5. If a Proposal Security is specified pursuant to ITP 20.1, the Proposal Security of unsuccessful Proposers shall be returned as promptly as possible upon the successful Proposer's furnishing of the Performance Security pursuant to ITP 48.

20.6. The Proposal Security of the successful Proposer shall be returned as promptly as possible once the successful Proposer has signed the Contract and furnished the required Performance Security.

20.7. The Proposal Security may be forfeited:

(a) if a Proposer withdraws its Proposal prior to the expiry date of Proposal validity specified by the Proposer on the Letter of Proposal or any extended date provided by the Proposer; or

(b) if the successful Proposer fails to**:**

(i) sign the Contract in accordance with ITP 47; or

(ii) furnish a performance security in accordance with ITP 48.

20.8. The Proposal Security or the Proposal-Securing Declaration of a JV shall be in the name of the JV that submits the Proposal. If the JV has not been legally constituted into a legally enforceable JV at the time of submission of Proposals, the Proposal Security or the Proposal-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITP 4.1 and ITP 11.5.

20.9. If a Proposal Security is not required in the PDS, and;

(a) if a Proposer withdraws its Proposal prior to the expiry date of the Proposal validity specified by the Proposer on the Letter of Proposal, or any extended date provided by the Proposer; or

(b) if the successful Proposer fails to: sign the Contract in accordance with ITP 47; or furnish a Performance Security in accordance with ITP 48;

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

21. Format and Signing of Proposal

21.1. The Proposer shall prepare one original and copies/sets of the documents comprising the Proposal as described in ITP 11 and Proposer22.

21.2. Proposers shall mark as "CONFIDENTIAL" information in their Proposals 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 Proposal shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Proposer. This authorization shall consist of a written confirmation as specified in the PDS and shall be attached to the Proposal. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Proposal where entries or amendments have been made shall be signed or initialed by the person signing the Proposal.

21.4. In case the Proposer is a JV, the Proposal 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 Proposal.

D. SUBMISSION OF PROPOSALS

22. Submission, Sealing and Marking of Proposals

22.1. The Proposer shall deliver the Proposal in two separate, sealed envelopes (the Technical Part and the Financial Part). These two envelopes shall be enclosed in a separate sealed outer envelope marked "Original PROPOSAL". In addition, the Proposer shall submit copies of the Proposal in the number specified in the PDS. Copies of the Technical Part shall be placed in a separate sealed envelope marked "COPIES: TECHNICAL PART". Copies of the Financial Part shall be placed in a separate sealed envelope marked "COPIES: FINANCIAL PART". The Proposer shall place both of these envelopes in a separate, sealed outer envelope marked "PROPOSAL COPIES". In the event of any discrepancy between the original and the copies, the original shall prevail.

22.2. If alternative Proposals are permitted in accordance with ITP 14, the alternative Proposals shall be submitted as follows: the original of the alternative Proposal Technical Part shall be placed in a sealed envelope marked "ALTERNATIVE PROPOSAL – TECHNICAL PART" and the Financial Part shall be placed in a sealed envelope marked "ALTERNATIVE PROPOSAL – FINANCIAL PART" and these two separate sealed envelopes then enclosed within a sealed outer envelope marked "ALTERNATIVE PROPOSAL – ORIGINAL", the copies of the alternative Proposal will be placed in separate sealed envelopes marked "ALTERNATIVE PROPOSAL – COPIES OF TECHNICAL PART", and "ALTERNATIVE PROPOSAL – COPIES OF FINANCIAL PART" and enclosed in a separate sealed outer envelope marked "ALTERNATIVE PROPOSAL - COPIES.

22.3. The envelopes marked "ORIGINAL PROPOSAL" and "PROPOSAL COPIES" (and, if appropriate, a third envelope marked "ALTERNATIVE PROPOSAL") shall be enclosed in a separate sealed outer envelope for submission to the Purchaser.

22.4. The inner and outer envelopes shall:

(a) bear the name and address of the Proposer;

(b) be addressed to the Purchaser in accordance with ITP 23.1;

(c) bear the specific identification of this request for proposals process indicated in accordance with ITP 1.1; and

(d) bear a warning not to open before the time and date for Proposal opening.

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

23. Deadline for Submission of Proposals

23.1. Proposals must be received by the Purchaser at the address and no later than the date and time indicated in the PDS. When so specified in the PDS, Proposers shall have the option of submitting their Proposals electronically. Proposers submitting Proposals electronically shall follow the electronic Proposal submission procedures specified in the PDS.

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

24. Late Proposals

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

25. Withdrawal, Substitution, and Modification of Proposals

25.1. A Proposer may withdraw, substitute, or modify its Proposal 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 ITP 21.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Proposal must accompany the respective written notice. All notices must be:

(a) prepared and submitted in accordance with ITP 21 and ITP 22 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and

(b) received by the Purchaser prior to the deadline prescribed for submission of Proposals, in accordance with ITP 23.

25.2. Proposals requested to be withdrawn in accordance with ITP 25.1 shall be returned unopened to the Proposers.

No Proposal may be withdrawn, substituted, or modified in the interval between the deadline for submission of Proposals and the date of expiry of the Proposal validity specified by the Proposer on the Letter of Proposal or any extended date thereof.

E. PUBLIC OPENING OF TECHNICAL PARTS OF PROPOSALS

26. Public Opening of Technical Parts of Proposals

26.1. Except as in the cases specified in ITP 24 and ITP 25.2, the Purchaser shall conduct the Proposal opening in public, in the presence of Proposers` designated representatives and anyone who chooses to attend, and at the address, date and time specified in the PDS. Any specific electronic Proposal opening procedures required if electronic submission of proposals is permitted in accordance with ITP 23.1, shall be as specified in the PDS.

26.2. First, envelopes marked "Withdrawal" shall be opened and read out and the envelope with the corresponding Proposal shall not be opened but returned to the Proposer. No Proposal withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Proposal opening.

26.3. Next, envelopes marked "Substitution" shall be opened and read out and exchanged with the corresponding Proposal being substituted, and the substituted Proposal shall not be opened, but returned to the Proposer. No Proposal substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Proposal opening.

26.4. Envelopes marked "Modification" shall be opened and read out with the corresponding Proposal. No Proposal modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Proposal opening. Only Proposals that are opened and read out at Proposal opening shall be considered further.

26.5. Next, all other envelopes marked "Technical Part" shall be opened one at a time. All envelopes marked "Second Envelope: Financial Part" shall remain sealed and kept by the Purchaser in safe custody until they are opened at a later public opening, following the evaluation of the Technical Part parts of the Proposals. On opening the envelopes marked "Technical Part" the Purchaser shall read out: the name of the Proposer, the presence or the absence of a Proposal Security, or Proposal-Securing Declaration,

if required, and whether there is a modification; and Alternative Proposal - Technical Part; and any other details as the Purchaser may consider appropriate.

26.6. Only Technical Parts of Proposals and Alternative Proposal - Technical Parts that are read out at Proposal opening shall be considered further for evaluation. The Letter of Proposal-Technical Part and the separate sealed envelope marked "Second Envelope: Financial Part" are to be initialed by representatives of the Purchaser attending Proposal opening in the manner specified in the PDS.

26.7. The Purchaser shall neither discuss the merits of any Proposal nor reject any Proposal (except for late Proposals, in accordance with ITP 24.1).

26.8. The Purchaser shall prepare a record of the Proposal opening that shall include, as a minimum:

(a) the name of the Proposer and whether there is a withdrawal, substitution, or modification;

(b) any alternative Proposals; and

(c) the presence or absence of a Proposal Security or a Proposal-Securing Declaration.

26.9. The Proposers' representatives who are present shall be requested to sign the record. The omission of a Proposer'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 Proposers.

F. EVALUATION OF PROPOSALS- GENERAL PROVISIONS

27. Confidentiality

27.1. Information relating to the evaluation of the Technical Part shall not be disclosed to Proposers or any other persons not officially concerned with the procurement process until the notification of evaluation of the Technical Part in accordance with ITP 33. Information relating to the evaluation of Financial Part, the evaluation of combined Technical Part and Financial Part, and recommendation of contract award shall not be disclosed to Proposers or any other persons not officially concerned with the RFP process until the Notification of Intention to Award the Contract is transmitted to Proposers in accordance with ITP 42ProposerProposer.

27.2. Any effort by a Proposer to influence the Purchaser in the evaluation of the Proposals or Contract award decisions may result in the rejection of its Proposal.

27.3. Notwithstanding ITP 27.2, from the time of Proposal opening to the time of Contract award, if any Proposer wishes to contact the Purchaser on any matter related to the procurement process, it should do so in writing.

28. Clarification of Proposals

28.1. To assist in the examination, evaluation, and comparison of the Proposals, and qualification of the Proposers, the Purchaser may, at its discretion, ask any Proposer for a clarification of its Proposal. Any clarification submitted by a Proposer 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 Proposal shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Proposals, in accordance with ITP 35.

28.2. If a Proposer does not provide clarifications of its Proposal by the date and time set in the Purchaser's request for clarification, its Proposal may be rejected.

29. Deviations, Reservations, and Omissions

29.1. During the evaluation of Proposals, the following definitions apply:

(a) "Deviation" is a departure from the requirements specified in the request for proposals document;

(b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the request for proposals document; and

(c) "Omission" is the failure to submit part or all of the information or documentation required in the request for proposals document.

29.2. Provided that a Proposal is substantially responsive, the Purchaser may waive any nonmaterial nonconformities in the Proposal.

Provided that a Proposal is substantially responsive, the Purchaser may request that the Proposer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the Proposal related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Proposal. Failure of the Proposer to comply with the request may result in the rejection of its Proposal.

G. EVALUATION OF TECHNICAL PART OF PROPOSALS

30. Determination of Responsiveness

30.1. The Purchaser's determination of the Technical Part's responsiveness shall be based on the contents of the Proposal, as specified in ITP 11.

30.2. Preliminary examination of the Technical Part shall be carried out to identify proposals that are incomplete, invalid or substantially nonresponsive to the requirements of the request for proposals documents. A substantially responsive Proposal is one that materially confirms to the requirements of the request for proposals 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 Works specified in the Contract; or

(ii) limit in any substantial way, inconsistent with the request for proposals document, the Purchaser's rights or the Proposer's obligations under the proposed Contract; or

(iii) limit in any substantial way, inconsistent with the request for proposals document, the Purchaser's rights or the Proposer's obligations under the proposed Contract; or

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

30.3. If the Technical Part is not substantially responsive to the requirements of the request for proposals document, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

31. Eligibility and Qualifications of the Proposer

31.1. The Purchaser shall determine to its satisfaction whether the Proposers that have been assessed to have submitted substantially responsive Proposals are eligible, and either continue to meet (if prequalification applies) or meet (if prequalification has not been carried out), the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

31.2. The determination shall be based upon an examination of the documentary evidence of the Proposer's eligibility and

qualifications submitted by the Proposer, pursuant to ITP 15. The determination shall not take into consideration the qualifications of other firms such as the Proposer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the request for proposals document), or any other firm.

31.3. Prior to Contract award, the Purchaser will verify that the successful Proposer (including each member of a JV) is not disqualified by the Bank due to noncompliance with contractual SEA/SH prevention and response obligations. The Purchaser will conduct the same verification for each subcontractor proposed by the successful Proposer. If any proposed subcontractor does not meet the requirement, the Purchaser will require the Proposer to propose a replacement subcontractor.

31.4. Only substantially responsive Proposals submitted by eligible and qualified Proposers shall proceed to the detailed technical evaluation specified in ITP 32.

31.5. The Purchaser's evaluation of Technical Part will be carried out as specified in Section III, Evaluation and Qualification Criteria.

32. Detailed Evaluation of Technical Part

32.1. The scores and weightings to be given to Rated Criteria (including technical and non-price factors and sub factors) are specified in the PDS.

H. NOTIFICATION OF EVALUATION OF TECHNICAL PARTS AND PUBLIC OPENING OF FINANCIAL PARTS

33. Notification of Evaluation of Technical Parts and Public Opening of Financial Parts

33.1. Following the completion of the evaluation of the Technical Parts of the Proposals, the Purchaser shall notify in writing those Proposers whose Proposals were considered substantially non-responsive to the request for proposals document or failed to meet the eligibility and qualification requirements, advising them of the following information:

(a) the grounds on which their Technical Part of Proposal failed to meet the requirements of the request for proposals document;

(b) their envelopes marked "SECOND ENVELOPE: FINANCIAL PART" will be returned to them unopened after the completion of the selection process and the signing of the Contract; and

(c) Option 1: when BAFO or negotiations is not to be applied notify them of the date, time and location of the public opening of the envelopes marked 'Financial Part", or;

Option 2: **when BAFO or negotiations apply as specified in the PDS,** notify them that: (i) the envelopes marked 'Financial Part' will not be opened in public, but in the presence of a probity auditor appointed by the Purchaser, and that (ii) the announcement of the names of the Proposers whose Financial Parts will be opened and the total Proposal prices will be deferred to the time that the Notification of Intention to Award the contract is issued.

33.2. The Purchaser shall, simultaneously, notify in writing those Proposers whose Technical Part have been evaluated as substantially responsive to the request for proposals document and met the eligibility and qualification requirements, advising them of the following information:

33.3. their Proposal has been evaluated as substantially responsive to the request for proposals document and met the eligibility and qualification requirements;

33.4. Option 1: when BAFO or negotiations is not to be applied notify them of the date, time and location of the public opening of the envelopes marked 'Financial Part", or;

Option 2: when BAFO or negotiations apply as specified in the PDS, notify them that: (i) the envelopes marked 'Financial Part' will not be opened in public, but in the presence of a probity auditor appointed by the Purchaser, and that (ii) the announcement of the names of the Proposers whose Financial Parts will be opened and the total Proposal prices will be deferred to the time that the Notification of Intention to Award the contract is issued**.**

33.5. When BAFO or negotiations do not apply as specified in the PDS, the Financial Part of the Proposal shall be opened publicly in the presence of Proposers' designated representatives and anyone who chooses to attend.

33.6. The opening date shall be not less than ten (10) Business Days from the date of notification of the results of the technical evaluation, specified in ITP 33.1 and 33.2. However, if the Purchaser receives a complaint on the results of the technical evaluation within the ten (10) Business Days, the opening date shall be subject to ITP 50.1.

33.7. At this public opening, the Financial Parts will be opened by the Purchaser in the presence of Proposers, or their designated representatives and anyone else who chooses to attend. Proposers who met the eligibility and qualification requirements and whose Proposals were evaluated as substantially responsive will have their envelopes marked "SECOND ENVELOPE: FINANCIAL PART" opened at the second public opening. Each of these envelopes marked "SECOND ENVELOPE: FINANCIAL PART" shall be inspected to confirm that they have remained sealed and unopened. These envelopes shall then be opened by the Purchaser. The Purchaser shall read out the names of each Proposer, the technical score and the total Proposal prices, per lot (contract) if applicable, including any discounts and Alternative Proposal - Financial Part, and any other details as the Purchaser may consider appropriate.

33.8. Only envelopes of Financial Part of Proposals, Financial Parts of Alternative Proposals and discounts that are opened and read out at Proposal opening shall be considered further for evaluation. The Letter of Proposal – Financial Part and the Price Schedules are to be initialed by a representative of the Purchaser attending the Proposal opening in the manner specified in the PDS.

33.9. The Purchaser shall neither discuss the merits of any Proposal nor reject any envelopes marked "SECOND ENVELOPE: FINANCIAL PART" at this public opening.

33.10. The Purchaser shall prepare a record of the Financial Part of the Proposal opening that shall include, as a minimum: (a) the name of the Proposer whose Financial Part was opened; (b) the Proposal price, per lot (contract) if applicable, including any discounts; and (c) if applicable, any Alternative Proposal – Financial Part.

33.11. The Proposers whose envelopes marked "SECOND ENVELOPE: FINANCIAL PART" have been opened or their representatives who are present shall be requested to sign the record. The omission of a Proposer'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 Proposers.

33.12. When, as specified in the PDS, BAFO or negotiations apply the Financial Parts will not be opened in public and will be opened in the presence of a probity auditor appointed by the Purchaser.

33.13. At the opening each of the envelopes marked "Financial Part" shall be inspected to confirm that they have remained sealed and unopened. These envelopes shall then be opened by the Purchaser. The Purchaser shall record the names of each Proposer, and the total Proposal prices and any other details as the Purchaser may consider appropriate. The Letter of Proposal - Financial Part and

the Price Schedules are to be initialed by a representative of the Purchaser attending the opening and by the probity auditor.

33.14. The Purchaser shall prepare a record of the opening of the Financial Part envelopes that shall include, as a minimum:

(a) the name of the Proposers whose Financial Part was opened;

(b) the Proposal prices including any discounts. and

(c) The Probity Auditor's report of the opening of the Financial Part.

33.15. The probity auditor shall sign the record. The contents of the envelopes marked 'Financial Part' and the record of the opening shall be kept in safe custody by the Purchaser and not disclosed to anyone until the time of the transmission of the Notification of Intention to Award the contract.

I. EVALUATION OF FINANCIAL PART OF PROPOSALS

34. Adjustments for Non-material Noconformities

34.1. Provided that a Proposal is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Proposal Price. To this effect, the Proposal Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component by adding the average price of the item or component quoted by substantially responsive Proposers. If the price of the item or component cannot be derived from the price of other substantially responsive Proposers, the Purchaser shall use its best estimate.

35. Correction of Arithmetic Errors

35.1. In evaluating the Financial Part of each Proposal, 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.

35.2. Proposers shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITP 35.1, shall result in the rejection of the Proposal.

36. Evaluation of Proposals Financial Part

36.1. To evaluate the Financial Part, the Purchaser shall consider the following:

(a) the Proposal 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 ITP 35.1;

(c) price adjustment due to discounts offered in accordance with ITP 26;

(d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITP 34.1;

(e) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITP 36.2; and

(f) the evaluation factors indicated in the PDS and detailed in Section III, Evaluation and Qualification Criteria.

36.2. For evaluation and comparison purposes, the currency(ies) of the **Proposal** shall be converted into a single currency **as specified in the PDS**.

36.3. No margin of domestic preference shall apply**.**

36.4. If price adjustment is allowed in accordance with ITP 17.7, 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 Proposal evaluation.

36.5. If this request for proposals document allows Proposers to quote separate prices for different lots (contracts), each lot will be evaluated separately to determine the Most Advantageous Proposal using the methodology specified in Section III, Evaluation and Qualification Criteria. Discounts that are conditional on the award of more than one lotor slice shall not be considered for Proposal evaluation.

36.6. The Purchaser will evaluate and compare the Proposals. The evaluation will be performed assuming either that:

(a) the Contract will be awarded to the Most Advantageous Proposal for the entire Information System; or

(b) if specified **in the PDS**, Contracts will be awarded to the Proposers for each individual Subsystem, lot, or slice defined in the Technical Requirements whose Proposals result in the Most Advantageous Proposal/Proposals 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 Proposals. Such discounts will be considered in the evaluation of Proposals as specified **in the PDS**.

37. Abnormally Low Proposals

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

37.2. In the event of identification of a potentially Abnormally Low Proposal, the Purchaser shall seek written clarifications from the Proposer, including detailed price analyses of its Proposal 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 request for proposals document.

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

38. Unbalanced or Front Loaded Proposals

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

38.2. After the evaluation of the information and detailed price analyses presented by the Proposer, the Purchaser may:

(a) accept the Proposal; or

(b) if appropriate, require that the total amount of the Performance Security be increased, at the expense of the Proposer, to a level not exceeding twenty percent (20%) of the Contract Price; or

(c) reject the Proposal.

J. EVALUATION OF COMBINED TECHNICAL AND FINANCIAL PARTS, MOST ADVANTAGEOUS PROPOSAL AND NOTIFICATION OF INTENTION TO AWARD

39. Evaluation of combined Technical and Financial Parts, Most Advantageous Proposal

39.1. The Purchaser's evaluation of responsive Proposals will take into account technical factors, in addition to cost factors in accordance with Section III Evaluation and Qualification Criteria. The weight to be assigned for the Technical factors and cost is specified in the PDS. The Purchaser will rank the Proposals based on the evaluated Proposal score (B).

39.2. Best and Final Offer (BAFO): After completion of the combined technical and financial evaluation of proposals, If specified in the PDS, the Purchaser may invite those Proposers to submit their BAFOs. The procedure for submitting BAFOs will be specified in the PDS. BAFO is a final opportunity for Proposers to improve their Proposals without changing the specified business function and performance requirements in accordance with the invitation to Submit Second Stage Combined Technical and Financial Proposals, Proposers are not obliged to submit a BAFO. Where BAFO is used there will be no negotiation after BAFO**.**

39.3. BAFO will apply a two envelope procurement process. The submission of BAFOs, opening of the Technical Parts and Financial Parts and the evaluation of Proposals will follow the procedures described for the Technical, Financial and Combined evaluation above, as appropriate**.**

39.4. The Purchaser shall determine the Most Advantageous Proposal. The Most Advantageous Proposal is the Proposal of the Proposer that meets the Qualification Criteria and whose Proposal has been determined to be substantially responsive to the request for proposals document and is the Proposal with the highest combined technical and financial score.

39.5. If specified in the PDS, the Purchaser may conduct negotiations following the evaluation of the proposals and before the final contract award. The procedure of the negotiations will be specified in the PDS.

39.6. Negotiations shall be held in the presence of probity auditor appointed by the Purchaser.

39.7. Negotiations may address any aspect of the contract so long as they do not materially change the specified business function and performance requirements.

39.8. The Purchaser may negotiate first with the Proposer that has the Most Advantageous Proposal. If the negotiations are unsuccessful the Purchaser may negotiate with the Proposer that has the next best Most Advantageous Proposal, and so on down the list until a successful negotiated outcome is achieved.

39.9. Unless otherwise specified in the PDS, the Purchaser will NOT carry out tests prior to Contract award, 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 PDS the Purchaser may carry out such tests as detailed in the PDS.

39.10. Proposer.

39.11. Prior to Contract award, the Purchaser may carry out visits or interviews with the Proposer's clients referenced in its Proposal and site inspections.

39.12. The capabilities of the manufacturers and subcontractors proposed by the Proposer that is determined to have offered the Most Advantageous Proposal 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 Proposal will not be rejected, but the Proposer will be required to substitute an acceptable manufacturer or subcontractor without any change to the Proposal 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 Proposal, and to Reject Any or All Proposals

40.1. The Purchaser reserves the right to accept or reject any Proposal, and to annul the procurement process and reject all Proposals at any time prior to contract award, without thereby incurring any liability to Proposers. In case of annulment, all Proposals submitted and specifically, Proposal securities, shall be promptly returned to the Proposers.

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 ITP 46. The Standstill Period commences the day after the date the Purchaser has transmitted to each Proposer the Notification of Intention to Award the Contract. Where only one Proposal is submitted, or if this contract 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 Proposer the Notification of Intention to Award the Contract to the successful Proposer. The Notification of Intention to Award shall contain, at a minimum, the following information:

(a) the name and address of the Proposer submitting the successful Proposal;

(b) the Contract price of the successful Proposal;

(c) the total combined score of the successful Proposal;

(d) the names of all Proposers who submitted Proposals, and their Proposal prices as readout and as evaluated prices and technical scores;

(e) a statement of the reason(s) the Proposal (of the unsuccessful Proposer 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;

K. AWARD OF CONTRACT

43. Award Criteria

43.1. Subject to ITP 40, the Purchaser shall award the Contract to the successful Proposer. This is the Proposer whose Proposal has been determined to be the Most Advantageous Proposal..

Proposer.

44. Purchaser's Right to Vary Quantities at Time of Award

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 PDS.

45. Notification of Award

45.1. Prior to the date of expiry of the Proposal validity and upon expiry of the Standstill Period, specified in ITP 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 Proposer, in writing, that its Proposal 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").

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 Proposers that submitted Proposals, and their Proposal prices as read out at Proposal opening, and as evaluated;

(d) name of Proposers whose Proposals were rejected and the reasons for their rejection;

(e) the name of the successful Proposer, the final total contract price, the contract duration and a summary of its scope; and

(f) successful Proposer's Beneficial Ownership Disclosure Form.

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.

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 ITP 42, an unsuccessful Proposer 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 Proposers 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 Proposers 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 Proposers may be done in writing or verbally. The Proposer shall bear their own costs of attending such a debriefing meeting.

47. Signing of Contract

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

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

47.3. Notwithstanding ITP 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 Proposer shall not be bound by its Proposal, always provided, however, that the Proposer 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 Proposer 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

48.1. Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Purchaser, the successful Proposer shall furnish the performance security in accordance with the General Conditions, subject to ITP 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 Proposer is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Proposer 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.

48.2. Failure of the successful Proposer 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 Proposal Security. In that event the Purchaser may award the Contract to the Proposer offering the next Most Advantageous Proposal.

49. Adjudicator

49.1. Unless the PDS states otherwise, the Purchaser proposes that the person named in the PDS 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 PDS. The proposed hourly fee for the Adjudicator is specified in the PDS. The expenses that would be considered reimbursable to the Adjudicator are also specified in the PDS. If a Proposer does not accept the Adjudicator proposed by the Purchaser, it should state its non-acceptance in its Proposal Form and make a counterproposal of an Adjudicator and an hourly fee, attaching a résumé of the alternative. If the successful Proposer and the Adjudicator nominated in the PDS 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 PDS and propose a new one. If by the day the Contract is signed, the Purchaser and the successful Proposer 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.

50. Procurement Related Complaint

50.1. The procedures for making a Procurement-related Complaint are as specified in the PDS.

SECTION II - PROPOSAL DATA SHEET (PDS)

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

ITP Reference	A. General
ITP 1.1	The reference number of the Request for Proposals is: GDAP/Comp2.1.5 - **GH-MOCDTI-512196-GO-RFB** The Purchaser is: **Government of the Republic of Ghana represented byMinistry of Communication, Digital Technology and Innovations** The name of the RFP is: **Design, Supply, Implementation and Training for the National Data Exchange Hub.** The Purchaser **shall not** accept Proposal for multiple lots under this request for proposals document. The lots are: **One (1)**
ITP 1.3 (a)	Electronic Procurement **shall not** be applicable to this procurement. The Purchaser shall use the following electronic-procurement system to manage this procurement process: **Not applicable** The electronic-procurement system shall be used to manage the following aspects of the Procurement process: **Not applicable**
ITP 2.1	The Borrower is: **Government of the Republic of Ghana represented byMinistry of Communication, Digital Technology and Innovation.** Loan or Financing Agreement amount: **US$100 Million** The name of the Project is: **Ghana Digital Accelerated Project (GDAP)**
ITP 4.1	Maximum number of members in the JV shall be: **Three (3)**
ITP 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr.
B. Request for proposals Document	
ITP 7.1	For Clarification of Proposal purposes only, the Purchaser's address is: **The Chief Director** Attention: **Project Coordinator** **Ministry of Communication, Digital Technology and Innovation** **Ghana Digital Acceleration Project** **Fifth Floor, Rooms 38/39** **Ministry of Communications and Digitalisation Building** **Abdul Diouf Street,** **Ridge,Accra Ghana**

	Digital Address: **GA-079-0539** Electronic mail address: **pcu.gdap@moc.gov.gh;** Requests for clarification should be received by the Employer no later than: **21 days** prior to bid submission deadline. Web page: www.moc.gov.gh;
ITP 7.1	Web page: www.moc.gov.gh
ITP 7.4	A Pre-Proposal meeting **shall not** take place at the following date, time and place:
C. Preparation of Proposals	
ITP 10.1	The language of the Proposal is: : **English** All correspondence exchange shall be in **English** language. Language for translation of supporting documents and printed literature is **English**
ITP 11.2 (j)	The Proposer shall submit with its Proposal the following additional documents in the Technical Part of its Proposal: Code of Conduct for Supplier's Personnel (ES) The Proposer shall submit its Code of Conduct that will apply to the Supplier's Personnel (as defined in GCC Clause 1.1) employed in the execution of the Contract at the Project Site/s to ensure compliance with the Supplier's Environmental and/or Social obligations under the Contract, as applicable. The Proposer shall use for this purpose the Code of Conduct form provided in Section IV. No substantial modifications shall be made to this form, except that the Proposer may introduce additional requirements, including as necessary to take into account specific Contract issues/risks. **Management Strategies and Implementation Plans (MSIP) to manage the (ES) risks** The Proposer shall submit Management Strategies and Implementation Plans (MSIPs) to manage the following key Environmental and Social (ES) risks: • Sexual Exploitation, and Abuse (SEA) prevention and response • Occupational Health and Safety and Labour Management Procedures • Waste Management (both electronic and non-electronic) • Resource Efficiency and Energy Management • Traffic, Delivery, Lifting and Logistics Management • Community Health, Safety and Security Management • Data Protection, Privacy and Social Risk Management
ITP 11.3(d)	The Proposer shall submit the following additional documents in the Financial Part of its Proposal: **Not Applicable**
ITP 13.1	Alternative Bids **shall not be** permitted.

ITP 13.2	Alternatives to the Time Schedule **are not** permitted.
ITP 13.4	Alternative technical solutions shall be permitted for the following parts of the Information System: **None**
ITP 15.2	Prequalification **has not** been undertaken.
ITP 16.2 (a)	In addition to the topics described in ITP Clause 16.2 (a), the Preliminary Project Plan must address the following topics: (i) Project Organization and Management, including management authorities, responsibilities, and contacts, as well as task, time and resource-bound schedules (in GANTT format) (ii) Workplan (iii) Proposed Methodology (iv) Risk Management Plan; (v) Transition, Migration and Onboarding Plan (vi) Training Plan; (vii) Testing and Quality Assurance Plan; (viii) Warranty Defect Repair and Technical Support Service Plan (ix) Operations and Maintenance Plan (x) Backup, Disaster Recovery and Business Continuity Plan (xi) Content / Service Update, Patch and Upgrade Plan (xii) Proposed Service Level Agreement (xiii) Third Party Management Plan (xiv) User Support and Feedback Management Plan (xv) System Resources and Capacity Management Plan (xvi) Logging and Incident Management Plan (xvii) Commercial Management Model (xviii) Revenue Share Model (xix) 5-year Operational Cost and Revenue Model (xx) Governance and Transparency Plan
ITP 16.3	In the interest of effective integration, cost-effective technical support, and reduced re-training and staffing costs, Proposers shall offer the following items: **None**
ITP 17.2	The Proposer **must** propose Recurrent Cost Items
ITP 17.2	The Proposer **must** propose for contracts for Recurrent Cost Items not included in the main Contract.
ITP 17.5	The Incoterms edition is: **2020**
ITP 17.5 (a)	Named place of destination is: **The National Data Center and Kumasi Data Center**
ITP 17.6	Named place of final destination (or Project site) is: **The National Data Center and Kumasi Data Center**
ITP 17.8	ITP 17.8 is modified as follows: **There are no modifications**

ITP 17.9	The prices quoted by the Proposer **shall not** be subject to adjustment during the performance of the Contract.
ITP 18.1	The Proposer **is** required to quote in the currency of the Purchaser's Country the portion of the Proposal price that corresponds to expenditures incurred in that currency.
ITP 19.1	The Proposal shall be valid until: **2nd December, 2026**
ITP 19.3 (a)	The Proposal price shall be adjusted by the following factor(s): **None Applicable**
ITP 20.1	A Bid Security **shall be** required 2% of the Proposal price in Bank guarantee format or 6% in insurance bond and should be **valid till 30th December, 2026.**
ITP 20.3 (d)	Other types of acceptable securities: **Not Applicable**
ITP 20.9	If the Proposer performs any of the actions prescribed in ITP 20.9 (a) or (b), the Purchaser will declare the Proposer ineligible to be awarded contracts by the Purchaser for a period of ..... years starting from the date the Proposer performs any of the actions. **Not Applicable**
ITP 21.3	The written confirmation of authorization to sign on behalf of the Proposer shall consist of: **Signed and Notorised Power of Attorney**
D. Submission and Opening of Proposals	
ITP 22.1	In addition to the original of the Proposal, the number of copies is: • One original and Four (4) hard copies plus a searchable pdf file ona USB flash memory drive
ITP 23.1	For Proposal submission purposes only, the Purchaser's address is: **The Chief Director** Attention: **Project Coordinator** **Ministry of Communication, Digital Technology and Innovations** **Ghana Digital Acceleration Project** **Conference Room** **6th Floor** **Ministry of Communication, Digital Technology and Innovations BuildingAbdul Diouf Street, Ridge,** **Accra Ghana** Digital Address: **GA-079-0539** The deadline for Proposal submission is: Date: **4th August, 2026** Time: **10:00 GMT.**
ITP 23.1	Proposers **shall not** have the option of submitting their Proposals electronically.

E. Public Opening of Technical Parts of Proposals

ITP 26.1

The Proposal opening shall take place at:

Street Address: **Ministry of Communication, Digital Technology and Innovation Building, Abdul Diouf Street, near Kofi Annan ICTCenter for Excellence**

Floor/ Room number: **6th Floor, Conference Room**

City: **Accra**

Country: **Ghana**

Date: Date: **4th August, 2026**

Time: **10:00 GMT**

ITP 26.1

The electronic Proposal opening procedures shall be: **not applicable**

G. Evaluation of Technical Part of Proposals

ITP 32.2

The weighting to be given for Rated Criteria (including technical and non-price factors) is: **80%**

The technical factors (including sub-factors if any), which for purposes of this document carry the same meaning as Rated Criteria, and the corresponding weight out of 100% are:

	3
	Points
	Importance Weighting on scale of 1-5
Relevant Vendor Experience -10%	
General experience	5
Specific experience in similar project and environment.	5
Proposed Technical Solution-40%	
Overall Proposed Solution Architecture	2
Proposed Infrastructure Architecture	1
Proposed Platform Architecture	1
Proposed security Architecture	2
Semantic and System Catalogue	3
Integration Module	3
API Management module	3
Identity and Access Management module	3
Analytics module	3
Dashboard/Reporting module	2
Mobility module	2
Workflow Engine	3
IoT module	3
AI Module	3

PKI Integration	3
International Gateway Module	3
Proposed Approach and Methodology-10%	
Proposed Methodology	3
Workplan	2
Risk Management Plan	2
Transition Migration and Onboarding Plan	1
Testing and Quality Assurance Plan	1
Documentation, Training and Knowledge Transfer	1
Qualifications and Experience of Key Staff-15%	
Project Manager	3
Chief Technical Architect	2
Integration, API & ESB Lead	2
Cloud Infrastructure Engineer	2
Information Security Expert	2
Data Governance and Catalog Manager	2
Business Analyst and Change Manager	1
Commercial and Operation Lead	1
Operations and Maintenance Plan -10%	
Operations and Maintenance Plan	2
Backup, Disaster Recovery and Business Continuity Plan	1
Content/Service Update, Patch and Upgrade Plan	1
Service Level Agreement Plan (to purchaser and backend service providers)	2
Third Party Vendor Management Plan	1
User Support and Feedback Management Plan	1
System Resource and Capacity Management Plan	1
Logging and Incident Management Plan	1
Commercial -15%	
Commercial Management and Revenue Model	4
Revenue Share Model	4
Five (5) year Operational Cost	4
Governance and Transparency	3

The number of points to be assigned to each of the Key Staff positions shall be determined considering the following three sub-criteria and relevant percentage weights.

Sub-criteria	% Weight
1) General qualification (general education, training, and member of a professional body)	20%
2) Adequacy for the Assignment (relevant training, and total working experience in years in the sector/ Similar Assignments)	70%
3) Relevant experience in the region (working conditions, fluency in local language and similar environment	10%

The minimum Technical score (St) required to pass is*:* 80%	
H. Notification of Evaluation of Technical Parts and Public Opening of Financial Parts	
ITP 33.8	The Letter of Proposal – Financial Part and the Price Schedules shall be initialed by three (3) representatives of the Purchaser conducting Proposal opening. **Each Financial Part of Proposal shall be initialed by all representatives and shall be numbered, any modification to the unit or total price shall be initialed by the Representative of the Purchaser, etc.**
I. Evaluation of Financial Part of Proposals	
36.1(f)	The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria: (a) Deviation in Time for Completion: ***No.*** (b) Present value of Recurrent Costs: ***No***. (c) Functional Guarantees of the Facilities ***No*** (d) Work, services, facilities, etc., to be provided by the Purchaser ***No***
ITP 36.2	The currency(ies) of the Proposal shall be converted into a single currency as follows: **Ghana Cedis (GH₵)** The currency that shall be used for Proposal evaluation and comparison purposes to convert all Proposal prices expressed in various currencies into a single currency is: **Ghana Cedis (GH₵)** The source of exchange rate shall be: **Bank of Ghana** The date for the exchange rate shall be: **4th August, 2026**
J. Evaluation of Combined Technical and Financial Parts and Most Advantageous Proposal	
ITP 39.1	The weight to be given for cost is: **20%** Discount Rate (I) for net present value calculations of recurrent costs (if any) is *[insert **discount rate**]* percent per annum. **None**
ITP 39.2	BAFO **does not** apply
ITP 39.5	Negotiation **does not** apply
ITP 39.9	As additional qualification measures, the Information System (or components/parts of it) offered by the Proposer with the Most Advantageous Proposal may be subjected to the following tests and performance benchmarks prior to Contract award*:* **None**
K. AWARD OF CONTRACT	
ITP 44	The maximum percentage by which quantities may be increased is: **20%**

	The maximum percentage by which quantities may be decreased is: **20%**
ITP 49	The Adjudicator proposed by the Employer is **Allen Stanley-Marbel**. The hourly fee for this proposed Adjudicator shall be **GHC1,000.00**. The biographical data of the proposed Adjudicator is as follows: Allen Stanley-Marbell is computer engineer by training and has specialised in cybersecurity, datacentres and Managed IT services and enterprise system integration. Starting out in IT support about 30 years ago, Allen has built a track record with stints in the private sector, in the development sector as well as in public service in Ghana. Over the course. He has worked in North America, UK (Europe) as well as extensively across English speaking West Africa. Allen currently runs Delectis Ghana Limited, that provides Managed IT services to clients as well as turnkey IT Project Management and consulting services. His clients run the gamut from Government, through Banking to donor/development agencies. He has led the deployment of data centres for NITA (Ghana's national data centre, with nodes in Accra and Kumasi) and the Ghana Immigration Service, and played a significant role in the establishment of a Datacentre infrastructure for the Controller and Accountant Generals Department CAGD. Allen has also had extensive experience managing and overseeing many large IT projects, engaging effectively with stakeholders from government, and development partners as well as equipment vendors and subcontractors through to private sector and international clients. Allen holds a Bachelors degree in computer engineering from Rutgers University and a Postgraduate Diploma in information Security from the Royal Holloway University of London
ITP 50.1	The procedures for making a Procurement-related Complaint are detailed in the "Procurement Regulations for IPF Borrowers (Annex III)." A Procurement-related Complaint may challenge any of the following: 1. The terms of the request for proposals document; 2. the Purchaser's decision to exclude a Proposer from the procurement process prior to the award of contract; and 3. The Purchaser's decision to award the contract. If a Proposer wishes to make a Procurement-related Complaint, the Proposer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to: **For the attention**: **Chief Director** **Address:** **Ministry of Communication, Digital Technology and Innovations** **Ghana Digital Acceleration Project** **5th Floor, Room 38** **Ministry of Communication, Digital Technology and Innovations Building** **Abdul Diouf Street, Ridge,** **Accra-Ghana** Digital Address: **GA-079-0539**

	Email address: pcu.gdap@moc.gov.gh; A copy of the complaint can be sent for the Bank's information and monitoring to: **pprocurementcomplaints@worldbank.org**

ALLEN N. STANLEY-MARBELL

EDUCATION

2007–2009 Royal Holloway University of London London, UK
- P.G.Dip, Information Security

1993–1999 Rutgers University New Brunswick, NJ. USA
- B.Sc., Electrical and Computer Engineering.

EXPERIENCE

1/2018 – Present Delectis Ghana Ltd, Accra, Ghana

Director
- Turnkey ICT Project Development, Management and Delivery
- Technical Staffing and Managed IT Services
- Outsourced IT Solutions and Project Management
- Design and develop full-scale IT systems for clients, ranging from small to large enterprises
- Deploy and support IT subsystems for larger projects requiring competent local IT expertise
- Provide a Managed IT Service
- Provide a dedicated and skilled team for Digital Document Management, Archiving and Digitisation
- Internet and Cloud-based solutions
- Service, Support and Maintenance of IT infrastructure and Software

2/2011 – 1/2014 GIFMIS, Controller & Accountant Generals Department Accra

Network Consultant
- Responsibility for assuring the delivery of the connectivity requirements of the GIFMIS ERP implementation
- Assess and recommend additional infrastructure that may be required for effective and stable operation of GIFMIS ICT platform
- Advise the Project Manager on Business Continuity Planning and Disaster Recovery as regards the network infrastructure and data centres
- Advise the Project Manager on effective strategies for operating and maintaining the network and data centre infrastructure
- Assess skills and competencies of existing ICT teams and recommend options for further skills development
- Define, develop and implement a training programme to bring the skills of the existing ICT support team to a level required for sustainable operation of GIFMIS

1/2008 – 1/2011 GICTeD, Ministry of Communications Accra, Ghana

Director, Operations & Support
- Development of ICT Training Programmes encompassing CIOs, ICT Specialist officers and Business Application users in the Civil Service, legislature and judiciary
- Development of Government of Ghana (GoG) Shared ICT Services Initiative comprising
  - Global Active Directory Design
  - enterprise email infrastructure
  - Portal and content management system
  - Document management and workflow applications
  - ICT support and Central Helpdesk

  - Internet access service and gateway
  - WAN, application hosting & collocation services
- Development and promotion of a centralised IT support team
- Support and promotion of the Government ICT Scheme of Service
- Operational and implementation oversight of the eGovernment infrastructure Project
- Operational and implementation oversight of the Pilot Data Centre Project
- Support and promotion of a centralised ICT procurement planning mechanism and volume sourcing agreements
- Standardisation and regularisation of use of Licensed Software and operating systems in the public service
- Operational and implementation support to eGovernment application projects
- Operational and implementation support to all eGhana Project ICT activities

1/2006 – 2017 NME Ltd, Accra, Ghana

Director

- Set up a new enterprise to explore opportunities in the ICT sector
- Successfully negotiated agency status for major satellite Data service provider
- Initiated negotiations for agency status for several major equipment manufacturers
- Videoconferencing and Large Format Video Display design supply and installation
- IP Video Surveillance and access solutions supply and installation
- Wireless internet solution design and deployment
- Outsourced IT and Application support services (on-site and remote)
- Disaster Recovery and Business Continuity Planning and implementation
- Corporate ICT strategy and Business consulting
- Data Centre infrastructure design and implementation
- Data Centre Operations, Staffing and Managed Services
- Enterprise Local Area Network design with and implementation
- Structured (copper and fibre optic) cabling for Voice, Video and Data
- Project Implementation and Management

6/2004 – 12/2005 DFID Accra, Ghana

Regional IT Manager (West Africa)

- Monitor the performance of IT services and IS infrastructure to ensure all output performance measures and availability targets are consistently met
- Ensure that all faults are correctly logged and actioned within agreed timescales
- Liaise and negotiate with regional users and Heads of Office regarding their IS needs, to resolve problems that can be addressed locally, and escalate those that cannot.
- Coordinate activities relating to IT in the sub region.
- Manage the planning, and implementation of new systems in liaison with UK IS managers and local managers
- Manage the training of staff in the local offices on new and existing DFID IT systems.

- Serve as the first recourse for local IT managers, seeking technical support or resources
- Lead for IT systems deployments, resource planning and allocation in the region.
- Proactively manage the IS infrastructure in regional offices to ensure continued availability and reliability
- Ensure the development and training of technical support staff in regional offices
- Ensure the development and maintenance of IS Business Continuity Plans (BCPs).
- Disseminate corporate IT policy to local administrators and monitor enforcement and compliance at the local offices.
- Serve as line manager or co-reporting officer for up to 3 IT Managers in the region

4/2003 – 5/2004 DFID Ghana Ridge, Accra

IT Manager /Logistics

- Responsible for all IT infrastructures including videoconferencing equipment, VSAT, LAN and PABX, and ensuring smooth and uninterrupted delivery of all services over these infrastructure assets.
- Ensure arrangements are in place for the maintenance of all IT and telecommunications equipment and ensuring that new equipment and spares are ordered as required
- Liaise and negotiate with suppliers and contractors for the supply of IT goods and services
- Manage the installation, configuration and support of new IT systems in the office.
- Enforce and monitor compliance with corporate IT policy throughout the office.
- Ensure the physical and logical security of the network, including an effective backup and recovery regime as well as maintaining consistent virus defenses.
- Draft, test and maintain an IT Systems Business Continuity Plan to ensure minimal disruption of DFID's business and IT systems in the event of a disaster.

4/2000 – 12/2002 GIMPA DLC Greenhill, Accra

IT Specialist

- Operate and maintain a VSAT supporting voice, video and data
- Define specs for the acquisition of hardware and software
- Support and operate a videoconferencing facility
- Admin a WinNT/2K net of over 120 PC's & Servers
- Support and maintain all computing and telecom hardware within facility
- Develop IT training programmes for staff
- Responsible for all ICT systems and all aspects of strategic ICT planning in the institute.
- Member of Change Management Committee that oversaw the transition from subvented agency status.
- Led in the specification and participated in the subsequent procurement of a campus fibre optic network supporting voice video and data links between almost 900 terminals.

1996–1997 Lucent Technologies Murray Hill, NJ

Developer

- As a member of a research and development team, developed small programmes to demonstrate or verify theoretical concepts
- Implemented experimental image processing routines on Unix workstations and developed a web based interface to facilitate simple demonstrations of the team's research
- Developed plug-in for Netscape browser to allow for work done in the Lab to be demonstrated on Windows PCs
- Wrote a device driver for UNIX workstations to allow the extraction of closed caption data from a TV signal
- Created a large image database and developed a system that attempted to extract structural data from pictures and thus allow searching the entire catalogue for similarity between images

SECTION III - EVALUATION AND QUALIFICATION CRITERIA (WITHOUT PREQUALIFICATION)

This Section contains all the criteria that the Purchaser shall use to evaluate Proposals and qualify Proposers. No other factors, methods or criteria shall be used. The Proposer shall provide all the information requested in the forms included in Section IV, Proposal Forms.

1. Qualification

1.1 Qualification Requirements

The Proposer's qualifications shall be assessed in accordance with the Qualification table included in this section.

Joint Ventures
The information needed for Bids submitted by joint ventures is as follows: the information above applies. All joint members shall be jointly and severally liable for the Implementation of the Service Contract.

Annual Volume
The minimum required annual volume of Services for the successful Bidder in any of the last five years shall be: **US$10,000,000.00**

Experience

The prospective Proposer shall demonstrate that it has successfully completed at least **two (2)** contracts within the last seven (7) years prior to proposal submission deadline, each with a value of at least **US$5 Million**, that have been successfully and substantially completed and that are similar in nature and complexity to the proposed solution. Similar should include designing, deploying, and operating a Data Exchange Platform on a National scale. The onboarding experience is also very critical to this assignment and the Proposer should demonstrate experience in onboarding different national data sources onto a national data exchange platform.

The successfully completed similar contracts shall be documented by a copy of an Operational acceptance certificate (or equivalent documentation satisfactory to the Purchaser) issued by the previous clients.

1.2 Financial Resources

Using the relevant Form, FIN 1.3.3 in Section IV, Proposal Forms, the Proposer must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:

(i) the following cash-flow requirement: **US$2,000,000.00**

and

(ii) the overall cash flow requirements for this contract and its current supply and services' commitment.

1.3 **Key Personnel**

The Proposer must demonstrate that it will have suitably qualified key personnel. The Proposer shall complete the relevant Forms in Section IV, Proposal Forms. Below are the Key Staff with the relevant qualification and experience required for the assignment

Project Manager (PM)

- **Role**: End-to-end project governance, stakeholder coordination, risk/scope/budget control, and delivery alignment with the project objectives.
- **Qualifications & Experience**:
  - Bachelor's degree (Master's preferred) in Project Management, IT, or Business Administration. **PMP/PRINCE2 certification mandatory**.
  - 10+ years managing **large-scale government IT projects** (>$5M budget),
  - Expertise in Agile/Waterfall hybrid methodologies for software deployment, agency onboarding, and training.
  - Ability to interpret technical requirements (Functional Specifications) and align teams.
  - Experience managing 10-year operational contracts with revenue-sharing models and reverse transfer plans (Operations & Commercialization)

Chief Technical Architect

- Role: Overall solution design, integration strategy, and technical governance.
- Qualifications & Experience:
  - Master's degree in computer science/IT or related field.
  - 15+ years in enterprise integration (ESB, API management, microservices).
  - Expertise in SOA standards (Open Group SOA RA), cloud architecture (GovCloud), and semantic data modeling (RDF, OWL).
  - Proven experience in national-scale data exchange platforms (e.g., digital government projects).
  - Certifications: TOGAF, AWS/Azure Solutions Architect.

Integration, API & ESB Lead

- Role: Develop ESB core, API connectors, EAI patterns and Build/manage API gateway (security, throttling, lifecycle).
- Qualifications & Experience:
  - 10+ years with enterprise integration tools (MuleSoft, WSO2, Apache Camel).
  - Mastery of EAI patterns, protocol bridging (HTTP/JMS/MQTT), and data transformation (XSLT, JSON/XML).
  - Experience onboarding >10 agencies with legacy systems (e.g., SAP, mainframes).
  - Proficiency in REST/SOAP, OAuth 2.0, developer portal setup, API management (Apigee, Kong) and microservices
  - Knowledge of IoT/event-driven architectures.

Cloud Infrastructure Engineer

- Role: Deploy/manage platform on GoG Private Cloud (HA, DR, scaling).
- Qualifications & Experience:
  - 8+ years in cloud ops (AWS/Azure/GCP) and on-prem virtualization (VMware).

- Expertise in Kubernetes, load balancing, and infrastructure security.
- Experience supporting 3,000+ concurrent users.
- Certifications: AWS/Azure Certified DevOps Engineer.

Information Security Expert

- Role: Ensure end-to-end security of the platform, including data integrity, access controls, threat mitigation, and compliance.
- Qualifications & Experience:
  - Bachelor's/Master's in Cybersecurity, IT, or related field.
  - Certifications: CISSP, CISM, CEH, or ISO 27001 Lead Auditor
  - 8+ years in **securing large-scale government/enterprise platforms** (e.g., national ID systems, payment gateways).
  - API security (threat protection, DDoS mitigation), encryption (TLS, PKI), and vulnerability management.
  - Experience in implementing zero-trust architecture for data exchanges.

Data Governance & Catalog Manager

- Role: Design semantic catalog, metadata standards, and data quality rules.
- Qualifications & Experience:
  - 8+ years in data governance (ISO 11179, DCAM).
  - Expertise in ontology modeling, data lineage, and validation frameworks.
  - Experience with government master data management (e.g., citizen registries).
  - Tools: Collibra, Apache Atlas.

Business Analyst & Change Manager

- Role: Lead agency onboarding, process mapping, and training.
- Qualifications & Experience:
  - 10+ years in public sector digitalization and stakeholder engagement.
  - Experience running workshops for 15+ government agencies.
  - Skills in change management frameworks (e.g., Prosci) and UAT coordination.
  - Fluency in local regulations (Ghana Data Protection Act).

Commercialization & Operations Lead

- Role: Develop revenue model, manage 10-year operations, and partnerships.
- Qualifications & Experience:
  - 10+ years in PPP models, revenue sharing, and platform monetization.
  - Experience scaling govt-to-business (G2B) data services.
  - Proven SLA management and vendor transition planning.

1.4 Subcontractors/vendors/manufacturers – Not Applicable

Subcontractors/vendors/manufacturers for major items of supply or services identified in the prequalification document must meet or continue to meet the minimum criteria specified therein for each item.

Subcontractors for the following additional major items of supply or services must meet the following minimum criteria, herein listed for that item:

Item No.	Description of Item	Minimum Criteria to be met
1		

2		
3		
…		

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

1.5 Manufacturer's authorization

For all powered (active) hardware and/or software components of the Information System which the Proposer does not itself produce, by submission of documentary evidence in its Proposal, the Proposer must establish to the Purchaser's satisfaction that it is not prohibited to supply those components in the Purchaser's country under the Contract(s) that may result from this procurement.

(i) In the case of powered (active) hardware and other powered equipment, this must be documented by including Manufacturer's Authorizations in the Proposal (based on the sample found in the Sample Proposal Forms in Section IV.);

(ii) In the case of proprietary commercial software (i.e., excluding open source or "freeware" software) that the Proposer does not manufacture itself and for which the Proposer has or will establish an Original Equipment Manufacturer (OEM) relationship with the manufacture, the Proposer must provide Manufacture's Authorizations;

(iii) In the case of proprietary commercial software (i.e., excluding open source or "freeware" software) that the Proposer does not manufacture itself and for which the Proposer does not or will not establish an OEM relationship with the manufacturer, the Proposer must document to the Purchaser's satisfaction that the Proposer is not excluded from sourcing these items from the manufacturer's distribution channels and proposing offering these items for supply in the Borrower's Country.

(iv) In the case of open source software, the Proposer must identify the software item as open source and provide copies of the relevant open source license(s).

The Proposer is responsible for ensuring that the manufacturer or producer complies with the requirements of ITP 4 and ITP 5 and meets the minimum criteria listed above for that item.

1.6 Local Representative

In the case of a Proposer not doing business within the Purchaser's country, the Proposer shall submit documentary evidence in its Proposal to establish to the Purchaser's satisfaction that it is or will be (if awarded the Contract) represented by an agent in that country who is equipped and able to carry out / manage the Proposer's maintenance, technical support, training, and warranty repair obligations specified in the Purchaser's Requirements (including any response time, problem-resolution norms or other aspects that may be specified in the Contract).

2. Technical Evaluation

2.1 Assessment of adequacy of Technical Proposal with Requirements in accordance with ITP 32.1

The Technical Proposal must demonstrate full compliance with all requirements set out in Part II Technical Requirements. Only proposals that meet all of these mandatory requirements should be considered responsive and proceed to the technical evaluation stage, where the scored technical factors and sub-factors will be applied

Requirement as provided for in Part 2 – Purchaser's Requirement in this document.

2.2 Technical Evaluation (ITP 32.2)

The technical features to be evaluated are generally defined below and specifically identified in the PDS:

(i) to which extent that the performance, capacity, or functionality features meet or exceed the levels specified in the performance / functional requirements and/or influence the life-cycle cost and effectiveness of the Information System;

(ii) usability features, such as ease of use, ease of administration, or ease of expansion, which influence the life-cycle cost and effectiveness of the Information System;

(iii) quality of the Proposer's Preliminary Project Plan as evidenced by the thoroughness, reasonableness, and responsiveness of: (a) the task and resource schedules, both general and specific, and (b) the proposed arrangements for management and coordination, training, quality assurance, technical support, logistics, problem resolution, and transfer of knowledge, and other such activities as specified by the Purchaser or proposed by the Proposer based on the Proposer's experience;

(iv) Any sustainable procurement requirement if specified in Section VII-Requirements of the Information System.

The total technical points assigned to each Proposal in the Evaluated Proposal Formula will be determined by adding and weighting the scores assigned by an evaluation committee to technical features of the Proposal **in accordance with the PDS** and the scoring methodology below.

NOTE: The Technical evaluation criteria is found at the end of this current table.

Technical proposal scoring methodology

(a) During the evaluation process, the evaluation committee will assign each desirable/preferred feature a whole number score from 0 to 4, where 0 means that the feature is absent, and 1 to 4 either represent predefined values for desirable features amenable to an objective way of rating (as is the case for, e.g., extra memory, or extra mass storage capacity, etc., if these extras would be conducive for the utility of the system), or if the feature represents a desirable functionality (e.g., of a software package) or a quality improving the prospects for a successful implementation (such as the strengths of the proposed project staff, the methodology, the elaboration of the project plan, etc., in the proposal), the scoring will be 1 for the feature being present but showing deficiencies; 2 for meeting the requirements; 3 for marginally exceeding the requirements; and 4 for significantly exceeding the requirements.

(b) 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 "i" in category "j"
w_{ji} = the weight of feature "i" in category "j"
k = the number of scored features in category "j"
and $\sum_{i=1}^{k} w_{ji} = 1$

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

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

where:
S_j = the Category Technical Score of category "j"
W_j = the weight of category "j" as specified in the PDS
n = the number of categories

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

For Clarity, the quality of the bid with regard to each of the specification requirements will be rated as follows:

The importance of each of the technical feature to be rated on a scale of 1-3 as demonstrated in the table below;

Actual score to be given based on assessment of Bidders proposals meeting the requirement to be rated from 0 to 4 as below;

0 = Absent or Unacceptable : Required feature is absent; no relevant information to demonstrate how the requirement is met
1 = Poor : Required feature present with deficiencies such as insufficient or information that lacks clarity
2 = Fair : Sufficient information to demonstrate how the requirement will be met
3 = Good : Sufficient information to demonstrate that the requirement will be marginally exceeded
4 = Excellent : Sufficient information that significantly exceed the requirement/proposal contributes to significant value addition

For each sub-criteria, the evaluation team will calculate a score by multiplying the average quality rating number times by the importance rating number

The product of these two numbers will be entered in the final column by the evaluators and will be totaled

Each bidders score will be a proportion of the maximum obtained score (440). The minimum technical score for a bid to be considered further is **80%**

1	2		3	4	5
Item No.	**TECHNICAL EVALUATION CRITERIA**		**Points**		
			Importance Weighting on scale of 1-5	**Rating of Proposed System on scale of 0-4**	**Sub-total (weighting x rating)**
1	**Relevant Vendor Experience -10%**	General experience	5		
		Specific experience in similar project and environment.	5		
2	**Proposed Technical Solution -40%**	Overall Proposed Solution Architecture	2		
		Proposed Infrastructure Architecture	1		
		Proposed Platform Architecture	1		
		Proposed security Architecture	2		
		Semantic and System Catalogue	3		
		Integration Module	3		
		API Management module	3		

1	2		3	4	5
Item No.	**TECHNICAL EVALUATION CRITERIA**		**Points**		
			Importance Weighting on scale of 1-5	**Rating of Proposed System on scale of 0-4**	**Sub-total (weighting x rating)**
		Identity and Access Management module	3		
		Analytics module	3		
		Dashboard/Reporting module	2		
		Mobility module	2		
		Workflow Engine	3		
		IoT module	3		
		AI Module	3		
		PKI Integration	3		
		International Gateway Module	3		
3	**Project Approach and Methodology- 10%**	Proposed Methodology	3		
		Workplan	2		
		Risk Management Plan	2		
		Transition Migration and Onboarding Plan	1		
		Testing and Quality Assurance Plan	1		
		Documentation, Training and Knowledge Transfer	1		
4	**Qualification and Experience of Key Staff -15%**	Project Manager	3		
		Chief Technical Architect	2		
		Integration, API & ESB Lead	2		
		Cloud Infrastructure Engineer	2		
		Information Security Expert	2		
		Data Governance and Catalog Manager	2		
		Business Analyst and Change Manager	1		
		Commercial and Operation Lead	1		
5	**Operations & Maintenance - 10%**	Operations and Maintenance Plan	2		
		Backup, Disaster Recovery and Business Continuity Plan	1		
		Content/Service Update, Patch and Upgrade Plan	1		
		Service Level Agreement Plan (to purchaser and backend service providers)	2		

1	2		3	4	5
Item No.	**TECHNICAL EVALUATION CRITERIA**		**Points**		
			Importance Weighting on scale of 1-5	**Rating of Proposed System on scale of 0-4**	**Sub-total (weighting x rating)**
		Third Party Vendor Management Plan	1		
		User Support and Feedback Management Plan	1		
		System Resource and Capacity Management Plan	1		
		Logging and Incident Management Plan	1		
6	**Commercial - 15%**	Commercial Management and Revenue Model	4		
		Revenue Share Model	4		
		Five (5) year Operational Cost	4		
		Governance and Transparency	3		

3. Technical alternatives

If invited in accordance with ITP 13.4, will be evaluated as follows: **None**

4. Financial Evaluation

The following factors and methods will apply:

(a) Time Schedule:

The number of weeks, from the effective date specified in Article 3 of the Contract Agreement, to achieve Operational Acceptance must be no more than: **27 Weeks**.

A Proposal offering to achieve Operational Acceptance earlier than the maximum number of weeks **shall not** be given credit for proposal evaluation purposes.

If an adjustment for a proposed accelerated time schedule is specified above it shall be made accordingly: For evaluation purposes a *[specify: **number**]* percent reduction in the *[specify: **overall / pro rata**]*. Proposal Price shall be made for each week the proposed achievement of the Operational Acceptance is advanced relative to the Implementation Schedule in the Purchaser's Requirements up to a limit of *[specify: **number**]* weeks of acceleration. **Not-Applicable**

If awarded the Contract, the Proposer's accelerated Implementation Schedule would be formally incorporated into the Contract and this schedule shall govern the application of the contract clauses pertaining to Performance Security, liquidated damages as well as other relevant contract clauses. **Not-Applicable**

(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 Proposer 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 Proposal price for evaluation.

Option 1: The recurrent cost 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:

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

where

N = number of years of evaluated recurrent costs

x = an index number 1, 2, 3, ... N.

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 PDS for ITP 39.1.**

or Option 2:

alternative recurrent cost evaluation scheme: **Not Applicable**

5. Combined Evaluation

The Purchaser will evaluate and compare the Proposals that have been determined to be substantially responsive.

An Evaluated Proposal Score (B) will be calculated for each responsive Proposal using the following formula, which permits a comprehensive assessment of the evaluated cost and the technical merits of each Proposal:

$$B \equiv \frac{Clow}{C} * X * 100 + \frac{T}{Thigh} * (1 - X) * 100$$

where

C = Evaluated Proposal Price

C_{low} = the lowest of all Evaluated Proposal Prices among responsive Proposals

T = the total Technical Score awarded to the Proposal

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

X = weight for the Cost as specified in the PDS

The Proposal with the best evaluated Proposal Score (B) among responsive Proposals shall be the Most Advantageous Proposal provided the Proposer was prequalified and/or it was found to be qualified to perform the Contract

1. Qualification

Factor	1.1 ELIGIBILITY						
Sub-Factor	Criteria						Documentation Required
	Requirement	Proposer					
		Single Entity	Joint Venture (existing or intended)				
			All members combined	Each member	At least one member		
1.1 Nationality	Nationality in accordance with ITP 4.4.	Must meet requirement	Must meet requirement	Must meet requirement	N / A		Form ELI –1.1 and 1.2, with attachments
1.2 Conflict of Interest	No- conflicts of interests as described in ITP 4.2.	Must meet requirement	Must meet requirement	Must meet requirement	N / A		Letter of Proposal
1.3 Bank Ineligibility	Not having been declared ineligible by the Bank as described in ITP 4.5.	Must meet requirement	Must meet requirement	Must meet requirement	N / A		Letter of Proposal
1.4 State owned Entity of the Borrower country	Compliance with conditions of ITP 4.6	Must meet requirement	Must meet requirement	Must meet requirement	N / A		Form ELI –1.1 and 1.2, with attachments

Factor	1.1 ELIGIBILITY					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
1.1.5 United Nations resolution or Borrower's country law	Not having been excluded as a result of prohibition in the Borrower's country laws or official regulations against commercial relations with the Proposer's country, or by an act of compliance with UN Security Council resolution, both in accordance with ITP 4.8	Must meet requirement	Must meet requirement	Must meet requirement	N / A	Letter of Proposal

Factor	1.2 HISTORICAL CONTRACT NON-PERFORMANCE					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
1.2.1 History of non-performing contracts	Non-performance of a contract did not occur as a result of Proposer's default since 1st January 2020	Must meet requirement by itself or as member to past or existing JV	N / A	Must meet requirement	N / A	Form CON - 2
1.2.2 Suspension	Not under suspension based on execution of a Proposal Securing Declaration or Proposal Securing Declaration pursuant to ITP 4.7 and ITP 20.10	Must meet requirement	N / A	Must meet requirement	N / A	Letter of Proposal
1.2.3 Pending Litigation	Proposer's financial position and prospective long term profitability still sound according to criteria established in 2.3.1 below and assuming that all pending litigation will be resolved against the Proposer.	Must meet requirement by itself or as member to past or existing JV	N / A	Must meet requirement	N / A	Form CON – 2

1.2.4 Litigation History	No consistent history of court/arbitral award decisions against the Proposer since 1st January 2020	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Form CON – 2
1.2.5 Bank's SEA and/or SH Disqualification[1]	At the time of Contract Award, not subject to disqualification by the Bank for non-compliance with SEA/ SH obligations	Must meet requirement (including each subcontractor proposed by the Proposer)	N/A	Must meet requirement (including each subcontractor proposed by the Proposer)	N/A	Letter of Proposal, Form CON-3

Factor	1.3 FINANCIAL SITUATION					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
1.3.1 Historical Financial Performance	Submission of audited balance sheets or if not required by the law of the Proposer's country, other financial statements acceptable to the Purchaser, for the last five [5] years to demonstrate the current soundness of the Proposers financial position and its prospective long term profitability.	Must meet requirement	N / A	Must meet requirement	N / A	Form FIN – 1.3.1 with attachments
1.3.2 Average Annual Turnover	Minimum average annual turnover of **US$10,000,000.00** calculated as total certified payments received for contracts in progress or completed, within the last seven (7) years	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN –1.3.2

Factor	1.3 FINANCIAL SITUATION					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
1.3.3 Financial Resources	The Proposer must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet the following cash-flow requirement: A minimum liquidity of **US$2,000,000.00.**	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN –1.3.3

Factor	1.4 EXPERIENCE					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
1.4.1 General Experience	Experience under Information System contracts in the role of prime supplier, management contractor, JV member, or subcontractor for at least the last ten (10) years prior to the applications submission deadline.	Must meet requirement	N / A	Must meet requirement	N / A	Form EXP-1.4.1
1.4.2 Specific Experience	Participation as a prime supplier, management contractor, JV member, sub-contractor, in at least **two (2)** contracts within the last seven (7) years prior to proposal submission deadline, each with a value of at least **US$5,000,000.00**, that have been successfully and substantially completed and that are similar in nature and complexity to the proposed solution. The similar should include designing, deploying, and operating a Data Exchange Platform on a National scale. The onboarding experience is also very critical to this assignment and the Proposer should demonstrate experience in	Must meet requirement	Must meet requirements	N / A	N / A	Form EXP 1.4.2

Factor	1.4 EXPERIENCE					
Sub-Factor	Criteria					Documentation Required
	Requirement	Proposer				
		Single Entity	Joint Venture (existing or intended)			
			All members combined	Each member	At least one member	
	onboarding different national data sources onto a national data exchange platform. The successfully completed similar contracts shall be documented by a copy of an Operational acceptance certificate (or equivalent documentation satisfactory to the Purchaser) issued by the previous clients.					

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Letter of Proposal- Technical Part

INSTRUCTIONS TO PROPOSERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

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

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

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

RFP No.: *[insert **number of RFP process**]*

Alternative No.: *[insert **identification No if this is a Proposal for an alternative,** otherwise state **"not applicable"**]*

We, the undersigned, declare that:

To: *[insert **complete name of Purchaser**]*

(a) **No reservations:** We have examined and have no reservations to the request for proposals document, including Addenda issued in accordance with Instructions to Proposers (ITP 8);

(b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITP 4;

(c) **Proposal-Securing Declaration:** We have not been suspended nor declared ineligible by the Purchaser based on execution of a Proposal-Securing Declaration or Proposal-Securing Declaration in the Purchaser's Country in accordance with ITP 4.7;

(d) **Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH):** [*select the appropriate option from (i) to (v) below and delete the others. In case of JV members and/or subcontractors, indicate the status of disqualification by the Bank of each JV member and/or subcontractor]*.

We, including any of our subcontractors:

(i) [have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]

(ii) [are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations.]

(iii) [had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.]

(e) **Conformity:** We offer to provide design, supply and installation services in conformity with the request for proposals document of the following: [*insert a brief description of the IS Design, Supply and Installation Services*];

(f) **Proposal Validity:** Our Proposal shall be valid until *[insert day, month and year in accordance with ITP 19.1],* and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

(g) **Performance Security:** If our Proposal is accepted, we commit to obtain a Performance Security in accordance with the request for proposals document;

(h) **One Proposal Per Proposer:** We are not submitting any other Proposal(s) as an individual Proposer, and we are not participating in any other Proposal(s) as a Joint Venture member, and meet the requirements of ITP 4.3, other than alternative Proposals submitted in accordance with ITP 13;

(i) **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;

(j) **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 ITP 4.6***];

(k) **Commissions, gratuities and fees**: We have paid, or will pay the following commissions, gratuities, or fees with respect to the procurement 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****."]*

(l) **Binding Contract**: We understand that this Proposal, 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;

(m) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Proposal, the Most Advantageous Proposal or any other Proposal that you may receive; and

(n) **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 Proposer: **[insert **complete name of the Proposer**]*

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

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

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

Date signed *[insert **number**]* day of *[insert **month**]*, *[insert **year**]*

*: In the case of the Proposal submitted by joint venture specify the name of the Joint Venture as Proposer

**: Person signing the Proposal shall have the power of attorney given by the Proposer to be attached with the Proposal

FORM ELI 1.1.1- PROPOSER INFORMATION FORM

*[**Note**: The Proposer 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 Proposal submission***]

RFP No.: *[insert **number of Request for Proposals process**]*

Alternative No.: *[insert **identification No if this is a Proposal for an alternative]***
*otherwise state **"not applicable"***

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1. Proposer's Name *[insert **Proposer's legal name**]*
2. In case of JV, legal name of each member : *[insert **legal name of each member in JV**]*
3. Proposer's actual or intended country of registration: *[insert **actual or intended country of registration**]*
4. Proposer's year of registration: *[insert **Proposer's year of registration**]*
5. Proposer's Address in country of registration: *[insert **Proposer's legal address in country of registration**]*
6. Proposer's Authorized Representative Information 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**]*
7. Attached are copies of original documents of *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITP 4.4. ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITP 4.1. ☐ In case of state-owned enterprise or institution, in accordance with ITP 4.6 documents establishing: • Legal and financial autonomy

- Operation under commercial law
- Establishing that the Proposer is not under the supervision of the Purchaser

8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. *[The successful Proposer shall provide additional information on beneficial ownership, using the Beneficial Ownership Disclosure Form.]*

FORM ELI 1.1.2- PROPOSER'S JV MEMBERS INFORMATION FORM

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

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

RFP No.: *[insert **number of Request for Proposals process**]*

Alternative No.: *[insert **identification No if this is a Proposal for an alternative,** otherwise state **"not applicable"**]*

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1. Proposer's Name: *[insert **Proposer's legal name**]*
2. Proposer's JV Member's name: *[insert **JV's Member legal name**]*
3. Proposer's JV Member's country of registration: *[insert **JV's Member country of registration**]*
4. Proposer's JV Member's year of registration: *[insert **JV's Member year of registration**]*
5. Proposer's JV Member's legal address in country of registration: *[insert **JV's Member legal address in country of registration**]*
6. Proposer's JV Member's authorized representative information Name: *[insert **name of JV's Member authorized representative**]* Address: *[insert **address of JV's Member authorized representative**]* Telephone/Fax numbers: *[insert **telephone/fax numbers of JV's Member authorized representative**]* Email Address: *[insert **email address of JV's Member authorized representative**]*

7. Attached are copies of original documents of *[check the box(es) of the attached original documents]*

☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITP 4.4.

☐ 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 ITP 4.6.

8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership. *[The successful Proposer shall provide additional information on beneficial ownership for each JV member using the Beneficial Ownership Disclosure Form.]*

FORM CON – 2- HISTORICAL CONTRACT NON-PERFORMANCE, PENDING LITIGATION AND LITIGATION HISTORY

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

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: _____*[insert **date**]*

JV member Legal Name: *[insert **JV Member Legal Name**]*

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

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Non-Performed Contracts in accordance with Section III, Evaluation and Qualification Criteria			
☐ Contract non-performance did not occur since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 1.2.1. ☐ Contract(s) not performed since 1st January *[insert year]* specified in Section III, Evaluation and Qualification Criteria, requirement 1.2.1			
Year	**Non-performed portion of contract**	**Contract Identification**	**Total Contract Amount (current value, currency, exchange rate and US$ equivalent)**
*[insert **year**]*	*[insert **amount and percentage**]*	Contract Identification: *[indicate **complete contract name/ number, and any other identification**]* Name of Employer: *[insert **full name**]* Address of Employer: *[insert **street/city/country**]* Reason(s) for nonperformance: *[indicate **main reason(s)**]*	*[insert **amount**]*
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
☐ No pending litigation in accordance with Sub-Factor 1.2.3. ☐ Pending litigation in accordance with Sub-Factor 1.2.3 as indicated below.			

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), USD Equivalent (exchange rate)
*[specify **year**]*	*[specify **amount and currency**]*	Contract Identification: *[insert **Contract ID**]* Name of Employer: *[insert **Name of Employer**]* Address of Employer: *[insert **Address of Employer**]* Matter in dispute: *[describe **Matter of dispute**]* Party who initiated the dispute: *[specify **Initiator of dispute**]* Status of dispute: *[specify **Status of dispute**]*	*[specify **total contract amount and currency, USD equivalent and exchange rate**]*
*[specify **year**]*	*[specify **amount and currency**]*	Contract Identification: *[insert **Contract ID**]* Name of Employer: *[insert **Name of Employer**]* Address of Employer: *[insert **Address of Employer**]* Matter in dispute: *[describe **Matter of dispute**]* Party who initiated the dispute: *[specify **Initiator of dispute**]* Status of dispute: *[specify **Status of dispute**]*	*[specify **total contract amount and currency, USD equivalent and exchange rate**]*

Litigation History in accordance with Section III, Evaluation and Qualification Criteria

☐ No Litigation History in accordance with Sub-Factor 1.2.4.

☐ Litigation History in accordance with Sub-Factor 1.2.4 as indicated below.

Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), USD Equivalent (exchange rate)
*[specify **year**]*	*[specify **percentage of net worth**]*	Contract Identification: *[insert **Contract ID**]* Name of Employer: *[insert **Name of Employer**]* Address of Employer: *[insert **Address of Employer**]*	*[specify **total contract amount and currency, USD equivalent and exchange rate**]*

FORM CON – 3

SEXUAL EXPLOITATION AND ABUSE (SEA) AND/OR SEXUAL HARASSMENT PERFORMANCE DECLARATION

[The following table shall be filled in by the Proposer, each member of a Joint Venture and each subcontractor proposed by the Proposer]

Proposer's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member's or Subcontractor's Name: *[insert full name]*
RFP No. and title: *[insert RFP number and title]*
Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration **in accordance with Section III, Qualification Criteria, and Requirements**
We: ☐ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations ☐ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations ☐ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.
[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*

FORM EXP 1.4.1- GENERAL EXPERIENCE

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Starting Month / Year	**Ending Month / Year**	**Years ***	**Contract Identification**	**Role of Proposer**
*[insert **month / year**]*	*[insert **month / year**]*	*[insert **number of years**]*	Contract name: *[insert **Name of Contract**]* Brief Description of the Information System performed by the Proposer: *[describe **Information System**]* Name of Purchaser: *[insert **Name of Purchaser**]* Address: *[insert **Address of Purchaser**]*	*[describe **role of Proposer under the contract**]*
*[insert **month / year**]*	*[insert **month / year**]*	*[insert **number of years**]*	Contract name: *[insert **Name of Contract**]* Brief Description of the Information System performed by the Proposer: *[describe **Information System**]* Name of Purchaser: *[insert **Name of Purchaser**]* Address: *[insert **Address of Purchaser**]*	*[describe **role of Proposer under the contract**]*
*[insert **month / year**]*	*[insert **month / year**]*	*[insert **number of years**]*	Contract name: *[insert **Name of Contract**]* Brief Description of the Information System performed by the Proposer: *[describe **Information System**]* Name of Purchaser: *[insert **Name of Purchaser**]* Address: *[insert **Address of Purchaser**]*	*[describe **role of Proposer under the contract**]*
*[insert **month / year**]*	*[insert **month / year**]*	*[insert **number of years**]*	Contract name: *[insert **Name of Contract**]* Brief Description of the Information System performed by the Proposer: *[describe **Information System**]* Name of Purchaser: *[insert **Name of Purchaser**]* Address: *[insert **Address of Purchaser**]*	*[describe **role of Proposer under the contract**]*

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

FORM EXP 1.4.2- SPECIFIC EXPERIENCE

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Similar Contract Number: ___ of ___ required.	**Information**		
Contract Identification	*[insert **Contract ID**]*		
Award date Completion date	*[insert **Date of Award*** *[insert **Date of Completion***		
Role in Contract	ϒ Prime Supplier	ϒ Management Contractor	ϒ Subcontractor
Total contract amount			
If member in a JV or subcontractor, specify participation of total contract amount			
Purchaser's Name:	_____		
Address: Telephone/fax number: E-mail:	_____ _____ _____		

FORM EXP 1.4.2 (CONT.) - SPECIFIC EXPERIENCE (CONT.)

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Similar Contract No. *[insert **specific number**]* **of** *[**insert total number of contracts**]* **required**	**Information**
Description of the similarity in accordance with Sub-Factor 1.4.2 of Section III:	
Amount	*[insert **contract amount and currency and USD equivalent and exchange rate**]*
Geographical Scope	*[describe **geographic scope of the users of the information system**]*
Functional Scope	*[describe **the functionalities provided by the information system**]*
Methods/Technology	*[describe **methodologies and technologies used to implement the information system**]*
Key Activities	*[describe **the key activities of the Proposer under the contract**]*

FORM CCC- SUMMARY SHEET: CURRENT CONTRACT COMMITMENTS / WORK IN PROGRESS

[Proposers and each partner to a Joint Venture 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.]

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Name of contract	Purchaser, contact address/tel./fax	Value of outstanding Information System (current US$ equivalent)	Estimated completion date	Average monthly invoicing over last six months (US$ equivalent/month)
1. *[insert **Name o Contract]***	*[insert **Name of Purchaser, contact address, telephone / fax number]***	*[insert **Total Outstanding Contract Value of the information system in USD equivalent and exchange rate]***	*[insert **Estimated completion date]***	*[insert **Average monthly invoices in USD equivalent and exchange rate]***
2. *[insert **Name o Contract]***	*[insert **Name of Purchaser, contact address, telephone / fax number]***	*[insert **Total Outstanding Contract Value of the information system in USD equivalent and exchange rate]***	*[insert **Estimated completion date]***	*[insert **Average monthly invoices in USD equivalent and exchange rate]***
3. *[insert **Name o Contract]***	*[insert **Name of Purchaser, contact address, telephone / fax number]***	*[insert **Total Outstanding Contract Value of the information system in USD equivalent and exchange rate]***	*[insert **Estimated completion date]***	*[insert **Average monthly invoices in USD equivalent and exchange rate]***
...				

FORM FIN 1.3.1- FINANCIAL SITUATION: HISTORICAL FINANCIAL PERFORMANCE

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

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Financial information in US$ equivalent	**Historic information for previous** *[insert **number**]* **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:

(a) Must reflect the financial situation of the Proposer or member to a JV, and not sister or parent companies
(b) Historic financial statements must be audited by a certified accountant
(c) Historic financial statements must be complete, including all notes to the financial statements

(d) Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted)

FORM FIN 1.3.2- AVERAGE ANNUAL TURNOVER

[To be completed by the Proposer and, if JV, by each member]

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Annual turnover data (applicable activities only)		
Year	Amount and Currency	US$ equivalent
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*[insert **year**]*	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*
*Average Annual Turnover	*[insert **amount and currency**]*	*[insert **amount in USD equivalent and exchange rate**]*

*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 1.3.2.

FORM FIN 1.3.3- FINANCIAL RESOURCES

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

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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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. *[describe **type and source of available financing**]*	*[insert **amount of available financing in USD equivalent and exchange rate**]*
2. *[describe **type and source of available financing**]*	*[insert **amount of available financing in USD equivalent and exchange rate**]*
3. *[describe **type and source of available financing**]*	*[insert **amount of available financing in USD equivalent and exchange rate**]*
4. *[describe **type and source of available financing**]*	*[insert **amount of available financing in USD equivalent and exchange rate**]*

PERSONNEL CAPABILITIES- KEY PERSONNEL

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

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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

3.	Title of position: **Cyber security Expert/s** ***[Include as required]***	
	Name of candidate: *[insert **Name of Candidate**]*	
	Duration of appointment:	[*insert **the whole period (start and end dates) for which this position will be engaged***]
	Time commitment: for this position:	[*insert **the number of days/week/months/ that has been scheduled for this position***]
	Expected time schedule for this position:	[*insert **the expected time schedule for this position (e.g. attach high level Gantt chart***]

Candidate Summary

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

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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Position; *[insert **Title of Position**]*		Prime ϒ Alternate
Candidate information	Name of candidate *[insert **Name Candidate**]*	Date of birth *[insert **Date of Birth**]*
	Professional qualifications *[describe **Professional qualifications**]*	
Present employment	Name of Employer *[insert **Name of Present Employer**]*	
	Address of Employer *[insert **Address of Present Employer**]*	
	Telephone *[insert **Telephone** of **Contact**]*	Contact (manager / personnel officer) *[insert **Name**]*
	Fax *[insert **fax of Contact**]*	email *[insert **email** of **Contact**]*
	Job title of candidate *[insert **Job Title Candidate**]*	Years with present Employer *[insert **Number of years**]*

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 experienc
*[insert **year**]*	*[insert **year**]*	*[describe **experience relevant to the proposed Contract under the RFP**]*
*[insert **year**]*	*[insert **year**]*	*[describe **experience relevant to the proposed Contract under the RFP**]*
*[insert **year**]*	*[insert **year**]*	*[describe **experience relevant to the proposed Contract under the RFP**]*
*[insert **year**]*	*[insert **year**]*	*[describe **experience relevant to the proposed Contract under the RFP**]*

CODE OF CONDUCT FOR SUPPLIER'S PERSONNEL FORM

***Note to the Purchaser**:*

***The following minimum requirements shall not be modified**. The Purchaser may add additional requirements to address identified issues, informed by relevant environmental and social assessment.*

Delete this Box prior to issuance of the Request for Proposals document.

Note to the Proposer:

The minimum content of the Code of Conduct form as set out by the Purchaser shall not be substantially modified. However, the Proposer may add requirements as appropriate, including to take into account Contract-specific issues/risks.

The Proposer shall initial and submit the Code of Conduct form as part of its proposal.

CODE OF CONDUCT FOR SUPPLIER'S PERSONNEL

We are the Supplier, [*enter name of Supplier*]. We have signed a contract with [*enter name of Purchaser*] for [*enter description of the Information System*]. The Information System will be supplied to and installed at [*enter the Project Site/s]*. Our contract requires us to implement measures to address environmental and social risks.

This Code of Conduct identifies the behavior that we require from Supplier's Personnel employed in the execution of the Contract at the Project Site/s.

Our workplace is an environment where unsafe, offensive, abusive or violent behavior will not be tolerated and where all persons should feel comfortable raising issues or concerns without fear of retaliation.

REQUIRED CONDUCT

Supplier's Personnel employed in the execution of the Contract at the Project Site/s shall:

1. carry out his/her duties competently and diligently;
2. comply with this Code of Conduct and all applicable laws, regulations and other requirements, including requirements to protect the health, safety and well-being of other Supplier's Personnel and any other person;
3. maintain a safe working environment including by:

a. ensuring that workplaces, machinery, equipment and processes under each person's control are safe and without risk to health;

b. wearing required personal protective equipment;

c. using appropriate measures relating to chemical, physical and biological substances and agents; and

d. following applicable emergency operating procedures.

4. report work situations that he/she believes are not safe or healthy and remove himself/herself from a work situation which he/she reasonably believes presents an imminent and serious danger to his/her life or health;
5. treat other people with respect, and not discriminate against specific groups such as women, people with disabilities, migrant workers or children;
6. not engage in any form of sexual harassment including unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature with other Supplier's or Purchaser's Personnel;
7. not engage in Sexual Exploitation, which means any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another;
8. not engage in in Sexual Abuse, which means the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions;
9. not engage in any form of sexual activity with individuals under the age of 18, except in case of pre-existing marriage;
10. complete relevant training courses that will be provided related to the environmental and social aspects of the Contract, including on health and safety matters, and Sexual Exploitation and Abuse, and Sexual Harassment (SH);
11. report violations of this Code of Conduct; and
12. not retaliate against any person who reports violations of this Code of Conduct, whether to us or the Purchaser, or who makes use of the grievance mechanism for Supplier's Personnel or the project's Grievance Redress Mechanism.

RAISING CONCERNS

If any person observes behavior that he/she believes may represent a violation of this Code of Conduct, or that otherwise concerns him/her, he/she should raise the issue promptly. This can be done in either of the following ways:

1. Contact [*enter name of the Supplier's Social Expert with relevant experience in handling sexual exploitation, sexual abuse and sexual harassment cases, or if such person is not required under the Contract, another individual designated by the Supplier to handle these matters*] in writing at this address [ ] or by telephone at [ ] or in person at [ ]; or

2. Call [ ] to reach the Supplier's hotline *(if any)* and leave a message.

The person's identity will be kept confidential, unless reporting of allegations is mandated by the country law. Anonymous complaints or allegations may also be submitted and will be given all due and appropriate consideration. We take seriously all reports of possible misconduct and will investigate and take appropriate action. We will provide warm referrals to service providers that may help support the person who experienced the alleged incident, as appropriate.

There will be no retaliation against any person who raises a concern in good faith about any behavior prohibited by this Code of Conduct. Such retaliation would be a violation of this Code of Conduct.

CONSEQUENCES OF VIOLATING THE CODE OF CONDUCT

Any violation of this Code of Conduct by the Supplier's Personnel may result in serious consequences, up to and including termination and possible referral to legal authorities.

FOR SUPPLIER's PERSONNEL:

I have received a copy of this Code of Conduct written in a language that I comprehend. I understand that if I have any questions about this Code of Conduct, I can contact [*enter name of Supplier's contact person(s) with relevant experience*] requesting an explanation.

Name of Supplier's Personnel: *[insert **name**]*

Signature: _____

Date: (day month year): *[insert **date**]*

Countersignature of authorized representative of the Supplier:

Signature: _____

Date: (day month year): *[insert **date**]*

ATTACHMENT 1: Behaviors constituting SEA and behaviors constituting SH

ATTACHMENT 1 TO THE CODE OF CONDUCT FORM

BEHAVIORS CONSTITUTING SEXUAL EXPLOITATION AND ABUSE (SEA) AND BEHAVIORS CONSTITUTING SEXUAL HARASSMENT (SH)

The following non-exhaustive list is intended to illustrate types of prohibited behaviors.

(1) **Examples of sexual exploitation and abuse** include, but are not limited to:

- A Supplier's Personnel tells a member of the community that he/she can get them jobs related to the project site in exchange for sex.
- A Supplier's Personnel rapes, or otherwise sexually assaults a member of the community.
- A Supplier's Personnel denies a person access to the Project Site/s unless he/she performs a sexual favor.
- A Supplier's Personnel tells a person applying for employment under the Contract that he/she will only hire him/her if he/she has sex with him/her.

(2) **Examples of sexual harassment in a work context**

- A Supplier's Personnel comment on the appearance of another Supplier's Personnel (either positive or negative) and sexual desirability.
- When a Supplier's Personnel complains about comments made by another Supplier's Personnel on his/her appearance, the other Supplier's Personnel comment that he/she is "asking for it" because of how he/she dresses.
- Unwelcome touching of a Supplier's Personnel or Purchaser's Personnel by another Supplier's Personnel.
- A Supplier's Personnel tells another Supplier's Personnel that he/she will get him/her a salary raise, or promotion if he/she sends him/her naked photographs of himself/herself.

TECHNICAL CAPABILITIES

*[**Note**: To be completed by the Proposer and, if JV, by each member]*

Proposer's Legal Name: *[insert **Proposer's Legal Name**]*

Date: *[insert **Date**]*

JV Member Legal Name: *[insert **JV Member Legal Name**]*

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

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The Proposer shall provide adequate information to demonstrate clearly that it has the technical capability to meet the requirements for the Information System. The Proposer should summarize important certifications, proprietary methodologies, and/or specialized technologies that the Proposer 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 Proposals Title and No.: *[Purchaser insert: **RFP Title and Number**]*

To: *[Purchaser insert: **Purchaser's Officer to receive the Manufacture'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 Proposer or Joint Venture**]* located at *[insert: **address of Proposer or Joint Venture**]* (hereinafter, the "Proposer") to submit a proposal 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 request for proposals process results in a Contract between you and the Proposer, 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 Proposals Title and No.: *[Purchaser insert: **RFP 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 Proposer or Joint Venture**]* located at *[insert: **address of Proposer or Joint Venture**]* (hereinafter, the "Proposer") that it will submit a proposal 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 Proposal 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 Proposers on working with the Intellectual Property Forms

In accordance with ITP 11.1(j), Proposers must submit, as part of their proposals, lists of all the Software included in the proposal assigned to one of the following categories: (a) System, General-Purpose, or Application Software; (b) Standard or Custom Software; (c) Proprietary or Open Source. Proposers must also submit a list of all Custom Materials. These categorizations are needed to support the Intellectual Property in the GCC and SCC. The Proposer must also include the text of the software licenses for the software titles proposed.

Software List

	(select one per title)			(select one per title)		(select one per title)	
Title	System	General-Purpose	Application	Standard	Custom	Proprietary	Open Source
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							

Attachments: Proposed Software Licenses

List of Custom Materials

Custom Materials
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*

CONFORMANCE OF INFORMATION SYSTEM MATERIALS

Format of the Technical Proposal

In accordance with ITP 16.2, the documentary evidence of conformity of the Information System to the request for proposals documents includes (but is not restricted to):

(a). The Proposer's Preliminary Project Plan, including, but not restricted, to the topics specified in the PDS ITP 16.2. The Preliminary Project Plan should also state the Proposer's assessment of the major responsibilities of the Purchaser and any other involved third parties in System supply and installation, as well as the Proposer's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.

(b). A written confirmation by the Proposer 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 proposal, the Proposer must use the Technical Responsiveness Checklist (Format). Failure to do so increases significantly the risk that the Proposer's Technical Proposal will be declared technically non-responsive. Among other things, the checklist should contain explicit cross-references to the relevant pages in supporting materials included the Proposer's Technical Proposal.

Note: The Technical Requirements are voiced as requirements of the *Supplier* and/or the *System*. The Proposer'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 Proposer should indicate *that* – and to the greatest extent practical – *how* the Proposer 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 – 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 Proposal.

Note: As required in PDS 11.2 (j), include method statement, management strategies and implementation plans and innovations, to manage cyber security risks.

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

Note: As a matter of practice, the contract cannot be awarded to a Proposer whose Technical Proposal deviates (materially) from the Technical Requirements – *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 proposal evaluation and contract award, Proposers 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 PDS ITP 17.2 required Proposers to propose.

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

Technical Responsiveness Checklist (Format)

Tech. Require. No. _	Technical Requirement: *[insert:* ***abbreviated description of Requirement*** *]*
Proposer's technical reasons supporting compliance:	
Proposer's cross references to supporting information in Technical Proposal:	

*[**Note to the Purchaser**: The Technical Responsiveness tables submitted by each Proposer can help structure the Purchaser's technical evaluation. In particular, the Purchaser can append rows to each of the Proposer's submitted responsiveness tables to record the Purchaser's assessment of the compliance, partial compliance, and non-compliance of the Proposer's response to the specific Technical Requirement – including the Purchaser's rationale for its conclusion (including, as appropriate, clear indications of the gaps in the Proposer's response/supporting documentation). These assessments can provide a standardized presentation of the detailed underlying logic of the Purchaser's final assessment of the responsiveness / non-responsiveness of the Proposer's technical proposal. Typically, the detailed response/assessment tables would appear as an attachment to the Proposal Evaluation Report].*

FORM OF PROPOSAL 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**]*

RFP No.: *[Purchaser to insert reference **number for the RFP**]*

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

Date: *[Insert **date of issue**]*

PROPOSAL GUARANTEE No.: *[Insert **guarantee reference number**]*

We have been informed that *[insert **name of the Proposer**, 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 proposal (hereinafter called "the Proposal") for the execution of *[insert **Name of Contract**]* under Request for Proposals No. [*insert **number**]* ("the RFP").

Furthermore, we understand that, according to the Beneficiary's, Proposals must be supported by a Proposal 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**])]* 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 Proposal prior to the Proposal validity expiry date set forth in the Applicant's Letter of Proposal, or any extended date provided by the Applicant; or

(b) having been notified of the acceptance of its Proposal by the Beneficiary prior to the expiry date of the Proposal 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 Proposers ("ITP") of the Beneficiary's request for proposals document.

This guarantee will expire: (a) if the Applicant is the successful Proposer, 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 Proposer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the request for proposals process; or (ii) twenty-eight days after the expiry date of the Proposal validity.

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

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.

_____

[signature(s)]

FORM OF PROPOSAL SECURITY (PROPOSAL BOND)

BOND NO. *[insert **number**]*

BY THIS BOND *[insert **Name**]* as Principal (hereinafter called "the Principal"), and *[insert **Name**],* **authorized to transact business in** *[insert **Jurisdiction**],* as Surety (hereinafter called "the Surety"), are held and firmly bound unto *[insert **Purchaser Name**]* as Obligee (hereinafter called "the Purchaser") in the sum of *[insert **amount in figures**]* [1] (*[insert **amount in words**]*), for the payment of which sum, well and truly to be made, we, the said Principal and Surety, bind ourselves, our successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the Principal has submitted or will submit a written Proposal to the Purchaser dated the *[insert **ordinal number** day of [insert **month**] [**insert year**],* for *[insert **name of Contract**]* (hereinafter called the "Proposal").

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

(a) withdraws its Proposal prior to the Proposal validity expiry date set forth in the Principal's Letter of Proposal, or any extended date provided by the Principal; or

(b) having been notified of the acceptance of its Proposal by the Purchaser prior to the expiry date of the Proposal validity 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 Proposers ("ITP") of the Purchaser's request for proposals 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 expiry of the Proposal validity set forth in the Principal's Letter of Proposal 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 *[insert **number** day of [insert **month**] [insert **year**]*.

---

[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.

Principal: _____

_____
(Signature)

(Printed name and title)

Surety: _____
Corporate Seal (where appropriate)

_____
(Signature)

(Printed name and title)

FORM OF PROPOSAL-SECURING DECLARATION – NOT APPLICABLE

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

Date: *[insert **date** (as day, month and year)]*
Proposal No.: *[insert **number of request for proposals process**]*
Alternative No.: *[insert **identification No if this is a Proposal for an alternative**]*

To: *[insert **complete name of Purchaser**]*

We, the undersigned, declare that:

We understand that, according to your conditions, Proposals must be supported by a Proposal-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 specified in Section II – Proposal Data Sheet, if we are in breach of our obligation(s) under the proposal conditions, because we:

(a) have withdrawn our Proposal prior to the expiry date of the Proposal validity specified in the Letter of Proposal or any extended date provided by us; or

(b) having been notified of the acceptance of our Proposal by the Purchaser prior to the expiry date of the Proposal validity in the Letter of Proposal or any extended date provided by us, (i) fail to sign the Contract agreement; or (ii) fail or refuse to furnish the Performance Security, if required, in accordance with the ITP.

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

Name of the Proposer* *[insert **Name of Proposer**]*

Name of the person duly authorized to sign the Proposal on behalf of the Proposer** *[insert **Name of authorized person**]*

Title of the person signing the Proposal*[insert **Title of authorized person**]*

Signature of the person named above_____

Date signed *[insert **ordinal number**]* day of *[insert **month**]* , *[insert **year**]*

*: In the case of the Proposal submitted by joint venture specify the name of the Joint Venture as Proposer

**: Person signing the Proposal shall have the power of attorney given by the Proposer attached to the Proposal

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

Letter of Proposal - Financial Part

INSTRUCTIONS TO PROPOSERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE DOCUMENT

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

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

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

Request for Proposal No.: [*insert identification*]

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

To: **[*insert complete name of Purchaser*]**

We, the undersigned, hereby submit the second part of our Proposal, the Proposal Price and Priced Activity Schedule. This accompanies the Letter of Proposal- Technical Part.

In submitting our Proposal, we make the following additional declarations:

(a) **Proposal Validity**: Our Proposal shall be valid until *[insert day, month and year in accordance with ITP 19.1]*, and it shall remain binding upon us and may be accepted at any time on or before this date;

(b) **Total Price**: The total price of our Proposal, excluding any discounts offered in item (c) 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 Proposal 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*];

(c) **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*];

(d) **Commissions,** gratuities **and fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the procurement 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.")

Name of the Proposer:*[*insert complete name of the Proposer*]

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

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

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 Proposal submitted by a Joint Venture specify the name of the Joint Venture as Proposer.

**: Person signing the Proposal shall have the power of attorney given by the Proposer. The power of attorney shall be attached with the Proposal Schedules

PRICE SCHEDULE FORMS

Notes to Proposers on working with the Price Schedules

General

1. The Price Schedules are divided into separate Schedules as follows:

   3.1 Grand Summary Cost Table

   3.2 Supply and Installation Cost Summary Table

   3.3 Recurrent Cost Summary Table

   3.4 Supply and Installation Cost Sub-Table(s)

   3.5 Recurrent Cost Sub-Tables(s)

   3.6 Country of Origin Code Table

   [insert: ***any other Schedules as appropriate*** *]*

2. The Schedules do not generally give a full description of the information technologies to be supplied, installed, and operationally accepted, or the Services to be performed under each item. However, it is assumed that Proposers shall have read the Technical Requirements and other sections of these request for proposals documents to ascertain the full scope of the requirements associated with each item prior to filling in the rates and prices. The quoted rates and prices shall be deemed to cover the full scope of these Technical Requirements, as well as overhead and profit.

3. If Proposers are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Proposers in the request for proposals documents prior to submitting their proposal.

Pricing

4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Proposer. As specified in the Proposal Data Sheet, prices shall be fixed and firm for the duration of the Contract.

5. Proposal prices shall be quoted in the manner indicated and in the currencies specified in ITP 18.1 and ITP 18.2. Prices must correspond to items of the scope and quality defined in the Technical Requirements or elsewhere in these request for proposals documents.

6. The Proposer must exercise great care in preparing its calculations, since there is no opportunity to correct errors once the deadline for submission of proposals has passed. A single error in specifying a unit price can therefore change a Proposer's overall total proposal price substantially, make the proposal noncompetitive, or subject the Proposer to possible loss. The Purchaser will correct any arithmetic error in accordance with the provisions of ITP 32.

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

3.1 Grand Summary Cost Table

		[insert: ***Local Currency]*** ***Price***	*[insert:* ***Foreign Currency A]*** ***Price***	*[insert:* ***Foreign Currency B]*** ***Price***	*[insert:* ***Foreign Currency C]*** ***Price***
1.	Supply and Installation Costs (from Supply and Installation Cost Summary Table)				
2.	Recurrent Costs (from Recurrent Cost Summary Table)				
4.	Grand Totals (to Proposal Submission Form)				

Name of Proposer:		
Authorized Signature of Proposer:		

3.2 Supply and Installation Cost Summary Table

Costs MUST reflect prices and rates quoted in accordance with ITP 17 and 18.

			Supply & Installation Prices				
			Locally supplied items	**Items supplied from outside the Purchaser's Country**			
Line Item No.	**Subsystem / Item**	**Supply and Installation Cost Sub-Table No.**	*[insert: **Local Currency**]* Price	*[insert: **Local Currency**]* Price	*[insert: **Foreign Currency A]*** Price	*[insert: **Foreign Currency B]*** Price	*[insert: **Foreign Currency C]*** Price
0	Project Plan	- -	- -	- -	- -	- -	- -
1	Subsystem 1	1					
SUBTOTALS							
TOTAL (To Grand Summary Table)							

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

Name of Proposer:		
Authorized Signature of Proposer:		

3.3 Recurrent Cost Summary Table

Costs MUST reflect prices and rates quoted in accordance with ITP 17 and ITP 18.

Line Item No.	**Subsystem / Item**	**Recurrent Cost Sub-Table No.**	*[insert:* ***Local Currency]*** ***Price***	*[insert:* ***Foreign Currency A]*** ***Price***	*[insert:* ***Foreign Currency B]*** ***Price***	*[insert:* ***Foreign Currency C]*** ***Price***
y	Recurrent Cost Items					
y.1	____	y.1				
	Subtotals (to Grand Summary Table)					

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

Name of Proposer:		
Authorized Signature of Proposer:		

3.4 Supply and Installation Cost Sub-Table *[insert: **identifying number**]*

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

Prices, rates, and subtotals MUST be quoted in accordance with ITP 17 and ITP 18.

				Unit Prices / Rates					**Total Prices**				
				Supplied Locally	**Supplied from outside the Purchaser's Country**				**Supplied Locally**	**Supplied from outside the Purchaser's Country**			
Compo-nent No.	**Component Description**	**Country of Origin Code**	**Quan-tity**	*[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**]*
X.1	____	- -	- -	- -	- -	- -	- -	- -					
Subtotals (to *[insert: **line item**]* of Supply and Installation Cost Summary Table)													

Note: - - indicates not applicable.

Name of Proposer:		
Authorized Signature of Proposer:		

3.5 Recurrent Cost Sub-Table *[insert: **identifying number**] -- **Warranty Period***

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., y.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 ITP 17 and ITP 18.

		Maximum all-inclusive costs (for costs in *[insert: **currency**]*)						
Component No.	Component	Y1	Y2	Y3	Y4	...	Yn	Sub-total for *[insert: **currency**]*
1.	Hardware Maintenance	Incl. in Warranty	Incl. in Warranty	Incl. in Warranty				
2.	Software Licenses & Updates	Incl. in Warranty						
2.1	System and General-Purpose Software	Incl. in Warranty						
2.2	Application, Standard and Custom Software	Incl. in Warranty						
3.	Technical Services							

		Maximum all-inclusive costs (for costs in *[insert:* ***currency*** *]*)						
Component No.	Component	Y1	Y2	Y3	Y4	...	Yn	Sub-total for *[insert:* ***currency*** *]*
3.1	Sr. Systems Analyst							
3.2	Sr. Programmer							
3.3	Sr. Network Specialist, ….. etc.							
4.	Telecommunications costs [to be detailed]							
5.	[Identify other recurrent costs as may apply]							
	Annual Subtotals:							- -
Cumulative Subtotal (to *[insert:* ***currency***] entry for *[insert:* ***line item*** *]* in the Recurrent Cost Summary Table)								

Name of Proposer:		
Authorized Signature of Proposer:		

3.6 Country of Origin Code Table

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

SECTION V - ELIGIBLE COUNTRIES

Eligibility for the Provision of Information System

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

Under ITP 4.8(a) and ITP 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"].*

Under ITP 4.8(b) and ITP 5.1: *[insert a list of the countries following approval by the Bank to apply the restriction or state "none"]*

SECTION VI - FRAUD AND CORRUPTION

(Section VI 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; (ii) to be a nominated 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 inspect 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.

PART 2 – PURCHASER'S REQUIREMENTS

SECTION VII - REQUIREMENTS OF THE INFORMATION SYSTEM

(INCLUDING TECHNICAL REQUIREMENTS, IMPLEMENTATION SCHEDULE, SYSTEM INVENTORY TABLES, BACKGROUND AND INFORMATIONAL MATERIALS)

Technical Requirements

DESIGN, SUPPLY, IMPLEMENTATION AND TRAINING FOR THE NATIONAL DATA EXCHANGE HUB

BACKGROUND

The Government of Ghana (GoG) has embarked on an ambitious digitalization program to change the landscape of the ICT sector, the use of ICT in the delivery of government services and stimulate progressive economic growth using ICT as a tool. Under Component 2 of the World Bank supported Ghana Digital Accelerated Project (GDAP) (IDA70960-GH), the Ministry of Communication, Digital Technology and Innovation (MoCDTI) intends to apply part of the IDA Credit for procuring the services of a firm to Design, Supply, Implement and Train in the development of a National Data Exchange Hub under the project.

GoG recognizes the efficiency improvements gained in the increasing use of automation in provision of services. Government's shift to managed services and service-oriented delivery takes advantage of the increasing commoditization of ICT and the rapidly developing ICT industries.

Public sector ICT investment is increasingly influenced by financial constraints, rapidly ageing technology and a higher standard of service delivery demanded by the community. Against this backdrop, GoG through the Ministry of Communication, Digital Technology and Innovation is implementing a comprehensive e-Government program and initiatives with immense benefits to the nation.

Data has become core and critical to all these ICT investments being deployed. The acquisition of accurate, timely, and reliable data is key in making critical government decisions. The duplication in the collection, processing and storing of data across government does not allow government to realize the value for money on its investment. The government is now looking for reliable data to aid it in critical decision making, accurate planning and projections as well as data driven resource allocation.

The main objective of establishing the national data exchange hub is to eliminate or reduce the effort, cost and time involved in the collection, processing and storing of data across government. This is also to ensure that there is uniformity and standardization in the collection, processing and storing of data across government. It is expected that data integrity across government will improve tremendously. Data within government domains is expected to be reliable for decision making and policy formulation. These efforts will present the government with a seamless approach for data sharing. It is also expected that the private sector would plug in to this platform to access real time government data and contribute data for government use.

The GoG as a result is looking to hire an experienced vendor to design, supply, and implement the National Data Exchange Hub using established software tools that will provide scalability and robustness to support a large user base. The design and implementation of the National Data Exchange Hub shall align with the Target Architecture defined in Annex A of this Terms Of Reference. All bidders must demonstrate architectural compliance with this baseline. The vendor will also operate the platform on behalf of the government and share revenue from the commercialization of the platform.

The arrangements by which data is collected, processed, stored, and published have evolved over the years from the inefficient silos and outdated legacy systems that are managed by separate teams and often require significant investment to develop new functions in response to changing

policy needs. Changes to data collection are difficult and take months to implement, bulk collection which requires more front-line administration and inability to validate at source. This process is limited due to lack of connectivity or reliable connectivity and frequency of access to data. Data is stored disparately in discrete systems and databases that are difficult to join up or consolidate and analyze. The data harvested is published and made available through several channels and websites often with similar information presented differently without single-sign-on. This results in a frustrating user experience.

The National Information Technology Agency (NITA) seeks to acquire and deploy a National Data Exchange Hub from a software vendor for the exchange of data among multiple applications within and outside of government institutions. The solution will use open standards and protocols to connect, transform, and route data, documents and messages across the various application services deployed by the MDAs and MMDAs. It will also enable monitoring and management of data, including data governance, with minimal impact on existing applications.

The National Data Exchange Hub will provide the capability to route and transport service requests from the service consumers to the correct service provider. The true value of the platform is to enable the infrastructure for a connected or joined up government. The technology will be centrally managed and administered and can be physically distributed to enable intra and inter-MDAs and MMDAs application integration. The solution shall provide built-in capabilities to support and operationalise data governance and Data Sharing Agreement (DSA) management, including standardized governance workflows, dataset and API metadata management, data quality monitoring structures, and enforceable DSA lifecycle and access control mechanisms. This will enable secure, accountable, and interoperable data exchange across MDAs.

The implementation of a National Data Exchange Hub will set a new direction for how data should be collected and categorized. There is an increasing appreciation across government of the benefits that would arise from adopting a common information standard to minimize the effort taken to gather data and maximize reuse.

OBJECTIVES

The objectives for the deployment of the National Data Exchange Hub Platform are as below.

- Enable data sharing among MDAs and MMDAs in a rational and efficient way to improve provision of e-services to the public. This will further help to promote data reuse, hence preventing information redundancy in the public sector.
- Provide a mechanism for public services optimization through reusing information resources and services.
- Improve decision making through data sharing across Government. This will further help to expedite the implementation of Government Programs.
- Reduce the time and development cost for rolling out e-services among MDAs and MMDAs. The seamless sharing of data through a common platform shall simplify or eliminate some processes currently involved in provision of e-services; hence reducing time and cost for rolling out e-services by MDAs and MMDAs.
- Enable the public sector to become more efficient, transparent, and receptive to the needs of citizens and businesses.
- Promote the use of shared public service delivery platforms such as e-Payment Gateway, authentication, Mobile and SMS Gateway as well as Government Cloud.

- Ensure automatic updates for data shared between MDAs and MMDAs. This is very critical for data that is highly dynamic such as physical address, source of income, email address, phone number and other data.
- Create efficiency in data exchange by reducing manual sharing of data and costs thereof such as delays, printing, courier services, secretarial, movements, recordings, and the risk of human errors.
- Provide real time dashboards that provide analytics, data modeling trends for policy and decision making across government.

SCOPE

The scope of this project will be in four folds as outlined below.

Design and Deployment:

The vendor, per the technical specifications that is outlined in this document will design a solution to be reviewed and approved by the client. The design will be the solution delivered, including the infrastructure design as well as the security design for the platform. The approved design will then be deployed. The client will work with the vendor to perform a UAT as per the protocol agreed in the contract.

The proposed solution must conform to the Target Architecture outlined in Annex A, including the prescribed architectural principles, logical layering, security architecture, and interoperability standards.

Onboarding of Agencies:

The scope of this assignment will include onboarding of an initial eleven (11) government agencies that will be onboarded once the platform is deployed and certified. NITA and the selected 11 government agencies will work to provide the needed information and access required to successfully onboard the said government agencies. The onboarding activity should also include all the engagements, workshops, and interviews that will be required to gather the necessary pre-onboarding and post-onboarding information. The vendor will be expected to cost for all such activities and workshops.

Training

A clear responsibility matrix will have to be spelt out to determine the level of involvement of all stakeholders and the level of training required for each identified stakeholder. A tailored training will have to be developed and delivered to all such identified stakeholders. The vendor will be required to spell out clearly the training objectives, scope, method of delivery, tools and materials required to deliver the training. The total cost of the training, including refreshments and venue should all be costed by the vendor.

Operations and Commercialization

The platform will be expected to generate revenue. The management of the platform will also be outsourced to the provider of the platform for a period of five (5) years minimum. The vendor will be responsible for creating all the awareness about the platform across government. They will be responsible with the help of NITA work to onboard all identified government agencies that are

expected to be on the platform for the life span of this project. They are expected to develop and submit a commercial model as part of this proposal for the commercialization of this platform. A revenue share model with the government (NITA) will also be expected to be presented as part of this proposal. The vendor will equally be responsible for operations and maintenance of the platform over the contractual period per the contractual SLA (Service Based SLA and Operational Level Agreement-OLA). The operational plan should also include a governance structure that will supervise the operations of the vendor through the operational period. The operational model must comply with the Operational Governance Architecture defined in Annex A. The governance structure should include the following that will oversee the operations of the vendor;

- Institutional Oversight Framework
- Operational Governance Committees
- Roles and Reporting Lines
- Escalation and Dispute Resolution Mechanism
- Performance Oversight & SLA Monitoring
- Commercial Oversight & Revenue Audit
- Data Governance Oversight Council
- Security & Risk Oversight Committee

The vendor, apart from the cost of deployment and onboarding of the proposed 11 MDAs and MMDAs on the platform will be required to provide annual costing for the operations of the platform over the next five years. The proposal should include a very comprehensive operational plan which will include an Operational and Maintenance plan, Plan for onboarding of other government agencies outside the 11 already mentioned in this document over the five-year (5) operational period.

The vendor should also include in its proposal a reverse transitional plan in its proposal. This will be a plan that will help the transfer of the platform to the government, or any other vendor government might select should the contract with government end. If the vendor is not a Ghanaian company, the vendor will have to partner a local company for the delivery of this project. The local partner will largely lead the operational scope after the platform and the necessary onboarding and integration completion. The offshore partner will work with the local partner for the first year and ensure transfer of knowledge within the first year. The local partner will lead the operations after the first year with the offshore partner providing level 3 support. This is part of government policy of local content for delivery of critical government systems.

The commercial offering of the vendor should include the following

1. Commercial Management and Revenue Model:
    - Detailed proposal for platform monetization, including:
        - Fee structures (e.g., transaction fees, API call charges, subscription models).
        - Target user segments (government agencies, private sector, citizens).
        - Pricing tiers for different service levels.
    - Value-added services (e.g., premium analytics, dedicated support) with revenue potential.
    - Revenue forecasts with conservative, realistic, and optimistic scenarios.
    - Sensitivity analysis for key variables (e.g., user adoption rates, transaction volumes).
2. Revenue Share Model:
    - Transparent formula accounting for:

        - Government's CAPEX investment (hardware, software licenses, initial deployment).
        - Vendor's OPEX (maintenance, upgrades, staffing, cloud hosting).
    - Minimum guaranteed revenue share for the Government of Ghana (GoG)/NITA, escalating based on profit thresholds (e.g., 60% GoG / 40% Vendor after OPEX recovery).
    - Clawback mechanisms if revenue targets are unmet.
3. 5-Year Operational Cost Plan:
    - Annual OPEX projections (staff, infrastructure, security, training).
4. Performance Guarantees:
    - Bank guarantees or bonds covering revenue shortfalls vs. projections.
    - Penalties for SLA breaches affecting revenue generation.
5. Governance & Transparency:
    - Quarterly open-book accounting for costs/revenues.
    - Independent annual financial audits.
    - Conflict of interest policy

Supply of 15 Laptops

The vendor as part of the scope of this assignment will supply 15 laptops to NITA. This will form part of the institutional support to NITA in leading the delivery of this project. The following is the minimum technical specifications of the required laptops.

- Intel® Core™ Ultra 7 155H (up to 4.8 GHz with Intel® Turbo Boost Technology, 24 MB L3 cache, 16 cores, 22 threads)
- Integrated: Intel® Arc™ Graphics
- 16 GB DDR5-5600 MT/s (2 x 8 GB)
- 512 GB PCIe® Gen4 NVMe™ M.2 SSD
- 17.3" diagonal, FHD (1920 x 1080), multitouch-enabled
- 2 USB Type-A 10Gbps signaling rate
- Intel® Wi-Fi 7 BE200 (2x2) and Bluetooth® 5.4 wireless card
- 65 W USB Type-C® power adapter
- 6-cell, 83 Wh Li-ion polymer
- 5MP IR camera
- Windows 11 Professional
- Laptop should not be End of Life or Support and should not be more than 2 years post manufacturing

BUSINESS REQUIREMENT

Detailed Description of Component of the National Data Exchange Platform

The scope of the National Data Exchange platform will be a full unitary System where different applications should be seen as one system and hosted in the government cloud. The platform shall include the following:

- Semantic and System Catalogue
- Integration module (Enterprise Service Bus)

- API Management module
- Identity and Access Management (IAM) module
- Data Sharing Agreement (DSA) module
- Consent Management Module
- Analytics module
- Dashboard and Reporting module
- Mobility module
- Workflow Engine module
- IoT module
- AI module
- PKI Integration module
- International Gateway module

The National Data Exchange platform shall connect with the:

- e-payment gateway and
- SMS gateway
- IVR gateway

Connection of applications/systems from multiple 11 MDAs/MMDAs to the platform using suitable connectors or adapters.

To demonstrate the application and data integration platform's value proposition, the bidder shall implement the following activities:

Complete end-to-end integrations where onboarded entities exchange data using the platform.

Development of Dashboards for the onboarded entities.

The bidder is also required to provide the following activities:

User Training

Change Management

Support and Maintenance

Business Requirements to be met by the National Data Exchange Platform in general.

- The following will be expected of the National Data Exchange Platform.
- To satisfy the security requirements for each service, the bidder shall recommend and upon approval by all concerned parties implement security procedures and techniques of authentication and authorization.
- The bidder shall closely work with current system managers to modify the standard APIs that will interface with the integration layer.
- The consultant will develop an extendable, robust, cross platform to support a wide array of systems. It should also support all API technologies available (SOAP, JSON, etc.)
- The bidder should provide an intuitive development platform for simple services to be accessed through the e-services portal.

- The platform should have extended auditing capabilities, number of connections, data/record transfers,

The platform must have an intelligent mechanism to detect, thwart, log and notify incidents that are spurious.

The National Data Exchange Platform to be supplied must provide a minimum of the following building blocks as depicted in Figure 1

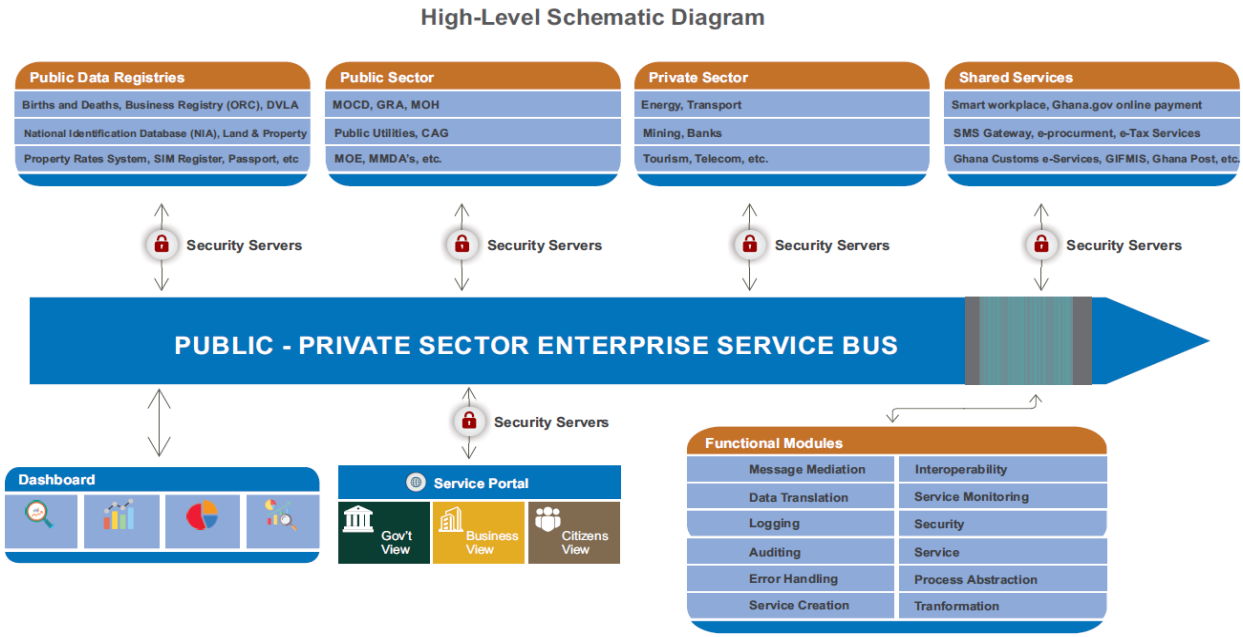

Figure 1 - National Data Exchange Platform

MDA Systems/services across government including:

- National Identification Authority (NIA)
- Office of Registrar of Companies (ORC)
- Driver and Vehicle Licensing Authority (DVLA)
- Birth and Death Registry (BDR)
- Ghana Revenue Authority (GRA)
- Social Security and National Insurance Trust (SSNIT)
- Passport Office
- Statistical Service
- Ministry of Finance/Controller and Accountant General
- National Communications Authority (NCA)
- Bank of Ghana (BoG)

The rest of the government agencies will be added as an annex.

Bidder is required to develop API connectors or adapters. The APIs connectors shall be developed by the bidder to complete the connections to the National Data Exchange Platform. The bidder is required to undertake connections to the systems of the government agencies listed above.

Dashboards/reports and Analytics functions are core to delivering information across government. The National Data Exchange Platform must include a dashboard/reports solution and analytics solution.

The National Data Exchange Platform must also be integrated into the Ghana.gov One-Stop-Shop Service Online Platform and the Citizens App Platform.

The implementation of the National Data Exchange platform must consider the existing legal framework.

Business Requirements to be met by the core modules and the development activities.

Enterprise Data Governance Framework

The platform shall implement a formal Data Governance Framework including:

1. Data Ownership Model (per dataset)
2. Data Stewardship Roles (per MDA)
3. Data Custodianship definition
4. Data Classification framework (Public/Restricted/Confidential/Sensitive)
5. Purpose limitation enforcement
6. Data retention and archival policy enforcement

On the issue of data quality management, the platform shall:

- Define measurable Data Quality dimensions:
    - Accuracy
    - Completeness
    - Timeliness
    - Consistency
- Provide automated data quality scoring at ingestion.
- Provide dashboards displaying data quality KPIs per MDA.
- Reject or quarantine data failing validation thresholds.

The other aspect of data governance that must be considered seriously for this project is data lineage and provenance. The solution shall:

- Provide end-to-end lineage tracking.
- Track data source, transformation steps, and destination.
- Implement transaction correlation of IDs across exchanges.
- Maintain immutable audit trails.

Development of Semantic and system catalogue

Smart governments know the data they collect provides a wealth of insights that can help them meet the needs of their citizens and drive competitive differentiation. Today, data is generated in huge volumes, coming from disparate sources and in a wide variety of formats. While almost every government wants to leverage their data for strategic insights, even the best is struggling make it happen.

The answer lies in a semantic layer between data sources and analytics. Hence, a bidder is required to develop the semantic and system catalogue for the National Data Exchange Platform as part of the readiness assessment. The readiness assessment will include but not limited to:

System description

I. Software details
II. Integration Touch Points (ITPs)
III. Integration Data
IV. Data Synchronization*Data Sharing Agreements and Approvals:*

The Semantic Catalogue shall support the structured referencing of existing, duly approved Data Sharing Agreements (DSAs) executed between government entities, i.e., MDAs and MMDAs. DSAs may include bilateral agreements between two government entities or multilateral agreements involving three or more institutions for shared data services.

Each DSA shall be explicitly linked within the Catalogue to the specific datasets, APIs, or data services to which it applies, ensuring traceability and structured governance oversight across the National Data Exchange Hub. The Catalogue shall enable the identification and tracking of DSA status, including active, expired, suspended, or revoked agreements. It shall maintain auditable records demonstrating alignment between approved DSAs and authorized dataset access and usage parameters.

The Catalogue shall operate strictly within the scope of duly approved agreements and shall not create, negotiate, or manage the legal content of DSAs. While the platform may provide standardized digital references or non-binding templates to promote consistency, all legal drafting, approval, and enforcement processes remain the responsibility of the relevant government institutions.

Data Governance and Data Ownership: The Semantic and Systems Catalogue of the National Data Exchange Hub shall be structured to align with national and cross-institutional data governance policies and frameworks. All relevant data governance frameworks shall be uploaded as part of the catalogue. It shall incorporate standardized metadata elements for dataset identification, classification, ownership, and purpose, in accordance with government-defined governance structures. The Catalogue shall enable clear mapping between datasets, responsible institutions, and applicable governance policies, promoting transparency, traceability, and structured oversight across the data lifecycle.

VII. Data Lineage and Provenance: The Semantic Catalogue shall support the documentation and management of data lineage and provenance information for metadata of datasets registered/exchanged on the National Data Exchange Hub. The Catalogue shall enable the recording of source systems, intermediary services such as ESB, APIs, and mediation layers, and downstream data consumers, ensuring transparency, traceability, and accountability throughout the data lifecycle. Lineage records shall support governance oversight, auditability, troubleshooting of data quality issues, and demonstration of compliance with approved purposes defined in Data Sharing Agreements and Ghana’s national data governance policies.

Integration Module (Enterprise Service Bus)

The Integration module will be the real core of the solution. The National Data Exchange Hub shall adopt a hybrid architectural model combining an API-first design approach with enterprise-grade integration capabilities. The API Gateway shall serve as the primary northbound access layer for all consumers (including MDAs, private sector entities, and international partners), enforcing authentication, authorization, throttling, versioning, consent validation, and traffic management.

Beneath the API layer, the platform shall incorporate robust Enterprise Service Bus (ESB) and message brokering capabilities to support legacy system integration, protocol mediation, data transformation, workflow orchestration, and event-driven processing.

The ESB shall not function as a monolithic centralized bottleneck but as a modular, scalable integration backbone that enables decoupling of systems while preserving interoperability.

This hybrid approach ensures modernization through API-first exposure of services while providing the necessary mediation and transformation capabilities required to integrate heterogeneous, non-API-enabled, or legacy government systems. All vendors must clearly delineate the functional boundary between API Gateway responsibilities and ESB/integration-layer responsibilities in their proposed solution architecture.

The integration module shall reflect the key functionality of an enterprise service bus (ESB) with the core concept of the ESB architecture that integrates different applications by putting a communication bus between them to enable each application to talk to the bus. This shall decouple systems from each other, allowing them to communicate without dependency on or knowledge of other systems on the bus. The module shall connect with the e-payment gateway and SMS gateway at go-live and look into the possibility of integrating a shared IVR gateway for government.

The Integration module shall provide the capability to implement all enterprise application integration (EAI) patterns. This should be configuration driven or simpler Domain Specific Language (DSL) and should be used to achieve the integration functions below:

The Integration module shall be able to host and manage business processes and rules.

The Integration module shall have integrated message broker to support event driven architectures.

In addition, the integration module shall have a multi set of capabilities with various layers as specified by the Open Group in their document “Open Group Standard – SOA Reference Architecture (document is publicly available on their website).

The Integration module which shall also act as the Enterprise Service Bus (ESB) shall also have but not limited to the following functional engines.

Message Mediation: This enables matching incompatible protocols, data formats and interaction patterns across different applications. Data can be split, cloned, aggregated, and enriched, allowing ESB to match the different capabilities of services. It also allows rich transformations on the messages.

- ***Data Translation:*** This will translate between different data formats.

- ***Logging:*** This functional engine will provide centralized logging capabilities.

- ***Auditing:*** This engine will provide audit trail for any transaction passing through the ESB.

- ***Error Handling:*** Provides centralized error handling capabilities such as when error happens, how to respond and recover.

- ***Interoperability Adapters:*** This interconnect different systems with each other independent of whether it is mainframe, java, .Net or any other system.

- ***Service Monitoring:*** This will take care of monitoring services in real time with alert system that will prompt administrators of the platform's service status and availability. This must have the ability to monitor the service in different states and proactively alert on issues like service degradation, service outage, etc.

- ***Service:*** This will handle service creation and governance by centralizing the governance of integration with a repository to add, modify and delete interfaces connecting through ESB.

- ***Process Abstraction:*** This engine will make it easier and transparent for developers to orchestrate processes with services and data entities.

- ***Transformation:*** The engine should have data transformation capabilities to transform data from one format to the another since data resides in different locations and format across government.

Hybrid API-First and Event-Driven Integration Approach:
The National Data Exchange Hub shall implement a hybrid integration architecture in which the API Management/Gateway layer is the primary northbound interface for synchronous service consumption and policy enforcement, while the Integration Layer (ESB + Message Broker) provides mediation, transformation, orchestration and event-driven asynchronous integration. The platform shall support both request/response APIs and event publication/subscription patterns. Vendors shall clearly delineate the responsibilities and flow between:

i. API Gateway mediation and policy enforcement;
ii. ESB orchestration and protocol/data transformation; and
iii. Event broker-based pub/sub for decoupled, near real-time data exchange, notifications and streaming workloads.

API Management Module

API Management is another component of the National Data Exchange platform, and it shall provide capability to expose services in secure managed fashion and use of APIs as fundamental building blocks for integration. Within API management, there must be provisions for advanced throttling and traffic management capabilities, and API analytics. The API manager module shall provide a framework for securing APIs using standard API security standards like OAuth 2.0 and beyond.

It is envisaged that the API Management platform shall comprise of key elements which include but not limited to the following:

API Security: To protect APIs, messages, and back ends with configurable policies such as Oath, API key verification, XML/JSON threat protection, access control.

API gateway: To secure and mediate the traffic between clients and back ends, and between a platform's APIs and the developers, customers, and partners who use the APIs.

Developer portal: To attract and engage application developers, enabling them to discover, explore, purchase (or profit from), and test APIs and register to access and use the APIs.

API lifecycle management: To manage the process of designing, developing, publishing, deploying, and versioning APIs.

The solution will ensure APIs are governed and secure. The solution shall have a multi set of capabilities described below.

API management module will publish APIs to external, partner and internal developers to unlock the potential of their data and services.

API management platform will manage users, monitor and analyse traffic, and secure APIs with ordered policies.

The API management module will provide API management for every connection made to backend services and data sources.

The API management module will ensure APIs are hosted and whatever technologies they run on and networked from one place.

API-to-EDA requirements

- The API Management platform shall support **asynchronous APIs** and event subscriptions, including:
    - webhook subscription management (secured callbacks)
    - subscription keys / tokens per consumer
    - throttling/quotas for event delivery
    - event delivery status monitoring and retries
- Developer Portal shall expose:
    - event catalog entries (alongside APIs)
    - AsyncAPI docs
    - subscription onboarding workflow

Identity and Access Management Module

The National Data Exchange Platform shall have a component which manages identity and access (IAM) centrally across all interactions with the system. The IAM component should integrate with existing National ID database in a non-invasive style of integration using identity federation such as the National Identification Number which uniquely identifies each citizen.

The IAM component shall serve the authentication needs of citizens, business entities and MDAs on the platform with the ability to support delegated authorization.

It should also facilitate SSO between different web applications that are providing public services.

The IAM component shall be able to support multi-factor / multi-step authentication models and optionally dynamic authentication.

The IAM component shall also provide analytical capability and out of the box functionality.

The goal is to use Single Sign On using the unique National ID number of every citizen for authentication for all government online systems and those from selected private sector players. Once SSO is implemented for all e-Services (Ghana.Gov), every user must create an account using their national ID number to authenticate with all Government Websites connected to the National Data Exchange Platform.

This shall include where a person opts to authenticate with a certificate enabled method such as "Mobile ID". It is important that before gaining access to an electronic service, every consumer is identified for purposes of establishing authenticity. This therefore calls for implementation of an identity management and authentication framework that is.

Secure and Reliable – uniquely identifies users and offers highest level of security with the right access privilege.

Efficient – is highly re-usable, has low total cost of ownership (TCO) and could be implemented and launched in reasonable timeframe.

Accessible – is affordable for businesses of all types and sizes as well as ordinary citizens.

The solution should support single sign-on (SSO) which shall enable the user to terminate access to multiple applications with a single action of signing out. The vision of single sign-on under the Identity and Access Management is four-fold:

Provide a consistent, intuitive experience for users to access online Government services and those from selected private sector players.

Integrate easily with existing applications.

Serve as a common trust network; allowing applications to accept user verification completed by those with more stringent guarantees.

Be a universal authentication mechanism for majority of users of Government online services and those from selected private sector players.

Data Sharing Agreement Management

The platform shall include a DSA Management capability to:

- Create digital bilateral or multilateral Data Sharing Agreements.
- Store agreements in a structured format.
- Encode machine-readable policies derived from DSA clauses.
- Enforce access conditions via API Gateway.

The system must have some enforcement capabilities for the Data Sharing Agreements. The system must

- Deny API access where no valid DSA exists.
- Validate request purposes against DSA-approved scope.
- Log DSA reference ID per transaction.

Consent Management Module

The National Data Exchange Platform shall include a dedicated **Structured Consent Management Module (SCM)** capable of:

1. Capturing explicit, purpose-bound citizen consent prior to personal data exchange.
2. Storing machine-readable consent artefacts.
3. Enforcing purpose limitation at runtime.

4. Enabling consent revocation.
5. Maintaining a full audit trail of consent lifecycle events.

The Structured Consent Management must:

- Generate a unique Consent ID per transaction scope.
- Encode consent metadata including:
    - Data subject
    - Data controller (MDA)
    - Data processor
    - Purpose of processing
    - Data fields authorized
    - Retention duration
    - Timestamp (PKI initiated)
- Support consent receipts (machine-readable format).
- Integrate with IAM and API Gateway for enforcement.
- Provide a Citizen Consent Dashboard accessible via:
    - EGovernment Service Portal
    - Citizens App

The module must comply with:

- Data Protection Act
- ISO/IEC 27001
- ISO/IEC 27701
- OECD privacy principles

Analytics Module

The Analytics module shall be expected to support an architecture which allows a large number of runtime and business specific data or events to be handled by taking advantage of both batch- and stream-processing methods. The architecture shall balance latency, throughput, and fault-tolerance by using batch processing to provide comprehensive and accurate views of batch data, while simultaneously using real-time stream processing to provide views of online data. The two view outputs may be joined before presentation. Comprehensive dashboards should provide business intelligence.

Dashboard and Reporting module

The bidder shall be expected to deliver an easy to configure Dashboard and Reporting Module.

The bidder shall utilize the Dashboard and Reporting module to create and configure dashboards for senior executives within 10 MDAs/MMDAs across government to provide high-level performance views. The platform shall therefore enable both public and private sector users to create, interact with, and share a wide range of data visualizations, dashboards, and reports. It shall support the visualization of system performance metrics, API usage statistics, data exchange activities, and service response times. The module shall provide historical reporting over configurable time periods and enable export of reports in standard formats. The platform shall also support integration with business intelligence tools for advanced analytics and executive reporting.

Mobility Module

The bidder shall be expected to deliver a complete mobile solution; a cross-platform environment for all mobile services. This shall be in form of a mobile platform module that integrates with industry standard development languages such Swift, Java, JavaScript, etc. This shall allow for the development, deployment and management of integrated mobile apps. This module shall offer end-to-end lifecycle management of mobile apps as well a comprehensive security solution. The solution shall have the capability to connect and utilise back-end systems, APIs and data analytics. The platform shall have the ability to provide out-of-the-box mobile solutions as well as the ability to develop bespoke mobile applications.

Internet of Things (IoT) Module

To get into the burgeoning IoT market and develop their own smart, connected products and solutions, government and private players must establish a new technology infrastructure. The IoT module is a suite of components with the ability to enable:

Deployment of applications that monitor, manage, and control connected devices.

Remote data collection from connected devices.

Independent and secure connectivity between devices.

Device/sensor management.

Integration with 3rd party IoT systems.

The ideal platform shall have the ability to integrate with any connected device and blend in with device applications and enable implementation of IoT features and functions into any device in the same way.

The ideal platform shall also leverage open standards and developer-friendly tools for speed and productivity. Connect to devices using out-of-the-box transport protocols.

Artificial Intelligence (AI) Integration Module

The bidder shall provide an Artificial Intelligence (AI) Integration Module as part of the National Data Exchange Platform to enable intelligent data processing, analytics enhancement, and automation of selected processes across government services.

The AI Integration Module shall, at a minimum, provide the following capabilities:

1. Service Invocation – Expose AI services via the Integration Module (ESB) and API Management Module, allowing runtime inference on both streaming and batch datasets.
2. Real-Time and Batch Processing – Support low-latency real-time inference for time-sensitive use cases, as well as high-throughput batch/offline scoring.
3. Model Management and MLOps – Include a model registry, version control, approval workflow, and automated deployment pipeline to manage AI models from development through production.
4. Multi-Modal Data Support – Handle tabular, text, and document-based datasets natively, with pluggable adapters for other formats such as images and audio.
5. Integration with Analytics Module – Enable AI-driven insights to be visualized within the platform's dashboards and reporting systems, with full KPI monitoring.

6. Security and Compliance – Enforce role-based access control, data privacy protections, and encryption of all AI-related data in transit and at rest; maintain a full audit trail of AI model usage and changes.
7. Privacy-Enhancing Technologies Support - The solution shall support (at minimum roadmap level)
    - Differential privacy mechanisms.
    - Secure multi-party computation (where applicable).
    - Federated analytics capability.
    - Confidential computing readiness (TEE support).

8. Explainability and Monitoring – Provide bias detection, data drift alerts, and explainable AI features to support decision transparency and trustworthiness.
9. Privacy-Enhancing Technologies (PETs) – Implement technologies such as differential privacy, secure multi-party computation, and homomorphic encryption that enable data analysis and cross-agency collaboration without exposing individual records or sensitive raw data.
10. Federated Analytics – Enable AI model training across multiple agencies' datasets without moving or centralizing the data; each agency retains full control of their data.
11. Confidential Computing – Use hardware-based secure environments that protect sensitive data during processing, ensuring data remains encrypted even while being analyzed.
12. Security Testing and Incident Response – Conduct quarterly penetration testing and vulnerability assessments of all AI components; maintain documented incident response procedures specific to AI/ML systems including model poisoning and adversarial attacks.
13. Governance – Maintain metadata for each AI model (owner, purpose, training data source, last updated date, approvals) and apply configurable SLAs to each deployed model.

International Gateway Module for Regional Data Exchange

The bidder shall provide an International Gateway Module to facilitate secure and policy-compliant data exchange between the National Data Exchange Platform and approved external or regional data exchange partners (e.g., ECOWAS member states).

The International Gateway Module shall, at a minimum, provide the following capabilities:

1. Secure External Connectivity – Establish a dedicated gateway for inbound and outbound data traffic with partner platforms, without direct exposure of internal government services.
2. Interoperability Standards – Support secure transport protocols (HTTPS, SFTP/FTPS, AMQP, MQTT) and standard payload formats (JSON, XML, CSV) with schema versioning. In addition, the international gateway shall also
    - Align with African Union Interoperability Framework being led by Smart Africa
    - Support ISO/IEC 11179 metadata standards.
    - Support RDF/OWL semantic interoperability.
    - Be architecturally compatible with federated data exchange models.

3. Cross-Border Trust – Implement PKI-based mutual authentication, digital signatures, and certificate management with trusted foreign certification authorities.

4. Federated Identity and Access Control – Integrate with the IAM module to authenticate and authorize external entities using recognized federation protocols such as SAML 2.0 and OpenID Connect.
5. Policy and Compliance Enforcement – Apply jurisdiction-specific policies, including data type restrictions, routing controls, geo-fencing, and retention rules, before allowing data exchange.
6. Schema Mediation and Transformation – Validate, translate, and reconcile incoming and outgoing data formats, rejecting or quarantining non-compliant messages.
7. Reliability and Performance – Provide store-and-forward messaging, retry mechanisms, deduplication, and idempotency controls to ensure delivery guarantees.
8. Audit and Reporting – Maintain end-to-end transaction audit trails, correlation IDs for cross-border operations, and SLA reporting for availability and performance.
9. Threat Protection – Include API-level security controls, payload inspection, and denial-of-service protection for all international data exchange endpoints.
10. High Availability and Disaster Recovery – Implement fault-tolerant gateway infrastructure with active/active or active/passive failover to meet the platform's SLA and DR requirements.
11. Commercialization Support – Where permissible, enable traffic metering, quota enforcement, and monetization reporting for regional data exchange services.

Public Key Infrastructure (PKI) Integration Requirement

The proposed solution architecture shall include full integration with a Public Key Infrastructure (PKI) to provide secure, certificate-based authentication, encryption, and digital signing for the National Data Exchange Platform.

The PKI implementation shall be designed specifically for the platform's use cases and must, at a minimum, support the following:

1. Certificate-Based Authentication – Ensure that all entities (users, services, and connected systems) accessing the platform can be authenticated using digital certificates issued by a trusted Certification Authority (CA) recognized by the Government of Ghana.
2. Data Confidentiality & Integrity – Enable encryption of data in transit and at rest using PKI-based mechanisms to prevent interception or tampering.
3. Digital Signatures – Provide capability for signing of transactions, messages, and documents to guarantee authenticity and non-repudiation.
4. Integration with IAM – Seamlessly integrate PKI with the platform's Identity and Access Management (IAM) module to support multi-factor authentication, role-based access control, and certificate lifecycle management.
5. Certificate Lifecycle Management – Include automated processes for certificate issuance, renewal, revocation, and validation (e.g., via OCSP or CRL).
6. Secure API Access – Enforce PKI-based authentication for all API calls, especially for sensitive or high-privilege transactions.
7. Logging and Audit – Maintain a verifiable audit trail of all PKI-related security events, including certificate issuance, revocation, and failed authentication attempts.
8. Standards Compliance – Support widely adopted PKI standards and protocols such as X.509, PKCS, TLS/SSL, and meet relevant government cybersecurity regulations.

The PKI component shall be scalable, interoperable with existing government PKI infrastructure where applicable, and resilient to meet high availability and disaster recovery requirements of the platform.

Note that the platform should make provision for later integration with verifiable credentials and digital wallet modules. NITA being the regulator for the verifiable credential and digital wallet is in the final stages of developing the standards and guidelines around that.

Hosting infrastructure and Software license costing

All software components of the National Data Exchange Platform shall reside in its totality within the National Data Centers. The solution shall be hosted on the GoG Private Cloud Infrastructure. The vendor shall include the cost of hosting infrastructure to his proposal. The vendor as a result shall take costing from the operators of the National Data Center and the Government Cloud and add it to the cost of their solution.

The bidder should clearly state their hosting requirements considering a minimum hosting configuration to support 3000 concurrent users per second for a start. The requirements should cater for Production, DR, QA, Test and Development environments. The hosting configuration must align with the Deployment Architecture described in Annex A.

Non-Functional Requirements (NFRs)

The following minimum NFRs are hereby introduced:

Availability

- Minimum 99.95% uptime annually.
- Active-active deployment across National Data Centres.

Disaster Recovery

- RTO: ≤ 2 hours
- RPO: ≤ 15 minutes
- Annual DR simulation is mandatory.

Scalability

- Minimum support for 3000 concurrent requests per second at go-live.
- Horizontal scalability through container orchestration (e.g., Kubernetes).

Security Testing

- Annual independent penetration testing.
- Quarterly vulnerability assessments.
- Documented Incident Response Plan.

Data Retention

- Configurable retention per data classification.
- Automated archival and secure deletion workflows.

Training

The vendor shall conduct any relevant training required for the MDAs/MMDAs and their technical partners being onboarded to ensure that they are fully capable to support all operational and maintenance activities required at their end so far as their systems and platforms are still plugged into the National Data Exchange Platform. The vendor shall include in their proposal a comprehensive training plan outlining training content, training objectives, identified

stakeholders per MDA/MMDA to be trained, training method to be used and the duration for each identified category. The vendor will also have to outline the training requirement for each category of stakeholder identified to be trained.

The vendor shall be fully responsible for costs relating to training including but not limited to venue for training, training materials, refreshments during training. The vendor shall not be responsible for allowances for the trainees.

Change Management and User Adoption

The vendor shall develop and implement a comprehensive Change Management Plan to ensure successful adoption of the National Data Exchange Platform across all MDAs/MMDAs.

The Change Management Plan shall include:

1. Pre-Launch Activities: Stakeholder mapping, communication strategy, readiness assessments, and early engagement with champion users across pilot MDAs.
2. Go-Live Support : Dedicated on-site/remote support teams for minimum 90 days post go-live and a helpdesk with <4 hour response time for critical adoption issues.
3. Post Go-Live Support : Ongoing change management support for minimum 12 months, including quarterly refresher sessions, updated documentation, and adaptation support as new MDAs onboard.
4. User Adoption Metrics : Track and report monthly on:
    1. active user percentage per MDA
    2. system utilization rates
    3. support ticket trends
    4. user satisfaction scores (target: >80% adoption within 6 months).
5. Feedback Loops – Establish user feedback mechanisms (surveys, focus groups) and demonstrate quarterly iterations based on user input.

Knowledge Transfer and Sustainability

The vendor shall provide documented knowledge transfer sessions ensuring MDAs can independently operate and troubleshoot basic platform functions. Knowledge transfer shall include:

- Technical documentation in accessible formats (video tutorials, step-by-step guides, FAQs)
- Train-the-trainer programs enabling each MDA to build internal capacity
- Quarterly knowledge assessments to measure retention and identify gaps

Knowledge Transfer KPIs:

- 80% of trained staff pass competency assessments within 3 months
- Each MDA has minimum 2 certified super-users within 6 months
- Support ticket volume from trained users decreases by 40% within 12 months

FUNCTIONAL/TECHNICAL SPECIFICATIONS

Preliminary Remarks

While the number and nature of building blocks may vary in the bidders' proposals (having a smaller or larger number of components), the total set of (mandatory) business, functional, and technical requirements listed below must be met by the proposed solution. It should be clear from the bid what component(s) is (are) responsible for the fulfillment of each of the requirements listed below. This is very important as that will be the basis for evaluation of solutions.

For each requirement, the bidder's proposal must contain a concise description on how the requirement is met enabling the purchaser not only to validate that the requirement is met but also to make a qualitative assessment of the proposal, where proposals meeting requirements in a way that favors interoperability, i.e. proposals implementing widely used international or non-proprietary industry standards, will have an advantage.

All bidders shall submit a Target Architecture Alignment Statement demonstrating how their proposed solution complies with Annex A (Target Architecture). Non-alignment must be clearly justified. All bidders shall submit a clearly defined mandatory Target Architecture including:

1. Logical Architecture View
2. Deployment Architecture View
3. Security Architecture View
4. Data Architecture View
5. Operational Architecture View

The proposed solution must demonstrate compliance with:

- API-first design
- Loose coupling
- Zero-trust security
- Authentication at the edge
- Encryption by default
- Observability by design
- Modular extensibility

Bidders shall include Architecture Decision Records (ADRs). When requirements are met via the implementation of specific formats or standards, it must always be made clear exactly what formats or standards are supported, what versions of these formats/standards and, when relevant, if the full format/standard is implemented, a subset or a superset. If a superset is implemented, it must be made clear if the use of non-standard extensions can be disabled.

The following letters ("M","D"), meaning the criticality of the requirement (mandatory, desirable); The criticality of requirements takes one of the following possible values:

Value	Meaning	Interpretation
M	Mandatory	Mandatory requirements MUST be met by the proposed solution.
D	Desirable	Desirable requirements MAY be met by the proposed solution but meeting all desirable requirements is not compulsory. Desirable requirements that are met by the proposed solution are considered an advantage during evaluation.

Each bidder MUST enter comments to further explain the situation surrounding the choice of the response above in the vendor responses column for each requirement. Vendors shall use the product reference column to refer to section numbers or page numbers in which detailed information pertaining to a particular requirement is held in their response. Vendors should pay particular attention to the accuracy of the responses in these sections as the bid responses will be referenced in final contracts.

GENERAL FUNCTIONAL/TECHNICAL REQUIREMENTS

These requirements represent capabilities with various layers as specified by the Open Group in their document "Open Group Standard – SOA Reference Architecture (document is publicly available on their website) and are categorized in the responsive checklist below

Requirements Responsiveness checklist

M = MANDATORY REQUIREMENT D = DESIRABLE REQUIREMENT

FUNCTIONAL/TECHNICAL SPECIFICATIONS

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS		M/D	SUPPLIER'S RESPONSE
HIGH LEVEL FUNCTIONAL REQUIREMENTS				
1	The scope of the National Data Exchange platform will be a full unitary System where different applications should be seen as one system and hosted in its totality within the government cloud as an on-premise solution spread across the two Data Centers for resiliency purpose. The application and data integration platform shall include the following:		M	
	HIGH-LEVEL FUNCTIONAL REQUIREMENTS	**Max Points**		
	Semantic and System Catalogue	Yes/No		
	Integration module	Yes/No		
	API Management module	Yes/No		
	Identity and Access Management module	Yes/No		
	Data Sharing Agreement	Yes/No		
	Consent Management Module	Yes/No		
	Analytics module	Yes/No		
	Dashboard/Reporting module	Yes/No		
	Mobility module	Yes/No		
	Workflow Engine Module	Yes/No		
	IoT module	Yes/No		
	AI Module	Yes/No		
	International Gateway Module	Yes/No		
	PKI Integration Module	Yes/No		
SEMANTIC AND SYSTEM CATALOGUE				
2	Bidder is required to develop the semantic and system catalogue for the National Data Exchange Platform for all systems under the scope of the project.		M	
3	The catalogue should be a common knowledge model that can be used to represent different data sources in a consistent context.		M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
4	The catalogue should specify relationships between entities according to a formal representation of knowledge (Ontology).	M	
5	The catalogue should define semantic assets for all the systems in the scope of the project.	M	
6	The catalogue should define metadata for semantic assets to ensure discoverability, traceability, and interoperability across MDAs and MMDAs. Metadata elements shall include, but not limited to: · Dataset identification · Ownership and responsible institution · Data classification and sensitivity level · Purpose and intended use · Source system and lineage · Update frequency and versioning	M	
7	The catalogue should have validation rules for the semantic assets to ensure data integrity and reliability. Validation rules shall support: · Structural conformance (data types, mandatory fields, schema adherence) · Semantic correctness (e.g., relationships, reference values) · Completeness, accuracy, consistency, and timeliness of data	M	
8	The catalogue shall include KPIs defined per data domain, and validation rules shall be applied at ingestion to generate automated data quality scores.	M	
9	The catalogue should conform to modelling languages e.g. UML	M	
10	The catalogue should conform to semantic-related technologies such as ISO/IEC 11179, RDF, OWL, etc.	M	
11	The catalogue should be machine-readable and exportable in standard formats for system interoperability.	M	
NATIONAL DATA EXCHANGE PLATFORM (ESB IN GENERAL)			
12	The integration module shall reflect the key functionality of an enterprise service bus with the core concept of the ESB architecture that integrates different applications by putting a communication bus between them to enable each application to talk to the bus. This shall decouple systems from each other, allowing them to communicate without dependency on or knowledge of other systems on the bus.	M	
13	Integration module shall provide capability to implement most of the enterprise application integration (EAI) patterns. This should be configuration driven or simpler DSL.	M	
14	National Data Exchange Platform shall be able to host business processes and rules.	M	
	The Application and Data Integration platform shall have an integrated message broker to support event driven architectures.	M	
16	The event driven architecture standards and contracts shall include: · The platform shall standardize event payloads using CloudEvents (minimum) and document event interfaces using AsyncAPI specifications. · Every event type shall have a defined schema, ownership (producing MDA/system), classification, and allowed consumers.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
17	The event driven architecture schema registry and event catalog shall include: · Provide a Schema Registry for event schemas with compatibility controls (backward/forward), versioning, and validation at publish/consume time. · Provide an Event Catalog (searchable) integrated into the platform's developer portal/catalogue to enable discovery, subscription, and governance.	M	
18	The event driven architecture topic/channel governance shall include: · Enforce naming conventions, domain-based partitioning (per MDA / data domain), and access controls (producer/consumer ACLs). · Support multi-tenancy and delegated administration aligned to government governance model.	M	
19	The event driven architecture delivery guarantees and reliability shall include: · Support configurable delivery modes: at-least-once (minimum) and exactly-once where supported by the chosen broker/patterns. · Must include retry policies, dead-letter queues (DLQ), poison message handling, and message replay (reprocessing) for defined retention windows.	M	
20	The event driven architecture ordering, idempotency, correlation shall include: · Provide ordering guarantees per key/partition where applicable. · Provide idempotency support (deduplication keys) for consumer safety. · Mandatory support for correlation IDs and end-to-end traceability across API→ESB→Broker flows.	M	
21	The event driven architecture Security shall include: · Secure event transport using TLS/mTLS; authenticate publishers/subscribers using IAM-integrated mechanisms; authorize at topic/event-type level. · Events containing personal data must enforce data minimization and purpose controls (aligned to governance/consent/DSA controls where applicable).	M	
22	The event driven architecture Observability shall include: · Provide real-time monitoring dashboards for: · publish/consume rates · lag · DLQ volumes · retries/failures · end-to-end tracing · Integrate broker telemetry into centralized logging/auditing already required by the Integration Module	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
23	The event driven architecture Performance & DR shall include: · Broker cluster must be highly available and deployed in the same HA/DR posture as the core Hub (active-active where adopted). · Define retention, throughput, and latency targets for events separately from API latency.	M	
24	Some of the government organizations do not have services APIs and in this case the National Data Exchange Platform shall be able to convert data silos into services.	M	
INTEGRATION MODULE			
Integration Specifications			
24	Offers full integration platform capabilities listed below: · Application integration · Data integration · Message brokering	M	
25	100% open-source advantage	D	
26	Low infrastructure footprint, less than 400MB per runtime component	M	
27	Maturity of the system for over 3 years	D	
28	No licensing fees for development instances	M	
29	Flexible engagement model	M	
30	Scalable Pricing (e.g. per JVM/ instances in use, provision for auto-scaling etc.)	M	
31	Support for containerized deployment (eg Docker, Kubernetes)	M	
32	Compliance with enterprise security standards (e.g., TLS, OAuth2)	M	
33	Support for high availability and clustering	M	
Integration Capabilities			
34	Connect anything to anything	M	
35	Transports for connecting any type of system	M	
36	Cloud based connectors/ adaptors (popular connectors Salesforce, Gmail, JIRA, Amazon S3, Facebook, Twitter, File etc.)	M	
37	Web based systems (HTTP/ HTTPS etc.)	M	
38	File systems (FTPS, SFTP etc.)	M	
39	Brokering systems (JMS etc.)	M	
40	Proprietary systems such as IBM AMS etc.	M	
41	Domain specific (healthcare, financial, etc.) systems (such as HL7, FIX etc.)	M	
42	Adaptors to COTS systems (SAP BAPI & iDOC, IBM WebSphere MQ, Oracle AQ etc.)	M	
43	Ability to write custom transports	M	
44	Ability to write your own connector	M	
45	Protocol bridging: Including HTTP(S), JMS, AMQP, SAP, VFS, FTP, MQTT, EDIFACT etc.	M	
46	Support for API management and mediation (REST/SOAP passthrough, transformation, throttling)	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
47	Built-in monitoring and logging of integrations (real-time)	M	
	Route, Mediate and Transform		
48	Main routing types: · Header based · Content based · Rule based · Priority based	M	
49	Mediation - support for established Enterprise Integration Patterns (EIP) · Messaging systems · Messaging channels Message construction · Message routing · Message transformation · Messaging endpoints · System management	M	
50	Transformation · XQuery · Smooks · XPATH · XSLT · Data Mapping · Formats (XML, JSON, CSV --> XML, JSON, CSV) · Operators (Common, arithmetic, Boolean, conditional, type conversion)	M	
51	Support for data formats: Including XML, JSON, CSV, SOAP, Text, HTML, POX, Email, EDIFACT, etc.	M	
52	Versioning support for transformations or routing rules	M	
53	Support for error handling and retry logic in routing/mediation flows	M	
54	Standards and Security	M	
55	WS-Standards · WSRM · WSDL 2.0 · WS-Addressing (dual channel invocation) · WS-Security · WS-Reliable Messaging · WS-make connection · WS-Eventing · WS-Policy (supports separate policies for incoming/outgoing messages) · MTOM/SwA optimizations for binary messages · XML/HTTP (POX)	M	
56	REST · REST API support · JAX-WS and JAX-RS	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
57	Security and Identity Management · WS-* · Kerberos · LDAP · Open ID · SAML · XACML · SCIM · OAuth 1.0a/2.0*.	M	
	Development and Deployment		
58	Fully configuration driven development	M	
59	Graphical tooling for developing mediation artefacts	M	
60	Mediation debugging for error detection	M	
61	Mediation tracing	M	
62	Embed scripting language code in JavaScript, JRuby, Groovy, and more, as custom mediators	M	
63	Develop and deploy via integration with SVN, Maven, ANT and other standard tools	M	
64	Environment-based configuration management (Dev, QA & Staging, Prod)	M	
	Event Handling		
65	· WS-Eventing · Asynchronous · Streaming · Synchronous · Transactions · CloudEvents compliant event envelope · AsyncAPI definitions for all event types · Schema registry with compatibility checks · Event catalog with ownership and access control · DLQ + replay + retention policies · Correlation IDs + distributed tracing	M	
	Event Schema Governance and Catalog Requirements		
66	· Adopt AsyncAPI or CloudEvents standards.	M	
67	· Implement Event Catalog with version control.	M	
68	· Define backward compatibility standards.	M	
69	· Enforce schema validation at event publication.	M	
	Extensibility		
70	Ability to extend the core unit (mediator) of the mediation engine with Class/Custom mediator	M	
71	Capability to extend other components - scheduled tasks, message stores, message processors, inbound endpoints, message builders and formatters, transports, handlers etc.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
72	Extending the connector framework to write your own connectors	M	
73	Extending ESB functionality with installing other integration product features	D	
74	Extend configuration language with custom DSLs via templates	M	
	Management, Monitoring and Analytics (Statistics and Tracing)		
75	Ability to publish mediation artefacts' processing statistics (API, proxy, sequence, endpoint, inbound endpoint)	M	
76	Ability to view message success/ failure rates	M	
77	Ability to view transactions processed per second	M	
78	Ability to view latency	M	
79	Ability to view message counts	M	
80	Ability to view past statistics over configurable timelines	M	
81	Tracing - Messages and message flow	M	
82	Tracing - Mediator properties (before and after)	M	
83	Dashboards for visualizing statistics out of the box	M	
84	Ability to define custom statistics and publish to dashboards	M	
85	Ability to generate reports by plugging in a reporting tool	M	
86	Alerting/thresholds support for stats anomalies (e.g. failure spike, latency breach)	M	
	Logs		
87	Tracing - Messages and message flow	M	
88	Tracing - Mediator properties (before and after)	M	
	Data Integration Capabilities		
89	Data sources supported · Any RDBMS · CSV · Excel · ODS · Cassandra · Google Spreadsheets · RDF · Any web page via OData	M	
90	Data bases supported · MsSQL · DB2 · Oracle · OpenEdge · TerraData · MySQL · PostgreSQL/ Enterprise DB · Derby · Any database with a JDBC driver	M	
91	Transports	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
	· HTTP		
	· HTTPS		
	· JMS		
	· SMTP		
	· Other transports including FTP, FTPS, SFTP and TCP		
	Federation support		
92	Combine data from multiple sources in single response or resource	M	
93	Support for nested queries across data sources	M	
94	RESTful data access	M	
95	Create collection of REST resources for CRUD operations	M	
96	Support for both JSON and XML media types	M	
97	Data Transformation	M	
	· Via XSLT		
	· Via XQuery		
	· Built-in validators for standard data types		
	· Customizable validators		
	· Schema validation		
	Transactional support		
98	Push and pull model support	M	
99	Transaction commit and rollback	M	
100	Distributed transactions via JMS	M	
101	Transactions spanning different data sources	M	
102	Secure access to data:	M	
	· Authentication		
	· Authorization		
	· Confidentiality		
103	Encryption with Basic Auth:	M	
	· WS-Security		
	· WS-Trust		
	· WS-Secure Conversation		
	· WS-Policy Attachment		
	· WS-Security Policy		
104	Fine grained authorization with XACML	D	
105	Flexible throttling for access frequency, source IP, and via policies	M	
106	WS-Security Policy configurations	M	
107	Comprehensive user management	D	
	Development/tooling		
108	Fully configuration driven development	M	
109	XML based DSL	M	
110	Wizards for editing data services and resource configurations	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
111	Tools for automatic generation of CRUD operations/ resources against existing database schemas	M	
112	Flexible mapping of query responses to custom XML data formats	M	
113	Ability to debug services	M	
114	Ability to trace messages	M	
115	Interactive testing with Try It capabilities	M	
116	Automatic generation of WSDLs for services and service stubs	M	
117	Integrated with standard tools for development and deployment	M	
	Message Brokering Capabilities		
118	Supported APIs:	M	
	· JMS 2.0		
119	Reliable messaging protocols: AMQP 1.0	M	
120	IoT protocol support: MQTT with support for all QoS levels and retained messaging	M	
121	Interoperability languages/platforms:	M	
	· via AMQP clients for Java		
	· .Net		
	· C		
	· C++		
	· PHP		
	· Ruby		
	· Erlang and more		
	Elastically scalable broker architecture		
122	Broker capacity can be adjusted by adding/removing broker nodes	M	
123	Brokers can be added/removed at run-time without system restart	M	
124	Supports relational databases as a scalable backend message store	M	
125	Architecture for message store scalability	M	
126	Allocate the load among brokers	M	
	Distributed queues		
127	Publishers and subscribers can connect to any broker	M	
128	Support for in-order reliable message delivery	M	
129	Support for strict and best effort (faster) delivery guarantees	M	
130	Support for dead letter channel	M	
131	Support for Publish/Subscribe Model (Topics)	M	
132	Support for shared subscription	M	
133	Ability to publish and subscribe using JMS or MQTT	M	
	Management		
134	User based authorization support for queues	M	
135	Role based authorization support for topics and users	M	
136	Flow control mechanism to control and safeguard from bursts of message loads and global error conditions	M	
137	Support to browse publish/subscribe topics through management console	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
138	Support to display the messages inside a queue, send a test message to a queue, and purge the messages in the queue	M	
139	Flexible logging support with integration to enterprise logging systems	M	
140	Flexible logging support with integration to enterprise logging systems	M	
	Management Console		
141	Web based admin console for management with enterprise-level security	M	
142	APIs for externalizing administration	M	
143	Ability to manage users, roles and permissions	M	
144	Ability to manage artifacts	M	
145	JMX MBeans for key metrics monitoring and management	M	
	High Availability and Deployment Options		
146	Availability and scalability: · High availability (active/active, active/passive) · Vertical scaling · Horizontal scaling · Clustering	M	
147	Deployment options · On-premise · Cloud (public, private, hybrid) · Managed Cloud · Multi-tenancy	M	
148	Documentation: · Quick start guides (includes samples) · Tutorials (includes samples) · Deep dive/ detailed documentation · Easy to use · Publicly available, and free to use	M	
	Communication, Service Interaction, and Integration Layer		
149	Ability to route requests to correct the provider after necessary message transformation and protocol conversion and to connect the service requestor to the service provider and its underlying solutions platforms realizing the requested service.	M	
150	Ability to take a service call and messages to the end-point; i.e., to enable a service consumer to connect/interact with service providers	M	
151	Ability to handle service request and service response	M	
152	Ability to support communication through a variety of protocols	M	
153	Ability to support variety of messaging styles such as one-way, pub-sub, request-response	M	
154	Ability to transform protocol formats; e.g., from SOAP/HTTP to SOAP/Message Queue or SOAP/JMS	M	
155	Ability to link a variety of systems that do not directly support service-style interactions so that a variety of services can be offered in a heterogeneous environment	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
156	Ability to store and forward messages using message queuing	M	
157	Ability to ensure secure communication through encryption and authentication mechanisms using PKI Integration	M	
158	Ability to handle errors and implement retry mechanisms for failed message deliveries.	M	
	Message Processing		
159	Ability to perform the necessary message transformation to connect the service requestor to the service provider and to publish and subscribe messages and events asynchronously	M	
160	Ability to transform data formats; e.g., from proprietary to standard format or industry standards and vice versa	M	
161	Ability to aggregate (including messages and data) from different services and service providers	M	
162	Ability to propagate the events from producers to consumers	M	
	Quality of Service		
163	Ability to support handling of transactions and exceptions.	M	
164	Ability to handle transactions from the other layers, especially when a statically composed service invokes a service chain	M	
165	Ability to handle exceptions raised in the process of service request and message passing	M	
166	Ability for the system to handle multiple queries and multiple users at the same time.	M	
	Security		
167	Ability in the enforcement of access privileges and other security policies.	M	
168	Ability to authenticate/authorize for service request and message routing	M	
169	Ability to support fraud detection and prevention.	M	
170	Ability to maintain historical data and keep audit logs.	M	
	Management		
171	Ability to track and monitor the message routing and service request activities	M	
172	Ability to capture and record message routing and service request history	M	
173	Ability to allow configuration and parameterization of the Integration Layer	M	
	Business Process Layer		
174	Ability to define the business processes/operational flow of the business	M	
175	Ability to define business processes representing dynamic behavior of the business.	M	
176	Ability to divide a business process into smaller units, each matching to a service cluster	M	
177	Ability to aggregate services as a business process	M	
178	Ability to handle the collaboration patterns between services and processes.	M	
179	Ability to manage data transactions and transformations between services and processes.	M	
180	Ability to ensure that a business process complies with predefined requirements or industry standard	M	
181	Ability to store a set of business processes in a retrievable asset repository.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
182	Ability to host rules that dictate how the architecture can be configured based on various business scenarios	M	
183	Ability to record and track business process interactions.	M	
	Event Handling		
184	Ability to handle business events in the context of a business process such as emitting/publishing events and subscribing/listening to business events.	M	
185	Ability to detect, emit, and listen to business events in the context of business processes	M	
	Process Runtime Enablement		
186	Ability to realize and deploy the business processes in a runtime environment	M	
187	Ability to create and manage individual instances of the business processes	M	
188	Ability to execute the instances of a business process, its sub-processes, and activities therein	M	
189	Ability to intelligently decide the end-point of the enabling services using the process context	M	
190	Ability to manage the interaction of the business process with humans	M	
	Process Information Management		
191	Ability to manage the context of a business process	M	
192	Ability to manage the state of a process	M	
193	Ability to transform the data flowing through a business processes based on its needs	M	
194	Ability to store and retrieve assets required and requested by an ongoing process	M	
	Decision Management		
195	Ability to configure the relationships between the composition and the non-functional characteristics of the process flow	M	
196	Ability to encapsulate/isolate the decisions and rules affecting those decisions associated with the execution of a business process from the actual process flow itself	M	
	Process Integration		
197	Ability to make available the business processes as a service	M	
198	Ability to schedule the execution of a business process	M	
	Security and Policy Compliance		
199	Ability to define policies, enforce them, and verify the compliance of the elements of process with a set of predefined policies	M	
200	Ability to control access to a process flow at design or runtime	M	
	Process Monitoring and Management		
201	Ability to monitor a business process and insert points at which metrics may be gathered, identify bottlenecks, and optimize workload assignments	M	
	Consumer Services Layer		
202	Ability to consume (use) the platform, through a program or an individual who requests a service	M	
203	Ability to support consumer interaction and integration; i.e., the ability to capture the input from the user (consumer) of the platform and provide the response to the consumer	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
	Presentation Services		
204	Ability to support the creation of a presentation view by the composition of a number of atomic components	M	
205	Ability to provide navigation logic and flow for the processing of consumer interactions (presentation control)	M	
206	Ability to provide the Consumer Layer with the ability to support customer-specific information (enabled by the Information Layer) and personalization and customer-specific preferences to be used by the presentation controller for navigation and content presentation purposes	M	
207	Ability to configure components in the Consumer Layer based on consumer request scenarios	M	
	Backend Integration		
208	Ability to mediate services from other platform layers such as the Business Process Layer and the Integration Layer into the Consumer Layer; it provides the ability to integrate the underlying platform into the Consumer Layer	M	
209	Ability to support the translation of input data/content from a format supported by the user of the platform to a format required by the other layers of the platform and to convert content returned from them into a user acceptable response format	M	
	Caching and Streaming Content		
210	Ability includes the handling of streaming content	M	
211	Ability to cache interaction data to improve performance and quality	M	
	Security and Privacy		
212	Ability to provide access to authentication/authorization capabilities (enabled through policies) to be used by the presentation controller to allow/prevent what content can be presented to the consumer	M	
213	Ability to filter to control access to the underlying platform	M	
214	Ability to monitor the usage of the Consumer Layer components	M	
	Information Access		
215	Ability to access data and metadata through the Information Layer	M	
	Governance Layer		
216	Ability to define governance processes	M	
217	Ability to define governance artefacts	M	
218	Governance Enablement and Implementation	M	
219	Ability to enable governance	M	
220	Ability to realize governance processes	M	
221	Metadata Storage and Management	M	
222	Ability to store and search any kind of assets and artefacts	M	
223	Ability to support the capture of service-related information at design time, and its dissemination to the other layers in the platform in a standards-compliant interoperable manner	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
224	Ability to support the storage and dissemination of information supporting these capabilities: service contract definition (e.g., WSDL); service policy management; service version information management; service dependencies (e.g., the ability to integrate with a CMDB tool); service management descriptions; canonical form and domain model specification for integration with the Information Layer	M	
225	Ability to store governance artefacts	M	
226	Ability to access governance artefacts	M	
227	Ability to advertise/query for governance artefacts	M	
228	Ability to advertise for services and metadata about services	M	
229	Ability to find or query for services and metadata about services	M	
Business Rule Definition and Management			
230	Ability to capture, author, and define business rules	M	
231	Ability to change, manage, and maintain business rules	M	
232	Ability to store business rules	M	
233	Policy Definition and Management	M	
234	Ability to define policies	M	
235	Ability to correlate business rules into policies	M	
236	Ability to distribute policies	M	
237	Ability to change, manage, monitor, and maintain current policies	M	
Monitoring			
238	Ability to monitor solution-level system status according to predefined governance policies and plans	M	
239	Ability to manage solution-level system status according to predefined governance policies and plans	M	
240	Ability to measure and gather metrics on the platform services, platform solutions, governing processes, and policy enforcement	M	
241	Ability to use metrics to determine appropriateness of the current governance regimen	M	
242	Ability to trigger checkpoints in the compliance process	M	
243	Ability to indicate the status of governing and governed processes and their metrics in real-time	M	
Management			
244	Ability to capture governing processes as workflow documents	M	
245	Ability to automate governing processes	M	
Information Service Layer			
246	Ability to expose data as services, to add/remove/manipulate data entries in different services or service components, and to disable some data from outside access	M	
247	Ability to interface with the Integration Layer in multiple ways such as message-based, service call, batch interface	M	
248	Ability to handle representing data from various data sources in a unified data format; ability to transform and map data from one format to another and align data from different resources	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
249	Ability to manage the lifecycle of business entities	M	
250	Ability to manage the hierarchy and relationship among data	M	
251	Ability to validate records against defined business rules	M	
252	Ability to validate and enforce data quality rules	M	
253	Ability to notify and trigger actions based upon events detected within the data	M	
	Information Integration		
254	Ability to perform Extract-Transform-Load (ETL capabilities) data from one source to other; ability to extract relevant information from sources, transform the information into the appropriate integrated form, and load the information into the target repository	M	
255	Ability to perform Enterprise Information Integration (EII) capabilities, such as access to federated query to structure and unstructured data	M	
256	Ability to virtualize data representing actual data from the actual data repositories of various types, such as a DB2 database in the Operational Systems Layer, or an Excel file	M	
257	Ability to handle data transformation (including transformation of data types and contents) and to aggregate data from multiple data sources	M	
258	Ability to perform data standardization and perform data reconciliation including semantic reconciliation	M	
259	Ability to cleanse and match inbound records to existing data	M	
260	Ability to cache data in support of the data virtualization/information services capability	M	
	Basic Information Management		
261	Ability to manage and maintain metadata in a common metadata repository for the enterprise	M	
262	Ability to capture, aggregate, and manage unstructured content in a variety of formats such as images, text documents, web pages, spreadsheets, presentations, graphics, email, video, and other multimedia	M	
267	Ability to author, configure, manage, customize, and extend metadata	M	
	Information Security and Protection		
268	Ability to handle access privileges of various participants to data	M	
269	Ability to control access on individual data items	M	
270	Ability to monitor and manage data usage using a log-like facility; typical traceability log includes who has accessed the data, when, and what part of the data has been accessed	M	
	Business Analytics		
271	Ability to analyze data access history, provide optimization algorithms, and business intelligence for data optimization, performance tuning, capacity planning, and resource optimization.	M	
272	Ability to query and search capabilities for enterprise information	M	
273	Ability to visualize interactively the results from business analytics and data analysis	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
274	Ability to interface with the Integration Layer and obtain events from the Integration Layer; ability to analyze this event information, both in real-time/near real-time, as well as stored (warehoused) events	M	
275	Ability to review and assess inbound service activity in the form of event information and determine responses or issue alerts/notifications	M	
	Information Definition and Modelling		
276	Ability to define business vocabulary – glossary, terms, business entities	M	
277	Ability to define a common information model as leveraged by IT such as entity relationships, logical data model for information repositories, and message model for service definition and specification	M	
278	Ability to define business events	M	
	Information Repository		
279	Ability to store operational and reshaped information (structured and unstructured) that adds business value including common model of data; used to share canonical forms (common data models) between platform Integration Layer elements and also other platform layer elements – typically invoked by other components (including information virtualization capabilities)	M	
280	Ability to store instance and definition of master data and historical data that records changes to master data	M	
281	Ability to store analytical data	M	
	Requirements for the Operational Systems Layer		
	Service Delivery		
282	Ability to locate components implementing services	M	
283	Ability to host applications and functionality to deliver service features	M	
284	Ability to host databases needed for service implementation	M	
285	Ability to host legacy systems needed for service implementation	M	
286	Ability to act as a broker between services requests and invoking implementations	M	
287	Ability to map service functional requirements to underlying or legacy solution	M	
288	Ability to compose service function from underlying services and implementation of services	M	
289	Ability to wrap custom and legacy platforms for service implementation	M	
290	Ability to find Service Component associated with Solution Building Blocks	M	
291	Ability to delegate request or invoke Solution Component for service	M	
	Runtime Environment		
292	Ability to support operating systems platforms	M	
293	Ability to support runtime hosting platforms	M	
294	Ability to support runtimes of software needed to run service implementation	M	
295	Ability to support runtimes and software needed to deploy service implementations	M	
296	Ability to support the software environment in which the Solution Component runs	M	
	Virtualization and Infrastructure Services		
297	Ability to provide infrastructure needed by runtime infrastructure	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
298	Ability to provide infrastructure in a virtualized manner to platforms	M	
299	Ability to provide infrastructure in a virtualized manner to service implementation	M	
300	Ability to manage infrastructure and virtualized infrastructure	M	
301	Ability to provide a single point of control for security of the Operational Systems Layer	M	
Requirements for the Quality-of-Service Layer			
Command and Control Management			
302	Ability to ensure protection, response, continuity, and recovery	M	
303	Ability to approve authority for security	M	
304	Ability to ensure that physical and operational security is maintained for locations, assets, humans, environment, and utilities	M	
305	Ability to provide surveillance and monitoring of locations, perimeters, and areas	M	
306	Ability to enforce entry control	M	
307	Ability to provide for positioning, tracking, and identification of humans and assets; continuity, and recovery operations	M	
308	Ability to secure physical assets, such as locations, facilities, services, inventory, physical access control, human identity, etc.	M	
309	Ability to ensure the safety of a solution from types of failure, damage, error, accidents, and harm as defined by the Governance Layer	M	
Security Management			
310	Ability to ensure appropriate authentication based on proper roles	M	
311	Ability to ensure appropriate authorization based on proper roles	M	
312	Ability to ensure appropriate encryption of messages	M	
313	Ability to ensure appropriate audit logging of messages	M	
314	Ability to assure that access to resources has been given to the right identities, at the right time, for the right purpose	M	
315	Ability to monitor and audit access to resources for unauthorized or unacceptable use	M	
316	Ability to protect unstructured and structured data from unauthorized access and data loss, according to the nature and business value of information	M	
317	Ability to monitor and audit access to information	M	
318	Ability to address how software, systems, and services are designed, developed, tested, operated, and maintained throughout the software lifecycle including the use of technology as well as processes and procedures which are followed during all aspects of software development and deployment	M	
319	Ability to maintain the security status through proactive changes to the system, reacting to identified vulnerabilities and new threats, and through responding to detected incidents and reported problems	M	
320	Ability to identify, quantify, assess, and report on IT-related risks that contribute to the enterprise's operational risk by providing all services to analyze and report security information and security events, and create alarms and insight	M	
IT Systems Monitoring and Management			

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
321	Ability to monitor, manage, and configure IT systems hardware, including operating systems which are part of an platform solution	M	
322	Ability to monitor, manage, and configure IT network hardware systems which are part of an platform solution	M	
323	Ability to monitor, manage, and configure IT storage hardware systems which are part of an platform solution	M	
Application Monitoring and Management			
324	Ability to coordinate overall QoS requirements for the platform solution	M	
325	Ability to manage solutions and services from solution delivery to solution termination	M	
326	Ability to capture the percentage of executions that the solution does not fail	M	
327	Ability to capture the percentage of executions of the solution that execute within a prescribed period	M	
328	Ability to capture the metric for percentage of time that the solution is invokable	M	
329	Ability to capture the metric for the response time of network access to a service or solution	M	
330	Ability to react to infrastructure changes to maximize availability	M	
331	Ability to log or report on availability metrics	M	
332	Ability to capture metrics on performance of services and solutions	M	
333	Ability to change configuration and policy to ensure meeting SLAs	M	
334	Ability to change configuration and policy to ensure performance optimization	M	
335	Ability to support virtualization of resources to support performance optimization	M	
336	Ability to record, track, and monitor the cost of executing a specific solution	M	
337	Ability to monitor current status of the solution	M	
338	Ability to change the current status of the solution	M	
339	Ability to check QoS requirements for valid status	M	
340	Ability to issue events for non-compliance to QoS requirements	M	
341	Ability to measure, gather, evaluate, and test metrics against policies on a regular basis	M	
Business Activity Monitoring and Management			
342	Ability to analyse this event information, both in real-time/near real-time, as well as stored (warehoused) events	M	
343	Ability to review and assess business and service activity in the form of event information and determine responses or issue alerts/notifications	M	
Event Management			
344	Ability to interface with the Integration Layer and obtain events from the Integration Layer	M	
345	Ability to control issuance of events in the solution	M	
346	Ability to send issue events indicating non-compliance to QoS requirements	M	
347	Ability to subscribe to events issued by the solution	M	
348	Ability to log events and business messages	M	
349	Ability to control logging frequency and size	M	
Policy Monitoring and Enforcement			

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
350	Ability to check QoS requirements for valid rules	M	
351	Ability to change rules to comply with QoS requirements	M	
352	Ability to change QoS requirements to comply with rules	M	
353	Ability to send events for non-compliance to QoS requirements	M	
354	Ability to evaluate policies	M	
355	Ability to resolve conflicts between policies	M	
356	Ability to enforce compliance with policies	M	
357	Ability to automatically respond and correct violations of policies (enforce)	M	
358	Ability to enable policy enforcement	M	
359	Ability to discover, analyze, transform, distribute, evaluate, and enforce security policies	M	
360	Ability to manage non-functional QoS solution requirements from solution delivery to solution termination	M	
361	Ability to manage lifecycle of policies	M	
362	Ability to represent policies	M	
363	Ability to author policies	M	
364	Ability to manage instances of policies	M	
365	Ability to change policies	M	
366	Ability to disable, discard, and discontinue policies	M	
367	Ability to monitor and capture metrics and status	M	
368	Ability to find and access policies	M	
369	Ability to evaluate policies at checkpoints or on metrics captured	M	
370	Ability to automate monitoring for violations of policy	M	
Configuration and Change Management			
371	Ability to capture configuration (authoring tools)	M	
372	Ability to change configuration	M	
373	Ability to check QoS requirements for valid configurations	M	
374	Ability to change configuration to comply with QoS requirements	M	
375	Ability to send events for non-compliance to QoS requirements	M	
376	Ability to track and record changes, configuration, metadata, policy, etc., happening in the solution	M	
Data Repository			
377	Ability to store QoS policies and rules	M	
378	Ability to locate/find/return QoS policies and rules	M	
Requirements for the Service Component Layer			
Service Realization and Implementation (Design Time)			
379	Ability to realize a service; for example, using component-based design and development	M	
380	Service Publication and Exposure (Design Time)	M	
381	Ability to publish the service contract/descriptions in a standards-compliant, interoperable manner for other layers of the platform and design-time service repositories and runtime service registry in the Governance Layer	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
382	Ability to provide information about the services to the Services Layer	M	
383	Service Deployment (Design Time)		
384	Ability to provide for the deployment of the physical service to the existing solution platform which contains the associated service Solution Component	M	
	Service Invocation (Runtime)		
385	Ability to support a standards-compliant, interoperable, runtime invocation of the service	M	
	Service Binding (Runtime)		
386	Ability to support service interoperability	M	
387	Ability to implement a part of the broker pattern	M	
388	Ability to convert from the service description to service calls supported by the platform (in the case of a WSDL web service, the conversion from WSDL service description to the service invocation)	M	
389	Ability to convert at runtime into a standards-compliant form for consumption by standards-compliant service consumers on both input and output	M	
390	Ability to convert from the standards-compliant form to the form acceptable to the underlying Solution Component which satisfies the service's functional capability on both input and output	M	
391	Ability to enforce policies and access control during service binding	M	
	Requirements for the Services Layer		
	Service Definition		
392	Ability to define services in terms of service descriptions/contracts	M	
	Service Runtime Enablement		
393	Ability to support the resolution of service versions so that, over time, as a service evolves, there is support for successive versions; this occurs when an existing service, with existing consumers, changes to the newly created version	M	
394	Ability to enable the service container and the service registry to manage the storage and invocation of different services with minimal impact to users of the platform	M	
395	Ability to interact with other layers within the platform particularly the Integration Layer	M	
396	Ability to define the binding to the Service Component that implements a given service	M	
397	Ability to support the hosting of services	M	
398	Ability to check the status and heartbeat of the services	M	
	Policy Management		
399	Ability to support the integration of the Quality of Service (QoS) policy descriptions for services with the runtime elements of the Governance and the Quality of Service Layers	M	
400	Ability to support standards that are compliant to consume the QoS policy descriptions and convert them into assets consumable by the ABBs within the layer	M	
401	Ability to enforce the policies within the layer, behaving as a Policy Enforcer	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
402	Ability to support the audit and logging of runtime service usage to support QoS attributes, with the potential use of standards such as CBE and XDAS to ensure consistent and interoperable data which can then be easily integrated with the Quality of Service Layer to support capabilities such as service monitoring, audit, compliance, and runtime governance.	M	
403	Ability to support validation governance policy	M	
404	Ability to support management and authoring of SLAs	M	
405	Ability to support adapters for connecting to legacy systems	M	
	Access Control		
406	Ability to support the integration of the security access control descriptions for services with the runtime elements of the Governance and Quality of Service Layers of the platform	M	
407	Ability to support standards that are compliant to consume the security policy descriptions and convert them into assets consumable by the associated ABBs within the layer	M	
	Service Clustering		
408	Ability to cluster services which are contained by the service provider to invoke layers such as the Integration Layer; this capability enables the Services Layer to support the QoS requirements with regard to response and reliability	M	
409	Ability to distribute services which are contained by the service provider to invoke layers such as the Integration Layer	M	
410	Ability to Support WSDL (SOAP) and RESTful services	M	
411	Ability to provide graphical view of consumers and providers and provide preview capabilities	M	
	API MANAGEMENT MODULE		
412	API component shall provide advanced throttling and traffic management capabilities.	M	
413	API Management component should be able to provide API analytics to understand how APIs are being used.	M	
414	API manager shall provide framework for securing APIs using standard API security standards including but not limited to endpoint management.	M	
415	The API management component shall utilise an end-to-end DevOps approach and tools to the API development lifecycle.	M	
416	API Security shall be enabled by integrating in to Identity and Access Management component.	M	
417	API Management component of the application and data integration platform shall provide capability to expose services in a secure managed fashion and use of APIs as fundamental building blocks for integration	M	
418	API Security: Ability to protect the often valuable or sensitive data and application resources they expose, in order to prevent misuse or unauthorized access.	M	
419	Lifecycle Management: Ability to ensure that the process of moving new APIs and API updates through the development lifecycle (from Dev, to Testing, to QA, to Production) does not break the interfaces themselves or the client applications these interfaces support.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
420	Governance: Ability to maintain service-level agreements and ensure APIs remain available and comply with regulatory requirements	M	
421	Ability to control and track the health, performance and usage of APIs.	M	
422	Developer Experience: Ability to empower developers to create client apps that generate real business value, while maintaining governance over API usage and permissions.	M	
423	Monetization: Ability to simplify the process of generating revenue directly from APIs (e.g. by charging developers for interface access).	M	
424	Solution Security: Ability to satisfy enterprise-class security requirements such PCI compliance and FIPS.	M	
425	Manageability: Ability to manage Gateway clusters and interface development processes.	M	
426	Reliability: Ability to allow for clustering and scaling, in order to ensure failover and availability.	M	
427	Ability to encode credentials coming in plain text from the applications before sending the request to the back-end system.	M	
428	Ability to block or blacklist traffic coming from certain IPs hitting the API tier is required	M	
429	Ability to allow or whitelist only a certain set of IPs hitting the API tier.	M	
430	Ability to map all errors from different back ends and give one standard error format.	M	
431	Ability to handle business logic in the API tier.	M	
432	Ability to integrate some non-http endpoints, adapters, or jars through our API tier.	M	
433	Ability to analyse the API traffic for debugging purposes.	M	
434	API Designing and Prototyping		
435	Samples - The solution is pre-loaded with sample APIs for a hassle-free first experience.	M	
Designing APIs			
436	APIs can be created using an existing REST endpoint.	M	
437	APIs can be created using an existing SOAP endpoint to create a managed API by importing the corresponding WSDL.	M	
438	Supports Swagger 2.0 - APIs can be created by uploading Swagger definition or providing a Swagger URL.	D	
439	Prototyping APIs: Supports API first design, which enables gathering developers' feedback of a prototype prior to the implementation.	M	
440	Ability to connect to the endpoint given in the prototype API and validate.	M	
441	Ability to test the mock API response inline.	M	
Editing APIs			
442	APIs can be modified via the publishing interface (UI or REST API).	M	
443	APIs can be modified via Swagger UI.	D	
444	Service Protocols - Supports popular service protocols (e.g. SOAP, REST).	M	
445	Message Types - Supports standard message types (e.g. XML, JSON).	M	
Endpoint Support			

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
446	Supports various forms of endpoints such as address endpoints (i.e. hard coded URLs), template endpoints (i.e. URLs with path params), load-balanced endpoints, failover endpoints, load-balanced endpoints and dynamic endpoints (i.e. endpoints resolved at runtime).	M	
447	Supports secure endpoints with Basic Auth and Digest Auth.	M	
448	URI Templates - Ability to define variables as part of the URI template of your API's resources.	M	
449	HTTP Methods - Supports GET, PUT, POST, DELETE, HEAD, PATCH and OPTIONS.	M	
Message Mediation - Message mediation flow of APIs.			
450	Availability of a default mediation flow - Ability mediate/transform API requests by default.	M	
451	Ability to setup a custom mediation flow - Ability to configure inflow (API requests), outflow (API responses) and fault flow (API faults).	M	
452	Cross Origin Header Configurations - Ability to configure CORS headers.	M	
453	Transports - Supports HTTP and HTTPS.	M	
454	Backend Throughput - Ability to set a maximum back-end throughput, to limit the total number of API calls the solution is allowed to make to the backend.	M	
API Publishing and Governance			
API Lifecycle Management			
455	Supports default API states to indicate creation, prototyping, publishing, deprecation, retirement and blocking phases of APIs.	M	
456	Role-based API state transition.	M	
457	Graphical representation of API state transition.	M	
API Lifecycle Extensions			
458	Ability to define custom API states.	M	
459	Ability to change the state transition events as per the environmental preferences.	M	
460	Ability to add custom checklist items for specific API state transitions.	M	
461	Ability to change the execution code for each API state transition.	M	
API Visibility			
462	Ability to grant public access - accessible to unauthorized users.	M	
463	Ability to grant access only to selected user roles.	M	
464	Ability to grant access only to users of a domain/tenant	M	
API Documentation			
465	Ability to attach how-to guides, samples and SDKs, publish forums and support forums.	M	
466	Supports varied documentation formats (e.g. in-line, URL, PDF).	M	
API Documentation Visibility			
467	Ability to configure documentation visibility to same as API visibility.	M	
468	Ability to configure documentation visibility only to view by document owner.	M	
469	Ability to configure documentation visibility only to users of a domain/tenant.	M	
API Versioning			

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
470	Ability to maintain multiple API versions concurrently.	M	
471	Ability to setup a default API version.	M	
472	Ability to have the version in any part of the API base path (context).	M	
473	Automatically renew subscriptions of existing users of the same API when a new version is defined (optional).	M	
474	Automatically deprecate the old API when creating a new version (optional).	M	
475	Ability to display multiple API versions in the Developer Portal.	M	
476	API Tagging - Allows adding multiple tags for an API as a way of identification/groping.	M	
477	Publishing to Different Gateways - Ability to publish APIs to a selected set of gateways in a multi-gateway environment.	M	
478	API Migration Across Environments - Ability to move APIs from one environment to another (e.g. Dev, Test, QA, Prod).	M	
479	Quota/Rate Limiting Policies - Allows enabling multiple rate limiting tiers for subscribers to choose from.	M	
	API Deprecation & Backward Compatibility Policy		
480	Adopt Semantic Versioning (SemVer).	M	
481	Provide a minimum 6-month deprecation notice.	M	
482	Provide automated compatibility validation before production deployment.	M	
483	Maintain version of lifecycle documentation.	M	
	Access Rate Control Policies		
484	Allows advanced access control policies per API.	M	
485	Allows advanced access control policies per API Resource.	M	
	API Subscriptions		
486	Control API Subscriptions - Ability to control API subscriptions by tenants (organizations).	M	
487	Block API Subscriptions - Ability to block access to both production and/or sandbox environments.	M	
488	Single Sign On - SSO using SAML 2.0 for easy integration with existing Web apps.	M	
489	Register to Receive Alerts - Ability to configure the API to allow users to register to alerts of interest.	M	
490	Import/export APIs - Allow users to export an API as a zip file and import it in another environment.	M	
	API Publishing and Governance		
	Access Control and Security		
491	Authentication - OAuth 2.0 with Grant Types	M	
492	Supports client credentials.	M	
493	Supports passwords.	M	
494	Supports Implicit	M	
495	Supports Authorization Code.	M	
496	Supports SAML Bearer.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
497	Supports NTLM.	M	
498	Supports JWT	M	
499	Supports custom grant types.	M	
500	Ability to refresh tokens.	M	
501	Ability to revoke tokens.	M	
502	Ability to approve back revoked tokens before expiry time.	M	
503	Supports user consent (for implicit and code grants).	M	
504	Ability to change oauth2 token expiration time.	M	
505	Authentication - Basic Auth - Provision for Basic Auth and other custom authentication mechanisms.	M	
506	Authentication per API Resource - Allows controlling authentication by each individual API Resource.	M	
Authorization			
507	Supports OAuth scopes.	M	
508	Provision for fine-grained access control with XACML.	M	
509	Key Management - Supports key provisioning.	M	
510	Black Listing - Supports blacklisting APIs, applications, users and IP addresses.	M	
511	Rules - Allows custom rules for access rate control and security.	M	
512	JWT - Passes a JWT to the back-end system including meta data of the API request.	M	
513	Identity Federation - Supports popular methods/applications such as OpenID, SAML 2.0 Web SSO, OAuth2/OpenID Connect, WS-Federation (Passive), Facebook, Yahoo, Google, Microsoft Windows Live, LinkedIn, Twitter and GitHub as well as custom methods/applications.	M	
Encrypting Credentials			
514	Ability to encrypt tokens, client_secrect, etc.	M	
515	Ability to encrypt credentials in configuration files.	M	
Real-time Security Updates			
516	Threat protection.	M	
517	Bot Detection.	M	
518	Token-fraud detection.	M	
519	Tier Visibility - Allows restricting tiers to specified roles.	M	
Developer Portal			
520	User Friendly Graphical Experience - Intuitive theme similar to popular consumer stores.	M	
521	Organizational Theming - Common view of the store for users registered under same organization.	M	
Self-Sign Up			
522	API consumers can create their own account and subscribe to preferred APIs.	M	
523	Enable/disable self-signup per organization.	M	
524	User Signup Workflow Extensions - Allows signup workflows for approvals, etc.	M	
525	Customize User Signup Page Attributes - Ability to customize user signup page based on custom claims.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
526	Signing-in - Single Sign On - SAML based SSO for the Developer Portal.	M	
527	API Search - Ability to search APIs via name, provider, tag cloud (groups of APIs) and most recent APIs.	M	
	API Subscription		
528	Supports self-subscription.	M	
529	Supports group-subscription - An individual can subscribe to an API on behalf of his/her team.	M	
530	API Subscription Workflows - Allows to configure/extend workflows for API subscriptions.	M	
	Application-based API Subscription		
531	Ability to generate and use a single key for multiple APIs.	M	
532	Ability to subscribe to a single API multiple times with different SLA levels.	M	
533	Ability to subscribe using default application.	M	
534	Ability to subscribe using custom application.	M	
535	Application-based subscription - Ability to manage subscriptions for multiple APIs based on the application.	M	
536	Callback URL for Applications - Allows to set a callback URL per Application.	M	
537	Application Creation Workflow Extension - Allows configuring and extending Application creation workflows for approvals, validations, etc.	M	
538	Tier-based API Subscription - Subscriptions can be at different service tiers based on the expected usage levels.	M	
	App Keys		
539	Ability to generate production keys for Applications.	M	
540	Ability to generate sandbox keys for Applications.	M	
541	Ability to show/hide keys from the UI.	M	
542	Ability provide separate credentials for production and sandbox keys.	M	
543	Ken Generation Workflow Extension - Key generation workflow configurations and workflow extensions	M	
544	Map Existing Consumer Key/Secret - Ability to map existing third party key manager's consumer key/secret	M	
545	API Console - Supports an interactive API test console with sample payloads to play with.	M	
546	Control Allowed Grant Types - Allows to control Grant Types by Application	M	
547	App and Subscription Sharing - Sharing Application and Subscriptions among a group of users.	M	
548	Alert Management - Allows users to select Alert types to register for.	M	
549	Notifications - Notifications on new API versions of subscribed APIs	M	
550	Comments - Allows adding comments on APIs	M	
551	Rating - Allows users to rate APIs and provides an overall rate value.	M	
552	User Forums - Supports public and private (API specific) forums.	M	
553	Social Integration - Supports integration to popular social sites such as Facebook, Twitter, Google and Digg.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
554	Supports Internationalization.	M	
555	Widgets - Supports I frame which can be embedded in blogs, Websites, etc.	M	
556	Multi API Versions - Show/Hide older versions.	M	
	Managing and Scaling API Traffic		
557	Quota per User per Application - Allows specifying a quota per user by Application.	M	
	Access Rate control Quotas		
558	Supports quotas by number of requests in time window.	M	
559	Supports quotas by bytes within time window.	M	
560	Supports quotas by IP address.	M	
561	Supports quotas by IP address range.	M	
562	Supports quotas by incoming http headers.	M	
563	Supports quotas by incoming query parameters.	M	
564	Supports quotas by user claims and other data.	M	
565	Quota consumption persistence for long durations.	M	
566	Sharing quota consumption across gateways when scaling.	M	
567	Rate Limiting - Allows rate limiting by seconds and minutes.	M	
568	Unlimited Quota - Allows enabling/disabling unlimited quota.	M	
	Monitoring and Monetization		
	Analytics in Developer Portal		
569	API Usage by Applications.	M	
570	Top Users of Applications.	M	
571	Resource Usage by Applications.	M	
572	Faulty invocations by Applications.	M	
	Alerts for API Users		
573	Alert on abnormal number of requests by Application.	M	
574	Alert on resource access pattern change detection by Application.	M	
575	Alert on sudden change in geo location of access token.	M	
576	Alert on abnormal token renewal detection.	M	
577	Alert on frequent quota breaches by Application.	M	
	Analytics - API Publisher UI		
578	APIs created over time.	M	
579	API usage amount visualization.	M	
580	Last accessed time of APIs.	M	
581	API usage by Resource path.	M	
582	Endpoint usage counts.	M	
583	Comparison of API usage across APIs.	M	
584	Quota breached requests by API.	M	
585	Faulty invocations by API.	M	
586	API Latency breakdown on Gateway.	M	
587	Compare API performance between two versions.	M	
588	API usage across Geo Locations.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
589	API usage across User-Agent header.	M	
590	Quota breached requests by Application.	M	
591	Applications created over time.	M	
592	API Subscription counts visualization.	M	
593	Developer sign-ups over time.	M	
594	Subscriptions created over time.	M	
	Alerts for API Publisher Users		
595	Alert on abnormal API response times.	M	
596	Alert on abnormal back-end response times.	M	
597	Alert on abnormal API usage e.g.: sudden spikes or drops.	M	
598	Alert on API health degradation e.g. too many errors.	M	
	Log Analysis		
599	Supports a live log viewer.	M	
600	Ability to view a log overview (error log counts, etc.).	M	
601	Ability to view application errors (detailed view on error logs).	M	
602	Ability to view API failure errors (message processing errors).	M	
603	Ability to view access token errors (revoked, expired tokens being used).	M	
604	Ability to view invalid login attempts.	M	
605	Ability to view API deployment details.	M	
606	API Health Dashboard - Shows a dashboard indicating API health.	M	
607	Integration with Google Analytics - Allows pushing data to Google Analytics.	M	
608	Billing Engines - Has an API to query data and feed to any billing system.	M	
	Plug ability, Extensibility and Theme ability		
609	REST API for exposing product functionality.	M	
610	JWT Generation - Allows providing a custom JWT generator.	M	
611	Themes per Tenant - Allows for each tenant to have its own theme.	M	
612	Third party Key Servers - Integrating with third-party key managers for OAuth.	M	
613	Custom Template for API Configuration - Uses a template to define the API configuration.	M	
614	Analytics Data Retriever - Allows customizing the data retriever which retrieves data for visualization.	M	
615	Custom URLs for Tenant Stores - Allows having a customer URL per tenant store (e.g. coca-cola.com maps to foo.com tenant).	M	
616	Integration to User Repositories - Pluggable to various user repositories including Microsoft Active Directory, LDAP, databases, or Apache Cassandra	M	
617	Tooling Support - Geared with graphically supported development tooling, i.e. integration flows can be developed and deployed without having to code.	M	
	Deployment and Multitenancy		
618	Clustering - Clustering/node discovery.	M	
619	Tenant Isolation - Supports users per tenant, roles per tenant, user store per tenant, and tenant data isolation at application layer.	M	
620	Tenant Activation - Allows tenant activation/de-activation.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
621	Artifact Synchronization - Artifact synchronization across nodes using deployment synchronizer.	M	
622	Data Centric Deployment	M	
623	Minimal Startup Time - New instances can be brought up in a matter of minutes to support the demand spikes.	M	
	Deployment Options		
624	Deployable on-premise and in the cloud (private, public or hybrid deployments) or managed cloud.	M	
625	Developer portal can be deployed in DMZ for external access with publisher inside the firewall for private control.	M	
626	Gateway can be deployed in DMZ with controlled access to Identity and Access Management component and governance database behind firewall.	M	
	IDENTITY AND ACCESS MANAGEMENT MODULE		
627	The application and data integration platform shall have a component which manages Identity and Access Management (IAM) centrally across all interactions with the system.	M	
628	IAM component should integrate with existing Ghana citizen registries in a non-invasive style of integration using identity federation.	M	
629	IAM component need to facilitate SSO between different web government institutions.	M	
630	IAM component shall be able to support multi-factor / multi-step authentication models and optionally dynamic authentication.	M	
631	IAM component also should provide analytical capability out of applications hosted by the box	M	
	Single-Sign-On and Federation		
632	Supports SAML 2.0 protocols (e.g. Web SSO, Web SLO, Attribute Profile, Metadata Profile, SP Initiated SSO, IdP Initiated SSO, SAML Redirect Binding, SAML POST Binding, and Encrypted SAML Assertions).	M	
633	Supports OpenID Connect protocols (e.g. OpenID Connect Core, OpenID Connect Discovery, OpenID Connect Session Management, OpenID Connect DCR)	M	
634	Supports WS-Federation Passive.	M	
635	Federated SSO - Supports federated SSO via SAML2, OpenID Connect and WS-Federation Passive with external identity providers.	M	
636	Enterprise SSO - Supports enterprise SSO with applications such as Microsoft Office 365, Microsoft SharePoint, Microsoft Dynamics and Microsoft Exchange.	M	
637	SSO for Heterogeneous Applications - Supports SSO between on premise applications and cloud applications that support heterogeneous SSO protocols (identity bridging).	M	
638	Supports Service Provider (SP) and Identity Provider (IDP) Ecosystem Management	M	
639	Third-party IDPs - Ability to consume identities and attributes from third party IDPs by translating between different claim dialects.	M	
	Authentication (Multi-Option and Multi-Step Authentication)		
640	Supports Username/Password, SMS, XMPP, Certificates, and OTP via Email, Duo-Security, tiQr, and stateful Sessions.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
641	Two-factor Authentication - Supports two-factor authentication based on Fast Identity Online (FIDO).	M	
642	Supports Time-based One-time Password (TOTP) based authentication.	M	
643	Supports Integrated Windows authentication (IWA).	M	
644	Supports X.509 authentication.	M	
	Identity Governance and Administration (IGA)		
	User Group Management		
645	Supports user and group management.	M	
646	Supports user role management.	M	
647	Supports flexible profile management for users supporting multiple profiles per use.	M	
648	Account merging - Ability to link multiple user accounts that may belong to a single user.	M	
649	Supports account locking and account disabling (e.g. at invalid failed login attempts).	M	
650	Supports account recovery with email and secret questions.	M	
651	Supports account suspension for idle accounts for a pre-configured duration.	M	
652	Supports configurable password policies.	M	
653	Supports password recovery options.	M	
654	Supports self-registration.	M	
655	Self-service user portal for business end-users to manage their credentials, profile, and authorized applications.	M	
656	Supports multitenancy.	M	
657	Supports heterogeneous user stores, either through built-in lightweight directory access protocol (LDAP) - powered by Apache DS, an external LDAP, Microsoft Active Directory, or any JDBC databases.	M	
658	Supports multiple user stores.	M	
659	Supports claim management, which enables decoupling of application dialect from underlying user store implementation.	M	
	Provisioning		
660	Ability to provision users and groups using System for Cross-domain Identity Management (SCIM) 2.0 or proprietary SOAP APIs.	M	
661	Ability to provision users to external identity providers using SCIM 2.0 or Service Provisioning Markup Language (SPML).	M	
662	Ability to create identities on the fly with just-in-time (JIT) provisioning.	M	
663	Rule based provisioning - Ability to adopt provision flow based rules that can be based on event (user, idp, sp) information as well as environment (time, region) factors.	M	
664	Supports multi-option/multi-step approval template based workflows for user and role management operations.	M	
665	Supports policy life cycle management.	M	
	Entitlements and Access Control		
666	Fine-Grained Authorization	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
667	Ability to manage user entitlements.	M	
668	Supports Role-based access control (RBAC).	M	
669	Supports fine-grained policy-based access control based on eXtensible Access Control Markup Language (XACML) 2.0/3.0.	M	
670	Ability to explore policy impact prior to publishing the policies to runtime using the try-it tool.	M	
671	Supports high performance network protocol for Policy Enforcement Point/Policy Decision Point (PEP/PDP) interaction.	M	
672	Supports user-friendly Policy Administration Point (PAP) to edit XACML 2.0/3.0 policies.	M	
673	Ability to manage multiple PDPs from a single PAP.	M	
674	Ability to send notifications on policy updates.	M	
675	Supports Multiple Policy Information Points (PIP) to retrieve additional attributes required for policy evaluation.	M	
676	Ability to authenticate third-party applications using REST or SOAP services.	M	
	API Security		
677	Supports delegated access control using OAuth2 and WS-Trust.	M	
678	Supports SAML2 bearer grant type, JWT assertion grant type and NTLM-IWA grant type.	M	
679	Supports OAuth2 token revocation.	M	
680	Supports key management.	M	
	OpenID Token		
681	Ability to store user id's token along with any application identifier after the user's open ID has been authenticated.	M	
682	Ability to map a single open ID to one or more applications	M	
	User Session Management		
683	Ability to support configuration for ending a session due to hard time-outs (e.g., the SSO login will time out 90 minutes after first created).	M	
684	Ability to support configuration for ending a session due to soft time-outs (e.g., the SSO session will time out after 20 minutes of inactivity).	M	
685	Ability to support session ending due to logout by the user	M	
686	Ability to support both application logouts and overall session logouts.	M	
687	Compatibility with all standard browsers including Internet explorer, Firefox, Chrome etc.	M	
688	Ability to use browser cookies in facilitating SSO	M	
	Use of SSO for existing applications.		
689	Ability to work with the existing applications	M	
690	Ability to integrate the existing application rules that require a user to login	M	
691	The solution should provide an enterprise-wide single sign- on, single sign-off and session management solution that integrates with the broadest possible range of applications	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
692	The solution should have the ability to implement single sign-on to allow access to information sources through different mechanisms including but not limited to web, desktop, and VPN	M	
693	The solution should provide session- management services that enable immediate termination of all active sessions of a malicious user	M	
694	Single sign-on support for multiple software platforms on corporate networks and shared workstations	M	
695	Replicate user's credentials automatically across all independent applications	M	
696	Ability to incorporate National ID/Aliens ID in the user authentication framework.	M	
697	Ability to issue One Time Password (OTP) to enable implementation of "Two factor" or "Three factor" authentication.	M	
698	Ability to integrate other Authentication methods	M	
699	The ability to provide "white pages" capability of user profiles	M	
	Access Management Capability		
700	Access management of Web and non-Web applications, i.e., ability to provide URL-based web access control, ability to provide COM and DCOM (fat client) access control from a standard desktop microcomputer	M	
701	Allow independent invocation of authentication and authorization functions	M	
702	Support complex business rule processing	M	
703	Support re-prompting of user for authentication	M	
704	Smart Rules capability and Enforce privileges at Policy Decision Point (PDP)	M	
705	Access one of two LDAP instances based on login ID	M	
706	Ability to leverage existing role and group information from multiple sources, concurrently	M	
707	Support attribute based dynamic and filtered access control in a flat directory	M	
708	Federation Support (SAML, Liberty Alliance, WS-*), i.e., the ability to federate access control and authorization services	M	
709	Support for installed portals including but not limited to e-Services Portal, One Stop Centre Portal and MDA portals.	M	
710	Ability to grant authorization permissions using role-based access control (RBAC)	M	
711	Connector Development Tool (ADSI, Java, LDAP, XML, VS.NET, etc.)	M	
712	Encrypted Communications with targets (SSL or other)	M	
713	Support bi-directional flow from authoritative sources to subscriber systems	M	
714	Support data normalization and transformations	M	
715	Support for additional business logic and rules to resolve discrepancies	M	
	Monitoring, Reporting and Auditing		
716	Event and Session Monitoring - Supports login events and session monitoring.	M	
717	Auditing - Supports auditing of privileged operations using distributed auditing system (XDAS).	M	
718	Alerts	M	
719	Ability to detect and provide alerts for abnormal and suspicious login sessions.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
720	Supports configuring custom alerts.	M	
721	Access and Performance Statistics - Built-in collection and monitoring of standard access and performance statistics.	M	
722	Metrics Monitoring and Management - Supports dashboards monitor statistics (e.g. login attempts over time, by service provider, by user store, by role, by user).	M	
Connectors to Extend the Identity Ecosystem			
723	Connectors - Easy access to a wide range of self-contained connectors.	M	
724	IDPs - Support for federated authentication with popular enterprise IDPs such as Microsoft Office 365.	M	
725	Social Sites - Supports social login with popular sites like Facebook, Twitter and LinkedIn.	M	
726	Enterprise Cloud Applications - Provisioning connectors to enterprise cloud applications like Salesforce, Google, etc.	M	
Plug ability, Extensibility and Theme ability			
727	Plug-in Model - Supports a plug-in model for user stores, authenticators, OAuth2 grant types, etc.	M	
728	Extension Points -	M	
729	Numerous extension points to allow customizations.	M	
730	Ability to integrate with legacy systems.	M	
731	White Labelling - White label login and registration pages.	M	
Deployment and Multitenancy			
Ease of Deployment			
732	Lightweight, developer-friendly and easy to deploy.	M	
733	Ability to carry out Container Friendly Deployment.	M	
734	Supports headless deployment.	M	
735	Clustering for high availability deployment with the ability to perform session replication across cluster nodes.	M	
736	Deployment Flexibility - Choice of deployment to on-premise servers, private cloud, or managed cloud, without configuration changes.	M	
737	Integration - Complete SOAP API for integrating or embedding into any application or system.	M	
738	Configuration Management - Centralized configuration management across different deployment environments with life cycles and versioning with integration.	M	
ANALYTICS MODULE			
739	Ability Collect Data from Multiple Data-sources		
740	Ability receive event from multiple source and multiple channels such as Thrift, Kafka, JMS, Web Sockets, REST or MQTT etc.	M	
741	One API for all incoming events irrespective of how they are processed (real-time, batch or combined processing)	M	
742	Access analytics service via comprehensive REST API	M	
743	Integrated Pluggable Real-Time, Batch, Predictive and Interactive Analytics	M	
744	Proven stream processing capability	M	
745	SQL like stream processing language	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
746	Pluggable architecture for analytics	M	
747	real-time alerts (email, sms, push notification, physical sensor alarms, etc.) for instant condition reporting	M	
748	Correlate/filter events at the edge for edge analytics	M	
749	Comprehensive dashboards should provide for business intelligence	M	
750	Easy Adoptability and Extensibility	M	
751	Structured, easy to learn SQL-like query language for developing complex queries	M	
752	Ability to connect to external Spark clusters	M	
753	Builds scalable analytic querying	M	
754	Supports RDBMS (MSSQL, Oracle, MySQL etc.) data storage	M	
755	Supports NoSQL storage for big data enterprise deployments	M	
756	Industry/domain-specific toolboxes to extend product for business use cases, such as fraud detection, GIS data monitoring, activity monitoring	M	
	Presentation		
757	Customizable dashboards with visualisations that give users an at-a-glance view as well as ability drill down into details	M	
758	Real-time alerts (email, sms, push notification, physical sensor alarms, etc.) for instant condition reporting	M	
759	Expose event tables as APIs	M	
	Reports		
760	Ability to support reporting in varied formats and at different levels depending on factors such as frequency and consumer of the report.	M	
761	Ability to provide different data sets for each group of users (or business questions) based on their information requirements.	M	
762	Ability to reduce the time taken to run common operational reports from existing OLTP systems whilst eliminating difficulties associated with the same.	M	
763	Ability to enable end users with access to querying and reporting tools to enable them generate regular reports and perform organized listings.	M	
764	Ability to enable more complex user interaction or sophisticated formats of reports.	M	
765	Ability to extract data from the existing/ identified databases.	M	
766	Ability to export reports to machine-readable formats such as; CSV, JSON, XML and to other formats such as Excel, PDF Format, Word, TIFF, among others.	M	
767	Ability to support drag-and-drop functionality to make ad-hoc queries and create reports in a timely manner.	M	
768	Ability to generate massive reports faster and deploy them to more concurrent users	M	
	DASHBOARD AND REPORTING MODULE		
769	The bidder shall be expected to create at least two (2) dashboards for senior executives within the government to provide high level performance views. These dashboards shall include but not limited to; · Connecting IFMS and HCM on the application and data integration platform to draw data for a Dashboard on payroll management	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
	· Connecting IFMS and URA on the application and data integration platform to draw data for Dashboard on revenue collection and payments		
770	Support for a web based client user interface	M	
771	The dashboards should have restricted access to specific metrics by different users or groups of users	M	
772	The dashboards should connect to a variety of data sources like OLAP cubes, Databases, Lists and Spreadsheets	M	
773	The dashboards should have support for different operating systems	M	
774	The dashboards should support connectivity to various portals and applications.	M	
775	The dashboards should support integration with programmatic APIs for data & metadata	M	
776	Support for drill-down features	M	
777	Support for dimensional modelling with hierarchies and levels	M	
778	Support for what-if and dependency analysis	M	
779	Support for version control	M	
780	Support for audit trail features	M	
781	Customized layout of metrics for print	M	
782	Support for print and export functionalities to spreadsheets, presentation slides, word, PDF, etc.	M	
783	Support for data filtering for selected reports	M	
784	Support for scheduling of automatic reports	M	
785	Support for Inserting/deleting columns	M	
786	Scheduling automatic reports	M	
787	Ability to update the dashboard with refreshed data	M	
788	Support for visual intelligence to highlight areas and values	M	
789	Support for toggling between tabular and chart views	M	
790	Support for Resizing, maximizing/minimizing, re-ordering of zones	M	
791	Ability to display data in different layouts	M	
792	Support for metadata and help functionalities	M	
793	Ability to expose automated data quality scores for monitoring, visualization, analysis, and reporting of dataset-level quality metrics.ol	M	
794	Comply with WCAG 2.1 AA minimum.	M	
795	Support multilingual capability (English + major Ghanaian languages).	M	
796	Include usability testing before go-live.	M	
MOBILITY MODULE			
797	Mobility Platform with application full application lifecycle management, security, integration connectivity and analytics.	M	
798	The mobility platform shall provide the ability to develop once (single source) and deploy to multiple devices on multiple platforms.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
799	The mobility platform shall enable simultaneous connectivity and integration with multiple data sources including and not limited to the APIs in the application and data integration platform.	M	
800	The mobility platform shall have the capability to develop online and offline applications.	M	
801	The mobility platform shall support industry standard integrated development environments (IDEs)	M	
802	The mobility platform shall provide out-of-the-box mobile applications and the ability to develop bespoke applications.	M	
803	The mobility platform shall support the development of native, hybrid, mobile web and SMS based applications.	M	
804	The mobility platform shall have the ability to run on the cloud.	M	
805	The platform shall be flexible to support the capture of additional information through configuration without the need for extra coding in the mobile app.	M	
806	The mobility platform shall offer insights into running processes, equipment and systems.	M	
807	The mobility platform shall support seamless integration with back-end systems	M	
808	The platform shall support central management and monitoring of mobile applications	M	
809	The platform shall support and provide authentication and authorisation technology such as OAuth2, JSON Web Tokens, OpenID Connect, etc.	M	
810	The mobility platform shall provide deployment management	M	
811	The mobility platform shall support a multi-operating system environment	M	
812	The platform shall support multiple device types	M	
813	The platform shall have the ability to encrypt application source code	M	
814	The mobility platform shall provide the ability to patch and update mobile applications	M	
815	The mobility platform shall have the capability to implement containerization; to create encrypted containers	M	
816	The mobility platform shall support database encryption and encrypted connections such as VPN, SSL, TLS, etc.	M	
817	The mobility platform shall support file-based encryption; support encryption on a file by file basis to protect data on mobile devices.	M	
818	The mobility platform shall offer a comprehensive testing environment for mobile applications including but not limited to simulated environments with emulators, operating systems and browsers.	M	
819	The mobility platform shall provide firewall, anti-virus and anti-spam capabilities.	M	
820	The mobility platform shall provide security key management		
821	The mobility platform shall support the OWASP mobile security recommendations as specified on www.owasp.org	M	
822	Comply with WCAG 2.1 AA minimum.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
823	Support multilingual capability (English + major Ghanaian languages).	M	
824	Include usability testing before go-live.	M	
	IoT MODULE		
825	The IoT module shall have the capability to integrate with compatible devices and blend in with device applications and enable implementation of IoT features and functions into any device in the same way.	M	
826	The IoT module shall also have the capability to leverage open standards and developer-friendly tools for speed and productivity; connect to devices using out-of-the-box transport protocols like Zigbee and MQTT.	M	
827	The IoT module shall support performing analytics on device usage and other patterns.	M	
828	The IoT module shall support native raw data both in terms of data ingestion and processing, the platform should be able to natively deal with IoT data.	M	
829	The IoT module shall support incoming data in its raw format (JSON, log files, etc.) and for optimization purposes and allow to convert data downstream to more sophisticated formats	M	
830	Support for a variety of workload types. IoT applications usually require that the platform can natively support stream processing, and that it can deal with low-latency queries against semi-structured data items, at scale.	M	
831	The IoT module shall support a secure end-to-end operation, including integration with existing authentication and authorization systems in the enterprise such as LDAP, Active Directory, Kerberos, SAML or PAM.	M	
832	IoT module shall support higher abstraction level processing such as polyglot processing architecture.	M	
833	IoT module shall support the following query modes in use namely; · Output is generated as-it-happens, that is, in a continuous fashion. · Output is generated based on an interactive query by an end user or another system. Output is generated in batches.	M	
834	IoT module shall support the following main blocks; · Message Queue/Stream Processing (MQ/SP) block · Database (DB) block · Distributed File System (DFS) block	M	
834	IoT module shall support integration with unstructured data sources such as images or PDF docs etc.	M	
835	IoT module shall support complete IPv6 protocol stack	M	
	ARTIFICIAL INTELLIGENCE (AI) INTEGRATION MODULE		
836	Expose AI services via the Integration Module (ESB) and API Management Module, allowing runtime inference on both streaming and batch datasets	M	
837	Support low-latency real-time inference for time-sensitive use cases, as well as high-throughput batch/offline scoring.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
838	Include a model registry, version control, approval workflow, and automated deployment pipeline to manage AI models from development through production.	M	
839	Handle tabular, text, and document-based datasets natively, with pluggable adapters for other formats such as images and audio	M	
840	Enable AI-driven insights to be visualized within the platform's dashboards and reporting systems, with full KPI monitoring	M	
841	Enforce role-based access control, data privacy protections, and encryption of all AI-related data in transit and at rest; maintain a full audit trail of AI model usage and changes.	M	
842	Provide bias detection, data drift alerts, and explainable AI features to support decision transparency and trustworthiness.	M	
843	Maintain metadata for each AI model (owner, purpose, training data source, last updated date, approvals) and apply configurable SLAs to each deployed model.	M	
844	Differential privacy, secure multi-party computation, and homomorphic encryption for cross-agency analysis without exposing raw data	M	
845	AI model training across distributed agency datasets without data centralization; data remains at source	M	
846	Hardware-based secure environments (TEEs/enclaves) for protected sensitive data processing	M	
847	Quarterly penetration testing, vulnerability assessments, and documented incident response procedures for AI/ML systems	M	
INTERNATIONAL GATEWAY MODULE FOR REGIONAL DATA EXCHANGE			
848	Establish a dedicated gateway for inbound and outbound data traffic with partner platforms, without direct exposure of internal government services.	M	
849	Support secure transport protocols (HTTPS, SFTP/FTPS, AMQP, MQTT) and standard payload formats (JSON, XML, CSV) with schema versioning.	M	
850	Implement PKI-based mutual authentication, digital signatures, and certificate management with trusted foreign certification authorities	M	
851	Integrate with the IAM module to authenticate and authorize external entities using recognized federation protocols such as SAML 2.0 and OpenID Connect.	M	
852	Apply jurisdiction-specific policies, including data type restrictions, routing controls, geo-fencing, and retention rules, before allowing data exchange.	M	
853	Validate, translate, and reconcile incoming and outgoing data formats, rejecting or quarantining non-compliant messages	M	
854	Provide store-and-forward messaging, retry mechanisms, deduplication, and idempotency controls to ensure delivery guarantees	M	
855	Maintain end-to-end transaction audit trails, correlation IDs for cross-border operations, and SLA reporting for availability and performance	M	
856	Include API-level security controls, payload inspection, and denial-of-service protection for all international data exchange endpoints	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
857	Implement fault-tolerant gateway infrastructure with active/active or active/passive failover to meet the platform's SLA and DR requirements.	M	
858	Where permissible, enable traffic metering, quota enforcement, and monetization reporting for regional data exchange services	M	
PUBLIC KEY INFRASTRUCTURE (PKI) INTEGRATION REQUIREMENT			
859	Ensure that all entities (users, services, and connected systems) accessing the platform can be authenticated using digital certificates issued by a trusted Certification Authority (CA) recognized by the Government of Ghana	M	
860	Enable encryption of data in transit and at rest using PKI-based mechanisms to prevent interception or tampering	M	
861	Provide capability for signing of transactions, messages, and documents to guarantee authenticity and non-repudiation	M	
862	Seamlessly integrate PKI with the platform's Identity and Access Management (IAM) module to support multi-factor authentication, role-based access control, and certificate lifecycle management	M	
863	Include automated processes for certificate issuance, renewal, revocation, and validation (e.g., via OCSP or CRL).	M	
864	Enforce PKI-based authentication for all API calls, especially for sensitive or high-privilege transactions	M	
865	Maintain a verifiable audit trail of all PKI-related security events, including certificate issuance, revocation, and failed authentication attempts	M	
866	Support widely adopted PKI standards and protocols such as X.509, PKCS, TLS/SSL, and meet relevant government cybersecurity regulations	M	
Performance Requirements			
867	Support more than 300 information systems connections, either as service provider or as service consumer;	M	
868	Handle an average of 300 messages per connected system and per day, with a maximum of 100000 messages per day for a limited number of high-end systems and a maximum of at least 350 asynchronous messages per second;	M	
869	Handle an average message payload of 100 KB;	M	
870	Handle message payloads of up to 256 KB;	M	
871	Transfer message attachments of at least 50 MB in size either in-band or out of band of the underlying queuing technologies.	M	
872	All the above should be configurable	M	
873	The proposed solution should, except for the limits imposed by the underlying government infrastructure, have no (practical) technical limits with regards to:	M	
	· The number of registered/connected systems		
	· The number of data elements defined in the solutions, such as the number of definitions in the Semantic Catalogue		
	· The number of business processes and business rules defined in the solution, the number of instances of business processes running concurrently		
	· The number of elements or actions that are part of a business process definition		

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
	· The number of messages defined in the solution		
	· The number of transformations performed for a message		
	· The number of messages flowing through the solution		
	· The number of topics, streams or queues used for publish-subscribe functionality		
	· The number of subscribers in a message publish-subscribe pattern.		
874	The latency (time it takes to pass a service call/response and the associated messages between service consumers and service providers) induced by the proposed solution should be kept minimal (30 milliseconds) and mainly be determined by the type and number of transformation messages need to undergo while traveling through the solution.	M	
CONNECTIONS			
e-payment gateway			
875	Ability for the application and data integration platform to connect to the e-payment gateway	M	
Sms gateway			
876	Ability for the application and data integration platform to connect to the e-payment gateway	M	
	Applications/systems from multiple MDAs and MMDAs		
877	The application and data integration platform should have adapters for all the systems within government agencies and as many private agencies as possible	M	
	Development		
	Two (2) end-to-end system integrations		
878	Ability of the application and data integration platform to integrate) systems from the MDAs and exchange data.	M	
General IT Requirements			
879	The portal shall support various registration models for users including social logins.	M	
880	The portal shall support user authentication via single sign on using existing electronic ID or mobile ID platforms.	M	
881	The Portal should provide users with basic and advanced search capabilities to help users to find specific information.	M	
882	Users should be able to conduct full text search on portal content in English and other specified languages.	M	
883	The portal should include: scoring search results through relevance, popularity, and/or summaries.	M	
884	Users should also be able to retrieve content based on the relevance to their search result.	M	
885	The search should enable search across multiple web sites, databases, and document libraries as required.	M	
886	The Portal should provide polling and survey functionality that users can dynamically configure for different surveys.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
887	The portal should have features to control the repeated submissions by a single user.	M	
888	The portal should provide facilities to conduct polls/surveys with or without user identification.	M	
889	The portal should also enable the administration users to perform real-time analysis and presentation of the data obtained from the participating users.	M	
890	The Portal should provide categorized repository of documents. The documents shall be searchable by category or by free text.	M	
891	The Portal shall categorize the most popular e-services and other categories as shall be defined by Government of Ghana	M	
892	The Portal shall integrate with the Government SMS and notification gateways to send alerts and notifications for e-services offered.	M	
893	The Portal shall integrate with the Government Integration Layer, e-payment platform etc. to enable utilization of shared services.	M	
	e-Service General IT Requirements		
894	All e-Services developed shall be dynamic interacting with other systems via web services using secured methods.	M	
895	e-Services shall support upload and download/export of various file formats such as excel, XML, JSON etc.	M	
896	Data capture web forms shall be availed for all e-Services that require entry of data and data shall be validated against various rules and databases.	M	
897	All e-Services shall have the ability to produce and visualize reports as and when needed by the users.	M	
898	User interfaces shall be developed in a "server-less" approach that guarantees seamless interaction with server.	M	
899	All e-Services shall conform to ISO27000 standards and OWASP standards for web applications.	M	
	Mobile Application General IT Requirements		
900	The mobile app architecture should be able to address scalability requirements, in terms of application, infrastructure and the backend.	M	
901	The developed mobile application should support at least the last two to four OS versions.	M	
902	The mobile application should work in all networks irrespective of mobile device make and model.	M	
903	If required, the mobile app should access Geolocation information in case the mobile device supports it.	M	
904	Citizen should be able to download the correct version of mobile application supported by his/her mobile device.	M	
905	The mobile application needs to check for the updates if any and alert the user to download the latest version.	M	
906	All icons must be crisp, clean, and distinguishable and should be as per guidelines of respective mobile application platform.	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
907	The graphics, widgets and colours used in the app should be best in class	M	
908	The design and development of the mobile application should be scalable to handle increasing number of users.	M	
909	While developing mobile application, the vendor should give preference to the NATIVE ENVIRONMENT (e.g.: SDK android development Kit, IOS SDK, Windows SDK). In case of HYBRID APPLICATIONS, open source tools need to be use and not to any proprietary tools.	M	
910	The mobile application needs to integrate and interoperate with various other external entities, therefore, Integration with any existing applications through SOA (service oriented architecture) - Web services/API/ JSON, Social Media platform etc.	M	
911	The data communication between downloadable mobile application and various subsystems like payment gateway, SMS gateway, server, any other third party authentication server, and application server should be in encrypted form.	M	
912	The mobile APP should be able to communicate with the payment Gateway API for integrating various bank payment gateways.	D	
913	The mobile APP should be able to integrate with SMTP (Simple Mail Transfer Protocol) Gateway.	D	
914	The mobile APP should be able to communicate with the SMS Gateway API for integrating various PUSH and PULL Notification services.	D	
915	The mobile APP should have an ability to integrate with third party server for OTP.	D	
916	The mobile APP should support user role-based access to different functionalities.	M	
917	The platform should support user certificate provisioning for client-side authentication.	D	
918	The mobile application will be hosted on the mobile applications platforms (App store, Play store, etc.) whereas the web application and services and related APIs will be hosted on servers provided by NITA .The bidder should give any required assistant to publish the application.	M	
919	The vendor will provide support for troubleshooting and enhancements in the services till the warranty period. Enhancement would include inclusion of all new browser/handset/devices/mobile platform OS coming in the market within 1 month of their launch and also new market/industry related functionalities.	M	
920	The vendor will have to include version upgrade and enhancements in services on account of industry dynamics as a part of the Annual Maintenance. Any development work of such type will be carried out by the technical team of vendor at no extra cost while under Annual Maintenance.	M	
	GENERAL SPECIFICATIONS		
	License		
921	Core products should be under an OSI approved open source license	D	
922	Core products should be under a business friendly open source license	D	
923	Any connectors, adaptors required should be licensed under open source	D	
924	Core products should support open standards	D	
925	Licensing should be applicable only for production systems and not non-prod systems	M	

NO	FUNCTIONAL/TECHNICAL SPECIFICATIONS	M/D	SUPPLIER'S RESPONSE
926	Ability to route messages to the correct service provider	M	
	Business		
927	Proven use cases for SaaS	M	
928	Proven use cases for government to citizen portals	M	
	Deployment		
929	Products should support on premise deployments	M	
930	Products should support cloud deployments	M	
931	Products can be horizontally scaled	M	
932	Support for containerization	M	
933	Support for cloud deployments such as AWS, Azure etc.	M	
934	Support for auto-scaling	M	
935	Ability to deploy as a MTD solution	M	
	Platform		
936	Support for API Management	M	
937	Support for integration	M	
938	Support for service and micro services hosting and development	M	
939	Support for analytics	M	
940	Support for Identity & Access Management	M	

ANNEX A – TARGET ARCHITECTURE FOR THE NATIONAL DATA EXCHANGE HUB (NDEH)

Annex A defines the Target Architecture for the Ghana National Data Exchange Hub (NDEH). It establishes:

- Architectural principles
- Logical and physical architecture
- Security model
- Data governance structure
- Operational architecture
- Integration and interoperability standards

All bidders must align proposed solutions to this architecture baseline.

ARCHITECTURAL PRINCIPLES

The National Data Exchange Hub shall be governed by the following principles:

API-First Design: All services shall be exposed via standardized APIs.

Loose Coupling: No MDA shall directly integrate with another MDA. All exchanges must pass through the Hub.

Zero-Trust Security: Every request must be:

- Authenticated
- Authorized
- Encrypted
- Logged

No implicit trust between systems.

Authentication at the Edge: Authentication and consent validation must occur at the API Gateway before request processing.

Encryption by Default: Mandatory encryption is a must for all data both

- In transit (TLS 1.3 minimum)
- At rest (AES-256 equivalent)

Observability by Design: The platform must support:

- Real-time monitoring
- Distributed tracing
- Centralized logging
- SLA dashboards

Federated Interoperability: The architecture must support regional interoperability via federated trust models.

LOGICAL ARCHITECTURE

Layer 1 – Consumer Layer

- MDA systems
- Private sector integrations
- International gateways
- eGovernment Service Portal (Out of scope for this project but the NDEH must make provision for it for integration)
- Citizens App (Out of scope for this project but the NDEH must make provision for it for integration)

Layer 2 – API & Access Layer

- API Gateway
- Throttling
- Traffic management
- API security enforcement
- Versioning & lifecycle management

Layer 3 – Identity, Consent & Trust Layer

- IAM (federated identity)
- Consent Management Module
- PKI Integration
- Certificate lifecycle management
- MFA enforcement

Layer 4 – Integration & Orchestration Layer

- ESB capabilities
- Message brokering
- Event streaming
- Workflow orchestration
- Protocol mediation
- Transformation engines

Layer 5 – Data Governance & Information Layer

- Semantic Catalogue
- Metadata repository
- Data lineage engine
- Data quality engine
- Master data services
- Data virtualization

Layer 6 – Analytics & Intelligence Layer

- Real-time analytics
- Batch processing
- AI inference engine
- Reporting dashboards
- KPI monitoring

Layer 7 – Infrastructure Layer

- Government Private Cloud

- Container orchestration (Kubernetes)
- Load balancers
- Active-active Data Centres
- Backup & DR systems

DEPLOYMENT ARCHITECTURE

Hosting Model

The solution shall be:

- Fully hosted within Government National Data Centres
- Deployed across two geographically separated facilities
- Active-active configuration

Environment Segregation

Mandatory environments:

- Development
- QA
- Staging
- Production
- Disaster Recovery

All isolated at network and resource level.

Containerization

All runtime services shall support:

- Docker containers
- Kubernetes orchestration
- Horizontal auto-scaling

SECURITY ARCHITECTURE

Identity Federation

- Integration with National ID system
- OpenID Connect / SAML 2.0
- SCIM for provisioning

PKI Integration

- X.509 certificates
- Mutual TLS for system-to-system calls
- Digital signature validation
- OCSP / CRL support

Consent Enforcement

- Consent ID validation per transaction
- Purpose validation against DSA
- Runtime rejection of unauthorized requests

Threat Protection

- API-level DDoS protection
- Payload inspection
- Intrusion detection
- Fraud analytics

Security Monitoring

- SIEM integration
- Central audit repository
- Tamper-proof logs
- Immutable storage for compliance

DATA ARCHITECTURE

Canonical Data Model

- Common semantic data model
- Ontology-based metadata
- ISO/IEC 11179 alignment

Data Classification

Data shall be categorized as:

- Public
- Restricted
- Confidential
- Sensitive Personal Data

Data Lineage

All data flows must:

- Maintain traceable origin
- Track transformation steps
- Store transaction correlation Ids

Data Quality

Automated scoring for:

- Completeness
- Consistency

- Timeliness
- Accuracy

EVENT-DRIVEN ARCHITECTURE

The Hub shall support:

- Pub-sub model
- Event catalog
- Event versioning
- AsyncAPI schema documentation
- Backward compatibility standards

INTERNATIONAL INTEROPERABILITY ARCHITECTURE

The International Gateway shall:

- Operate as a secure boundary
- Support federated trust
- Enforce geo-policy routing
- Support cross-border PKI trust
- Align with AU interoperability standards

OPERATIONAL ARCHITECTURE

Governance Model

- Institutional Oversight Framework
- Operational Governance Committees
- Roles and Reporting Lines
- Escalation and Dispute Resolution Mechanism
- Performance Oversight & SLA Monitoring
- Commercial Oversight & Revenue Audit
- Data Governance Oversight Council
- Security & Risk Oversight Committee

Observability

- SLA dashboard
- Revenue dashboard
- Data quality dashboard
- Consent audit dashboard

TRANSITION ARCHITECTURE

The vendor must:

- Provide reverse transition plan
- Deliver documentation

- Transfer knowledge to local partner
- Provide architecture decision records

COMPLIANCE ALIGNMENT

The architecture shall align with:

- Data Protection Act
- Electronic Transactions Act
- ISO/IEC 27001
- ISO/IEC 27701
- Open Group SOA Reference Architecture

ANNEX B – IMPLEMENTATION SCHEDULE

A. IMPLEMENTATION SCHEDULE TABLE

No.	Phase	Subsystem / Item	Duration (From Contract Signature)	Site / Site Code	Delivery (Proposer to specify in the Preliminary Project Plan)	Installation (weeks from Effective Date)	Acceptance (weeks from Effective Date)	Liquidated Damages Milestone
1	Mobilization	Project kick-off & mobilization	2 Weeks	NITA				
		Inception & Detailed Workplan	2 Weeks	NITA				
2	Design & Architecture	Requirements validation & readiness assessment	4 Weeks	NITA				
		Semantic & system catalogue development	6 Weeks	NITA				
		High-level solution architecture (Integration, API Mgmt, IAM, Analytics, etc.)	8 Weeks	NITA				
		Low-level design (LLD), security model, infrastructure design	10 Weeks	NITA				
3	Supply and Install	Supply of hardware (including laptops), software & licenses	10 Weeks	Data Center				
		Set up environments (Dev, Test, Pre-prod, Prod, DR) including Cloud	12 Weeks	Data Center				
4		Deploy Integration Module (ESB) & API Management	20 Weeks	Data Center				
		Deploy IAM (integrated with National ID), PKI integration	20 Weeks	Data Center				
		Deploy Analytics, Dashboard, Reporting modules	20 Weeks	Data Center				
		Deploy Mobility, Workflow, IoT & AI modules	20 Weeks	Data Center				
5	Agency Onboarding	Engagements, workshops & readiness assessments	12 Weeks	Selected Government Agencies				

		Onboard initial 11 agencies to platform	24 Weeks	Data Center / Selected Government Agencies				
		Implement demonstrative dashboards & e-services (Ghana.gov) Integration	22 Weeks	Data Center				
6	Training & Knowledge Transfer	Training needs analysis & curriculum	12 Weeks	NITA				
		Conduct training for stakeholders (MDAs, NITA, operators)	24 Weeks	NITA / Selected Government Agencies				
		Operational runbooks, SOPs, incident mgmt.	26 Weeks	NITA				
7	Go-Live & Pilots	System Integration Testing (SIT), UAT with NITA & MDAs	24 Weeks	Data Center / Selected Government Agencies				
		Production Go-Live of NDEP	26 Weeks	Data Center / Selected Government Agencies				
8	Operations and Commercialization	Commercial Model Finalization & Approval (pricing, revenue share)	15 Weeks	NITA				
		Operational Model Finalization and Approval	15 Weeks	NITA				
		Awareness & adoption campaigns Plan and Approval	12 Weeks	NITA				
9	Project Closure	Operational Acceptance	27 Weeks	NITA				

ENVIRONMENTAL AND SOCIAL REQUIREMENTS

The Supplier shall implement the assignment in compliance with the World Bank Environmental and Social Framework, applicable national laws, and all E&S requirements contained in this RFP and the Contract.

The Supplier shall ensure that all design, supply, delivery, installation, testing, commissioning, training, operation, maintenance, user support, and onboarding activities are undertaken in a manner that prevents or minimizes environmental, social, occupational health and safety, labour, SEA/SH, waste, e-waste, stakeholder, grievance, data protection, and operational disruption risks.

The proposed solution should incorporate resource efficiency and green ICT considerations, including energy-efficient hardware, optimized server utilization, virtualization where appropriate, efficient storage architecture, cooling efficiency considerations, reduced idle power consumption, lifecycle energy cost considerations, and responsible procurement of ICT equipment. The Proposer shall describe how the proposed architecture will minimize energy use, reduce avoidable hardware redundancy, support scalable deployment, and reduce long-term environmental footprint during the operational period.

The Supplier shall be responsible for implementing approved MSIPs, maintaining records, reporting incidents, training workers, enforcing the Code of Conduct, managing subcontractors, and submitting E&S performance reports to the Purchaser in a format and frequency agreed with the Purchaser.

Prior to commencement of any delivery, installation, testing or commissioning activity at the National Data Center, Kumasi Data Center or any other approved project site, the Supplier shall prepare site-specific OHS procedures covering induction, access control, electrical safety, manual handling, lifting/offloading, fire prevention, emergency response, PPE, working at height where relevant, first aid, incident reporting, and coordination with the facility manager. All Supplier's Personnel and subcontractors shall be inducted before accessing the site.

The Supplier shall establish a stakeholder engagement and feedback process for onboarding agencies, participating MDAs/MMDAs, trainees, system administrators, data providers and users. The process shall include prior communication of onboarding requirements, training schedules, user feedback channels, grievance escalation procedures, documentation of stakeholder concerns, and coordination with the Project GRM where complaints relate to project impacts, labour issues, SEA/SH, exclusion, access barriers, service disruption or misuse of data.

The Supplier shall submit as part of reports agreed with the Purchaser, brief E&S performance updates. Reports shall cover OHS performance, worker induction, Code of Conduct implementation, waste/e-waste generated and disposed, stakeholder engagements, grievances received and resolved, SEA/SH sensitization, incidents/accidents, corrective actions, and any non-compliance.

The Supplier shall nominate and include an Environmental, Social, Health and Safety Focal Person as part of its staff to coordinate compliance with environmental, social, occupational health and safety, labour, SEA/SH, waste management, stakeholder engagement, grievance

management, and incident reporting obligations throughout design, delivery, installation, commissioning, training, operation, and maintenance. The nomination of the Environmental, Social, Health and Safety Focal Person will not be considered under the rated evaluation criteria but remains a mandatory requirement for compliance with the specified environmental, social, and occupational health and safety obligations.

PART 3 – CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VIII - GENERAL CONDITIONS OF CONTRACT

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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 request for proposals 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 request for proposals documents.

(vii) **"Implementation Schedule"** means the Implementation Schedule in Section VII of the request for proposals 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) **"**request for proposals **document"** refers to the document issued by the Purchaser on the subject procurement process.

(xi) "**Sexual Exploitation and Abuse" "(SEA)"** means the following:

Sexual Exploitation is defined as any actual or attempted abuse of position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another.

Sexual Abuse is defined as the actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.

(xii) **"Sexual Harassment" "(SH)"** is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature by the Supplier's Personnel with other Supplier's or Purchaser's personnel.

(b) entities

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

(ii) **"Purchaser's Personnel"** means all staff, labor and other employees of the Project Manager and of the Purchaser engaged in fulfilling the Purchaser's obligations under the Contract; and any other personnel identified as Purchaser's Personnel, by a notice from the Purchaser to the Supplier;

(iii) **"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.

(iv) **"Supplier"** means the firm or Joint Venture whose proposal to **perform** the **Contract** has been accepted by the Purchaser and is named as such in the Contract Agreement.

(v) **"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.

(vi) **"Supplier's Personnel"** means all personnel whom the Supplier utilizes in the execution of the Contract, including the staff, labor and other employees of the Supplier and each Subcontractor; and any other personnel assisting the Supplier in the execution of the Contract;

(vii) **"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.

(viii) **"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).

(ix) **"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 proposal. 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 the request for proposals document (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 thereunder 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 1er, 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 other electronic means, 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

(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 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 1 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 procurement 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

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.

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.

7.3 The Supplier's obligations (if any) to provide Goods and Services as implied by the Recurrent Cost tables of the Supplier's proposal, 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.

8. Time for Commencement and Operational Acceptance

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.

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 (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. The Supplier shall ensure that its Subcontractors carryout the work on the Information System in accordance with the Contract, including complying with relevant environmental and social requirements and the obligations set out in GCC Clause 9.9.

The Supplier shall at all times take all reasonable precautions to maintain the health and safety of the Supplier's Personnel employed for the execution of the Contract at the Project Site/s in the Purchaser's country where the Contract is executed.

If **required in the SCC**, the Supplier shall submit to the Purchaser for its approval a health and safety manual which has been specifically prepared for the Contract.

The health and safety manual shall be in addition to any other similar document required under applicable health and safety regulations and laws.

The health and safety manual shall set out any applicable health and safety requirement under the Contract,

(a) which may include:

(i) the procedures to establish and maintain a safe working environment;

(ii) the procedures for prevention, preparedness and response activities to be implemented in the case of an emergency event (i.e. an unanticipated incident, arising from natural or man-made hazards);

(iii) the measures to be taken to avoid or minimize the potential for community exposure to water-borne, water-based, water-related, and vector-borne diseases,

(iv) the measures to be implemented to avoid or minimize the spread of communicable diseases; and

(b) any other requirements stated in the Purchaser's Requirements.

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 proposal 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 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 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).

9.7 Pursuant to paragraph 2.2 e. of the Appendix 1 to the General Conditions of Contract, the Supplier shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and personnel, to permit, the Bank and/or persons appointed by the Bank to inspect the site and/or the accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have such accounts, records and other documents audited by auditors appointed by the Bank. The Supplier's and its Subcontractors' and subconsultants' attention is drawn to GCC Clause 6.1 (Fraud and Corruption) 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).

9.8 The Supplier shall conform to the sustainable procurement contractual provisions, if and as **specified in the SCC.**

9.9 **Code of Conduct**

The Supplier shall have a Code of Conduct for the Supplier's Personnel employed for the execution of the Contract at the Project Site/s.

The Supplier shall take all necessary measures to ensure that each such personnel is made aware of the Code of Conduct including specific behaviors that are prohibited, and understands the consequences of engaging in such prohibited behaviors.

These measures include providing instructions and documentation that can be understood by such personnel, and seeking to obtain that person's signature acknowledging receipt of such instructions and/or documentation, as appropriate.

The Supplier shall also ensure that the Code of Conduct is visibly displayed in the Project Site/s as well as, as applicable, in areas outside the Project Site/s accessible to the local community and any project affected people. The posted Code of Conduct shall be provided in languages comprehensible to the Supplier's Personnel, Purchaser's Personnel and the local community.

The Supplier's Management Strategy and Implementation Plans, if applicable, shall include appropriate processes for the Supplier to verify compliance with these obligations.

9.10 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.

9.11 The Supplier, including its Subcontractors, shall comply with all applicable safety obligations. The Supplier shall at all times take all reasonable precautions to maintain the health and safety of the Supplier's Personnel employed for the execution of Contract at the Project Site/s.

9.12 Training of Supplier's Personnel

The Supplier shall provide appropriate training to relevant Supplier's Personnel on any applicable environmental and social aspect of the Contract, including appropriate sensitization on prohibition of SEA, health and safety.

As stated in the Purchaser's Requirements or as instructed by the Project Manager, the Supplier shall also allow appropriate opportunities for the relevant personnel to be trained on any applicable environmental and social aspects of the Contract by the Purchaser's Personnel and/or other personnel assigned by the Purchaser.

The Supplier shall provide training on SEA and SH, including its prevention, to any of its personnel who has a role to supervise other Supplier's Personnel.

9.13 Stakeholder engagements

The Supplier shall provide relevant contract- related information, as the Purchaser and/or Project Manager may reasonably request to conduct contract stakeholder engagement. "Stakeholder" refers to individuals or groups who:

(a) are affected or likely to be affected by the Contract; and

(b) may have an interest in the Contract.

The Supplier may also directly participate in contract stakeholder engagements, as the Purchaser and/or Project Manager may reasonably request.

9.14 Forced Labor

The Supplier, including its Subcontractors, shall not employ or engage forced labour. Forced labour consists of any work or

service, not voluntarily performed, that is exacted from an individual under threat of force or penalty, and includes any kind of involuntary or compulsory labour, such as indentured labour, bonded labour or similar labour-contracting arrangements.

No persons shall be employed or engaged who have been subject to trafficking. Trafficking in persons is defined as the recruitment, transportation, transfer, harbouring or receipt of persons by means of the threat or use of force or other forms of coercion, abduction, fraud, deception, abuse of power, or of a position of vulnerability, or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purposes of exploitation.

9.15 Child Labor

The Supplier, including its Subcontractors, shall not employ or engage a child under the age of 14 unless the national law specifies a higher age (the minimum age).

The Supplier, including its Subcontractors, shall not employ or engage a child between the minimum age and the age of 18 in a manner that is likely to be hazardous, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development.

The Supplier, including its Subcontractors, shall only employ or engage children between the minimum age and the age of 18 after an appropriate risk assessment has been conducted by the Supplier with the Project Manager's consent. The Supplier shall be subject to regular monitoring by the Project Manager that includes monitoring of health, working conditions and hours of work.

Work considered hazardous for children is work that, by its nature or the circumstances in which it is carried out, is likely to jeopardize the health, safety, or morals of children. Such work activities prohibited for children include work:

(a) with exposure to physical, psychological or sexual abuse;

(b) underground, underwater, working at heights or in confined spaces;

(c) with dangerous machinery, equipment or tools, or involving handling or transport of heavy loads;

(d) in unhealthy environments exposing children to hazardous substances, agents, or processes, or to temperatures, noise or vibration damaging to health; or

(e) under difficult conditions such as work for long hours, during the night or in confinement on the premises of the employer.

9.16 Non-Discrimination and Equal Opportunity

The Supplier shall not make decisions relating to the employment or treatment of personnel for the execution of the Contract on the basis of personal characteristics unrelated to inherent job requirements. The Supplier shall base the employment of personnel for the execution of the Contract on the principle of equal opportunity and fair treatment, and shall not discriminate with respect to any aspects of the employment relationship, including recruitment and hiring, compensation (including wages and benefits), working conditions and terms of employment, access to training, job assignment, promotion, termination of employment or retirement, and disciplinary practices.

Special measures of protection or assistance to remedy past discrimination or selection for a particular job based on the inherent requirements of the job shall not be deemed discrimination. The Supplier shall provide protection and assistance as necessary to ensure non-discrimination and equal opportunity, including for specific groups such as women, people with disabilities, migrant workers and children (of working age in accordance with GCC Clause 9.15).

9.17 Personnel Grievance Mechanism

The Supplier shall have a grievance mechanism for personnel employed in the execution of the Contract to raise workplace concerns. The grievance mechanism shall be proportionate to the nature, scale, risks and impacts of the Contract. The grievance mechanism may utilize existing grievance mechanisms, provided that they are properly designed and implemented, address concerns promptly, and are readily accessible to such personnel.

9.18 Security of the Project Site

If stated in the SCC, the Supplier shall be responsible for the security at the Project Site/s including providing and maintaining at its own expense all lighting, fencing, and watching when and where necessary for the proper execution and the protection of the locations, or for the safety of the owners and occupiers of adjacent property and for the safety of the public.

In making security arrangements, the Supplier shall be guided by applicable laws and any other requirements that may be stated in the Purchaser's Requirements.

The Supplier shall (i) conduct appropriate background checks on any personnel retained to provide security; (ii) train the security personnel adequately (or determine that they are properly trained) in the use of force (and where applicable, firearms), and appropriate conduct towards the Supplier's Personnel, Purchaser's Personnel and affected communities; and (iii) require the security personnel to act within the applicable Laws and any requirements set out in the Purchaser's Requirements.

The Supplier shall not permit any use of force by security personnel in providing security except when used for preventive and defensive purposes in proportion to the nature and extent of the threat.

9.19 Recruitment of Persons

The Supplier shall not recruit, or attempt to recruit, either on limited time or `permanent basis or through any other contractual agreement, staff and labor from amongst the Purchaser's Personnel.

9.20 **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 Supplier's Personnel, 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.

12.6 **As specified in the SCC**, if the Supplier fails to perform its cyber security obligations under the Contract, an assessed amount, as determined by the Project Manager, may be withheld until the obligation has been performed.

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 request for proposal document 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*a/(100-a), where "P" is the sum of all payments effected so far to the Supplier (excluding the Advance Payment), and "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 request for proposal document, 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 proposal 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 (as legally sufficient) 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 proposal), 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 proposal 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, 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;

(d) is being provided to the Bank.

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 the Supplier's 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 Removal of Supplier's Personnel

18.3.1 The Project Manager may require the Supplier to remove (or cause to be removed) the Supplier's Representative or any other person employed by the Supplier in the execution of the Contract, who:

(a) persists in any misconduct or lack of care;

(b) carries out duties incompetently or negligently;

(c) fails to comply with any provision of the Contract;

(d) persists in any conduct which is prejudicial to safety, health, or the protection of the environment;

(e) based on reasonable evidence, is determined to have engaged in Fraud and Corruption during the execution of the Contract;

(f) has been recruited from the Purchaser's Personnel;

(g) engages in any other behaviour which breaches the Code of Conduct, as applicable;

If appropriate, the Supplier shall then promptly appoint (or cause to be appointed) a suitable replacement with equivalent skills and experience.

Notwithstanding any requirement from the Project Manager to remove or cause to remove any person, the Supplier shall take immediate action as appropriate in response to any violation of (a) through (g) above. Such immediate action shall include removing (or causing to be removed) from work on the System, any person Employed by the Supplier in the execution of the Contract who engages in (a), (b), (c), (d), (e) or (g) above or has been recruited as stated in (f) above.

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 suitable replacement with equivalent skills and experience.

19. Project Plan

19.1 In close cooperation with the Purchaser and based on the Preliminary Project Plan included in the Supplier's proposal, 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. Such submission to the Purchaser shall include any applicable environmental and social management plan to manage environmental and social risks and impacts. 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) status of compliance to environmental and social requirements, as applicable;

(vii) 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.

19.7 Immediate Reporting requirement

The Supplier shall inform the Project Manager immediately of any allegation, incident or accident in Project Site/s, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Purchaser's Personnel or Supplier's Personnel. This includes, but is not limited to, any incident or accident causing fatality or serious injury; significant adverse effects or damage to private property; any cyber security incidents as **specified in the SCC**; or any allegation of SEA and/or SH. In case of SEA and/or SH, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information.

The Supplier, upon becoming aware of the allegation, incident or accident, shall also immediately inform the Purchaser of any such incident or accident on the Subcontractors' or suppliers' premises relating to the Contract which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Purchaser's Personnel or Supplier's Personnel. The notification shall provide sufficient detail regarding such incidents or accidents.

The Supplier shall provide full details of such incidents or accidents to the Project Manager within the timeframe agreed with the Purchaser.

The Purchaser shall require its Subcontractors to immediately notify it of any incidents or accidents referred to in this Sub- Clause.

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. Submision by the Supplier, for addition of any Subcontractor not named in the Contract,

shall also include the Subcontractor's declaration in accordance with Appendix 2 to the GCC- Sexual exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration. 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, including by providing the Subcontractor's declaration in accordance with Appendix 2 to the GCC- Sexual exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration; 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.

20.4 The Supplier shall ensure that its Subcontractors comply with the relevant ES requirements and the obligations set out in GCC Clause 9.9.

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 proposal 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 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 proposal 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 proposal.

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 proposal) 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 request for proposals document, 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 proposal, 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 licensor of Goods included in the System, including without limitation assignment or transfer in favor of the Purchaser of the benefit of any warranties given by such producers or licensors to the Supplier.

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 Proposal; 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) Clause 16 (Software License Agreements), 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 Supplier 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.

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

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. Changes to the System

39.1 Introducing a Change

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 request for proposals document.

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; and

(f) any additional documents as **specified in the SCC**.

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. Termination

41.1 Termination for Purchaser's Convenience

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 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 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 1 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 thirty (30) 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 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 executed" shall include all work executed, Services provided, and all Information Technologies, or other Goods acquired (or subject to a legally binding obligation to purchase) by the Supplier and used or intended to be used for the purpose of the System, up to and including the date of termination.

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. Settlement of Disputes

43.1 Adjudication

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.

J. CYBER SECURITY

44. Cyber Security

44.1 **Pursuant to the SCC**, the Supplier, including its Subcontractors/ suppliers/ manufacturers shall take all technical and organizational measures necessary to protect the information technology systems and data used in connection with the Contract. Without limiting the foregoing, the Supplier, including its Subcontractors/ suppliers/ manufacturers, shall use all reasonable efforts to establish, maintain, implement and comply with, reasonable information technology, information security, cyber security and data protection controls, policies and procedures, including oversight, access controls, encryption, technological and physical safeguards and business continuity/disaster recovery and security plans that are designed to protect against and prevent breach, destruction, loss, unauthorized distribution, use, access, disablement, misappropriation or modification, or other compromise or misuse of or relating to any information technology system or data used in connection with the Contract.

APPENDIX 1

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 nominated[2] 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 inspect[3] all accounts,

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[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.

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.

APPENDIX 2
Sexual Exploitation and Abuse (SEA) and/or Sexual Harassment (SH) Performance Declaration for Subcontractors

[The following table shall be filled in by each subcontractor proposed by the Supplier, that was not named in the Contract]

Subcontractor's Name: *[insert full name]*

Date: *[insert day, month, year]*
Contract reference *[insert contract reference]*
Page *[insert page number]* of *[insert total number]* pages

SEA and/or SH Declaration
We: ☐ (a) have not been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. ☐ (b) are subject to disqualification by the Bank for non-compliance with SEA/ SH obligations. ☐ (c) had been subject to disqualification by the Bank for non-compliance with SEA/ SH obligations, and were removed from the disqualification list. An arbitral award on the disqualification case has been made in our favor.
[*If (c) above is applicable, attach evidence of an arbitral award reversing the findings on the issues underlying the disqualification.]*
Period of disqualification: From: _____ To: _____

Name of the Subcontractor_____

Name of the person duly authorized to sign on behalf of the Subcontractor_____

Title of the person signing on behalf of the Subcontractor_____

Signature of the person named above_____

Date signed _____ day of _____, _____

Countersignature of authorized representative of the Supplier:

Signature: _____

Date signed _____ day of _____, _____

SECTION IX - SPECIAL CONDITIONS OF CONTRACT

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Special Conditions of Contract

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

A. CONTRACT AND INTERPRETATION

Definitions (GCC Clause 1)

GCC 1.1 (a) (ix)	The applicable edition of the Procurement Regulation is dated: **Regulations of 7th Edition, September 2025**
GCC 1.1 (b) (i)	The Purchaser is: **Ministry of Communication, Digital Technology and Innovations**
GCC 1.1 (b) (ii)	The Project Manager is: **The Director General of NITA**
GCC 1.1 (e) (i)	The Purchaser's Country is: **Republic of Ghana**
GCC 1.1 (e) (x)	**6 Months from date of commencement**
GCC 1.1 (e) (xiii)	The Post-Warranty Services Period is ***[insert: number of months]*** starting with the completion of the Warranty Period. **Not Applicable**

Notices (GCC Clause 4)

GCC 4.3	Address of the Project Manager: **The Director General** **The National Information Technology Agency (NITA)** **3rd Floor, Ministry of Communication, Digital Technology and Innovations Office Complex** **Abdul Diouf Road, Ridge, Accra** **Email: info@nita.gov.gh**

B. SUBJECT MATTER OF CONTRACT

Scope of the System (GCC Clause 7)

GCC 7.3	The Supplier's obligations under the Contract will include the following recurrent cost items, as identified in the Recurrent Cost tables in the Supplier's Proposal: (i) number of years for implementation (ii) hardware maintenance (iii) software licenses and updates (iv) technical services (v) telecommunication services, and (vi) third party support services (vii) onboarding and integration services (viii) other services (if any). The Supplier agrees to supply spare parts required for the operation and maintenance of the System, as stated below, for five (5) years beginning with Operational Acceptance. Moreover, the price of such spare parts shall be those specified in the spare parts price schedule submitted by the Suppler as part of its Proposal. These prices shall include the purchase price for such spare parts and other costs and expenses (including the Supplier's fees) relating to the supply of spare parts.

Time for Commencement and Operational Acceptance (GCC Clause 8)

GCC 8.1	The Supplier shall commence work on the System within: ten (10) days from the Effective Date of the Contract.

Supplier's Responsibilities (GCC Clause 9)

GCC 9.1	Health and safety manual is required
GCC 9.8	The following sustainable procurement contractual provisions, apply: ***none***
GCC 9.18	The Supplier is ***not required*** to make security arrangements for the Project Site/s.

C. PAYMENT

Contract Price (GCC Clause 11)

GCC 11.2	Adjustments to the Contract Price shall be as follows: ***not applicable***

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. Only the categories Advance Payment and Complete System Integration relate to the entire Contract Price. In other payment categories, the term "total Contract Price" means the total cost of goods or services under the specific payment category. Within each such category, the Contract Implementation Schedule may trigger pro-rata payments for the portion of the total Contract Price for the category corresponding to the goods or services actually Delivered, Installed, or Operationally Accepted, at unit prices and in the currencies specified in the Price Schedules of the Contract Agreement. (a) Advance Payment Twenty percent (20%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2. (b) Requirement Validation and Architectural Design. Twenty percent (20%) of the entire Contract Price shall be paid against the completion of all requirement validation activities and architectural design. The vendor must submit requirement validation report, architectural designs and they must be approved by the customer and a certificate of acceptance issued before payment is done. (c) Infrastructure Setup Ten percent (10%) of the entire Contract Price shall be paid upon the completion of the G-Cloud Infrastructure set up including the Dev, Prod, DR, Test and Training environment. This shall also include the supply of laptops. The client shall issue a certificate of acceptance as proof of milestone delivery before payment shall be made.

	(d) Deployment of Data Exchange Platform Twenty percent (20%) of entire contract price shall be paid upon completion of deployment, configuration of the National Data Exchange Platform with all required functional and technical requirement. This shall be certified with a functional and technical UAT completion and certificate of Acceptance issued. The acceptance certificate must be accompanied by a UAT report before payment shall be authorized. (e) Onboarding and training of MDAs Twenty percent (20%) of the entire contract price shall be paid upon successful completion of onboarding and training of all in-scope MDAs and the issuance of a milestone certificate of acceptance. The certificate of acceptance shall be accompanied with an onboarding and training report by the vendor before payment shall be authorized. (f) Project Closure Report Ten percent (10%) of the entire contract price shall be paid upon the submission and approval of the final Project Report. The final project report shall include current status report of the project. Lessons from the project, current risk standing of the project, recommendations from the vendor for government going forward. The closure report should also include as-built document, operational manuals and SOPs, User accounts and passwords. Project Closure report shall be issued as a result.
GCC 12.3	The Purchaser shall not pay to the Supplier interest on the delayed payments.
GCC 12.4	The Supplier will invoice the Purchaser in the currency of the Purchaser's Country.
GCC 12.6	Not Applicable

Securities (GCC Clause 13)

GCC 13.3.1	The Performance Security shall be denominated in the currency of the contract for an amount equal to ten (10%) percent of the Contract Price, excluding any Recurrent Costs.
GCC 13.3.4	During the Warranty Period (i.e., after Operational Acceptance of the System), the Performance Security shall be reduced to two (2%) percent of the Contract Price, excluding any Recurrent Costs.

D. INTELLECTUAL PROPERTY

Copyright (GCC Clause 15)

GCC 15.3	**There are no Special Conditions of Contract applicable to GCC Clause 15.3**
GCC 15.4	**There are no Special Conditions of Contract applicable to GCC Clause 15.4**
GCC 15.5	**Escrow Arrangement shall be required for this contract for the source code**

Software License Agreements (GCC Clause 16)

GCC 16.1 (a) (iv)	***There are no Special Conditions of Contract applicable to GCC Clause 16.1 (a) (iv)***
GCC 16.1 (b) (vi)	**There are no Special Conditions of Contract applicable to GCC Clause 16.1 (b) (vi)**
GCC 16.1 (b) (vii)	**There are no Special Conditions of Contract applicable to GCC Clause 16.1 (b) (vii)**
GCC 16.2	**There are no Special Conditions of Contract applicable to GCC Clause 16.2**

Confidential Information (GCC Clause 17)

GCC 17.1	**There are no Special Conditions of Contract applicable to GCC Clause 17.1**

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

Representatives (GCC Clause 18)

GCC 18.1	***There are no Special Conditions of Contract applicable to GCC Clause 18***
GCC 18.2.2	***There are no Special Conditions of Contract applicable to GCC Clause 18.2.2***

Project Plan (GCC Clause 19)

GCC 19.1	Chapters in the Project Plan shall address the following subject**:** (i) Project Organization and Management, including management authorities, responsibilities, and contacts, as well as task, time and resource-bound schedules (in GANTT format) (ii) Workplan (iii) Proposed Methodology (iv) Risk Management Plan; (v) Transition, Migration and Onboarding Plan (vi) Training Plan; (vii) Testing and Quality Assurance Plan; (viii) Warranty Defect Repair and Technical Support Service Plan (ix) Operations and Maintenance Plan (x) Backup, Disaster Recovery and Business Continuity Plan (xi) Content / Service Update, Patch and Upgrade Plan (xii) Proposed Service Level Agreement (xiii) Third Party Management Plan (xiv) User Support and Feedback Management Plan (xv) System Resources and Capacity Management Plan (xvi) Logging and Incident Management Plan (xvii) Commercial Management and Revenue Model (xviii) Revenue Shae Model (xix) 5-year Operational Cost Model (xx) Governance and Transparency Plan Further details regarding the required contents of each of the above chapters are contained in the Technical Requirements, Section VII – Purchaser's Requirement.
GCC 19.6	***The Supplier shall submit to the Purchaser:*** (i) monthly inspection and quality assurance reports (ii) monthly training participants test results (i) monthly log of service calls and problem resolutions (ii) Monthly SLA Report (iii) Monthly Incident Reports including cybersecurity incidents (iv) Monthly Support Report
GCC 19.7	Any form of cybersecurity breach (internal or external) shall be reported to the GovCERT within 24 hours.

Design and Engineering (GCC Clause 21)

GCC 21.3.1	***There are no Special Conditions of Contract applicable to GCC Clause 21.3.1.*** The Supplier shall prepare and furnish to the Project Manager the following documents for which the Supplier must obtain the Project Manager's approval before proceeding with work on the System or any Subsystem covered by the documents. a. All High Level Designs (HLD) b. All Low Level Designs (LLD) **c.** User Acceptance Test Plan **d.** Onboarding and Integration Plan **e.** Commercial Model **f.** Operational Model ***g.*** Communication and Awareness Campaign

Product Upgrades (GCC Clause 23)

GCC 23.4	**There are no Special Conditions of Contract applicable to GCC Clause 23.4.** All new versions, releases, and updates of Standard Software shall be passed on for free as part of software update during the warranty period and as part of the annual support renewals after the warranty period.

Inspections and Tests (GCC Clause 25)

GCC 25	**There are no Special Conditions of Contract applicable to GCC Clause 25.**

Commissioning and Operational Acceptance (GCC Clause 27)

GCC 27.2.1	**There are no Special Conditions of Contract applicable to GCC Clause 27.2.1.**

F. GUARANTEES AND LIABILITIES

Operational Acceptance Time Guarantee (GCC Clause 28)

GCC 28.2	**There are no Special Conditions of Contract applicable to GCC Clause 28.2.**
GCC 28.3	**There are no Special Conditions of Contract applicable to GCC Clause 28.3.**

Defect Liability (GCC Clause 29)

GCC 29.1	**There are no Special Conditions of Contract applicable to GCC Clause 29.1.**
GCC 29.4	**There are no Special Conditions of Contract applicable to GCC Clause 29.4.**
GCC 29.10	**There are no Special Conditions of Contract applicable to GCC Clause 29.10**

Functional Guarantees (GCC Clause 30)

GCC 30	**There are no Special Conditions of Contract applicable to GCC Clause 30.**
GCC 32	**There are no Special Conditions of Contract applicable to GCC Clause 32.**

G. RISK DISTRIBUTION

Insurances (GCC Clause 37)

GCC 37.1 (c)	The Supplier shall obtain Third-Party Liability Insurance in the amount of **GH¢2,000,000.00** with deductible limits of no more than **GH¢200,000.00**. The insured Parties shall be *staff of the purchaser*. The Insurance shall cover the period from *the* **Effective Date of the Contract** *until* **its completion**.
GCC 37.1 (e)	**There are no Special Conditions of Contract applicable to GCC Clause 37.1 (e)**.

	The Supplier shall obtain Worker's Compensation Insurance in accordance with the statutory requirements of **the Republic of Ghana**. Specifically: The Workmen's Compensation Act, 1987 (P.N.D.C.L., 187). The Insurance shall cover the period from **beginning date, relative to the Effective Date of the Contract** until the **expiration date, relative to the Effective Date of the Contract or its completion** . The Supplier shall obtain Purchaser's Liability Insurance in accordance with the statutory requirements of **the Republic of Ghana**. Specifically: The Workmen's Compensation Act, 1987 (P.N.D.C.L., 187).. The Insurance shall cover the period from **beginning date, relative to the Effective Date of the Contract** until the **expiration date, relative to the Effective Date of Contract or its completion** . The Supplier shall obtain Public Liability Insurance in accordance with the statutory requirements of **the Republic of Ghana**. Specifically: section 214 of the Insurance Act, 2021 (Act 1061). This shall cover bodily injury or property damage that arises out of or in connection with the business, activity or operations of the Purchaser and the legal and other costs connected with investigating, defending and settling such a claim. The Insurance shall cover the period from **beginning date, relative to the Effective Date of the Contract** until the **expiration date, relative to the Effective Date of Contract or its completion**

H. CHANGE IN CONTRACT ELEMENTS

Changes to the System (GCC Clause 39)

GCC 39.2.1	***There are no Special Conditions of Contract applicable to GCC Clause 39.2.1***
GCC 39.4	**Value Engineering** The Purchaser **will not** consider a Value Engineering Proposal.

I. SETTLEMENT OF DISPUTES

Settlement of Disputes (GCC Clause 43)

GCC 43.1.4	The Appointing Authority for the Adjudicator is: ***Ghana Institute of Engineers.***

GCC 43.2.3	If the Supplier is from outside the Purchaser's Country arbitration proceedings shall be conducted in accordance with the rules of arbitration of ***UNCITRAL***. These rules, in the version in force at the time of the request for arbitration, will be deemed to form part of this Contract. If the Supplier is a national of the Purchaser's Country, any dispute between the Purchaser and a Supplier arising in connection with the present Contract shall be referred to arbitration in accordance with the laws of the Purchaser's country.

J. CYBER SECURITY

Cyber Security (GCC Clause 44)

GCC 44.1	Cyber Security **applies**

SECTION X - CONTRACT FORMS

Notes to the Purchaser on preparing the Contract Forms

Performance Security: Pursuant to GCC Clause 13.3, the successful Proposer is required to provide the Performance Security within twenty-eight (28) days of notification of Contract award.

Advance Payment Security: Pursuant to Clause 13.2, the successful Proposer is required to provide a bank guarantee securing the Advance Payment, if the SCC related to GCC Clause 12.1 provides for an Advance Payment.

Installation and Operational Acceptance Certificates: Recommended formats for these certificates are included in this SPD. Unless the Purchaser has good reason to require procedures that differ from those recommended, or to require different wording in the certificates, the procedures and forms shall be included unchanged. If the Purchaser wishes to amend the recommended procedures and/or certificates, it may propose alternatives for the approval of the World Bank before release of the request for proposals document to potential Proposers.

Change Order Procedures and Forms: Similar to the Installation and Operational Acceptance Certificates, the Change Estimate Proposal, Estimate Acceptance, Change Proposal, Change Order, and related Forms should be included in the request for proposals document unaltered. If the Purchaser wishes to amend the recommended procedures and/or certificates, it may propose alternatives for the approval of the World Bank before release of the request for proposals document.

Notes to Proposers on working with the Sample Contractual Forms

The following forms are to be completed and submitted by the successful Proposer following receipt of the Letter of Acceptance from the Purchaser: (i) Contract Agreement, with all Appendices; (ii) Performance Security; and (iii) Advance Payment Security.

- Contract Agreement: In addition to specifying the parties and the Contract Price, the Contract Agreement is where the: (i) Supplier Representative; (ii) if applicable, agreed Adjudicator and his/her compensation; and (iii) the List of Approved Subcontractors are specified. In addition, modifications to the successful Proposer's Proposal Price Schedules are attached to the Agreement. These contain corrections and adjustments to the Supplier's Proposal prices to correct errors, adjust the Contract Price to reflect – if applicable - any extensions to Proposal validity beyond the last day of original Proposal validity plus 56 days, etc.
- Performance Security: Pursuant to GCC Clause 13.3, the successful Proposer is required to provide the Performance Security in the form

contained in this section of this request for proposals document and in the amount specified in accordance with the SCC.

- Advance Payment Security: Pursuant to GCC Clause 13.2, the successful Proposer is required to provide a bank guarantee for the full amount of the Advance Payment - if an Advance Payment is specified in the SCC for GCC Clause 12.1 - in the form contained in this section of this request for proposals document or another form acceptable to the Purchaser. If a Proposer wishes to propose a different Advance Payment Security form, it should submit a copy to the Purchaser promptly for review and confirmation of acceptability before the proposal submission deadline.

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

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NOTIFICATION OF INTENTION TO AWARD

[This Notification of Intention to Award shall be sent to each Proposer that submitted a Proposal, unless the Proposer has previously received notice of exclusion from the process *Proposer.]*

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

For the attention of Proposer'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 Proposers. The Notification must be sent to all Proposers simultaneously. This means on the same date and as close to the same time as possible.]

DATE OF TRANSMISSION: This Notification is sent by: *[specify **email / fax**]* on *[specify **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 RFP is issued**]*

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

RFP No: *[insert RFP **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 Proposal, and/or

b) submit a Procurement-related Complaint in relation to the decision to award the contract.

1. The successful Proposer

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

2. Other Proposers *[INSTRUCTIONS: insert names of all Proposers that submitted a Proposal, Proposal prices as read out and evaluated, technical scores and combined scores.]*

Name of Proposer	Technical Score (If applicable)	Proposal price	Evaluated Proposal Cost	Combined Score
[*insert name*]	[*insert Technical score*]	[*insert Proposal price*]	[*insert evaluated cost*]	[*insert combined score*]
[*insert name*]	[*insert Technical score*]	[*insert Proposal price*]	[*insert evaluated cost*]	[*insert combined score*]
[*insert name*]	[*insert Technical score*]	[*insert Proposal price*]	[*insert evaluated cost*]	[*insert combined score*]

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

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

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 Proposal. 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 Proposer, 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 or state "not applicable"*]

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 Proposer, 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 or state "not applicable"*]

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.

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 Proposer who submitted a Proposal 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: _____

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

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

Email address: [*insert* ***email address***]

Telephone number: [insert ***telephone number]***

BENEFICIAL OWNERSHIP DISCLOSURE FORM

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

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful Proposer. In case of joint venture, the Proposer 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 Proposer is any natural person who ultimately owns or controls the Proposer 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 Proposer*

RFP No.: *[insert **number of RFP process**]*
Request for Proposals 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 Proposer (Yes / No)

[include full name (last, middle, first), nationality, country of residence]			

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 Proposer

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 Proposer 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 Proposer]"

Name of the Proposer: *[*insert* ***complete name of the Proposer***]

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

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

Signature of the person named above: _____

Date signed *[insert* ***ordinal number****]* day of *[insert* ***month****], [insert* ***year****]*

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

[**] Person signing the Proposal shall have the power of attorney given by the Proposer. The power of attorney shall be attached with the Proposal Schedules.

LETTER OF ACCEPTANCE

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

Project: *[insert **name of project**]*

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

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

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

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

Date: *[insert **Date**]*

To: *[insert **Name of Proposer**]*

This is to notify you that your Proposal dated *[insert **Date**]* for execution of the *[insert **brief description of the Information System**]* for the Contract Price in the aggregate of *[insert **amount in figures**]* (*[insert **amount in words**]*), as corrected and modified in accordance with the Instructions to Proposers 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 Form*s* and (ii) the additional information on beneficial ownership in accordance with ITP 47.1 within eight (8) Business days using the Beneficial Ownership Disclosure Form, included in Section X, - Contract Forms, of the request for proposals document.

Authorized Signature: _____

Name and Title of Signatory: *[insert **Name and Title**]*

Name of Agency: *[insert **Purchaser Name**]*

Attachment: Contract Agreement

1. CONTRACT AGREEMENT

THIS CONTRACT AGREEMENT is made

the *[insert: **ordinal number**]* day of *[insert: **month**], **2026 .***

BETWEEN

(1) **Ministry of Communication, Digital Technology and Innovation**, of the Government of the Republic of Ghana, and having its principal place of business at **Ministry of Communication Office Complex, Abdul Diouf Street, near Kofi Annan ICT Centre of Excellence, GA-079-0539** (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 **Design, Supply, Implementation and Training for the National Data Exchange Hub** ("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. Contract Documents

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

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 proposal and original Price Schedules

(f) Code of Conduct for Supplier's Personnel

(g) *[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. Appendixes

4.1 The Appendixes listed below shall be deemed to form an integral part of this Contract Agreement.

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 **Ministry of Communication, Digital Technology and Innovation**

Signed: **Alex Yaw Arphul**

in the capacity of **Chief Director**

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 proposal and that the Purchaser approves that the Supplier engage during the performance of the Contract. Add additional pages as necessary.]***

Item	Approved Subcontractors	Place of Registration

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 and to one of the two categories: (i) Proprietary or (ii) Open Source.

	(select one per title)			(select one per title)		(select one per title)	
Title	System	General-Purpose	Application	Standard	Custom	Proprietary	Open Source
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							
[insert Title]							

Appendix 5. Custom Materials

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

Custom Materials
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*
*[insert **Title and description**]*

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 Proposal. These Revised Price Schedules reflect any corrections or adjustments to the Supplier's proposal price, pursuant to the ITP 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 Proposer, 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*

---

[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.*

guarantee)] from the date of the Operational Acceptance 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.

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

[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.*

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**]*, *[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 RFP*** *]*

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

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 specify 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 RFP*** *]*

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

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: *[insert:* ***date*** *]*

in the capacity of: *[state:* ***"Project Manager"*** *or specify a 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 RFP*** *]*

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

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 RFP**]*

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

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 specify a 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 RFP*** *]*

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

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 specify a 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 RFP*** *]*

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

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: *[insert:* ***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 specify a 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 RFP**]*

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

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. Estimate of the increase/decrease to the Contract Price resulting from the proposed Change: *[insert: **amount in currencies of Contract],*** as detailed below in the breakdown of prices, rates, and quantities.

   Total lump sum cost of the Change:

   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):

9. Additional Time for Achieving Operational Acceptance required due to the Change: *[insert: **amount in days / weeks**]*

10. Effect on the Functional Guarantees: *[insert: **description**]*
11. Effect on the other terms and conditions of the Contract: *[insert: **description**]*
12. Validity of this Proposal: for a period of *[insert: **number**]* days after receipt of this Proposal by the Purchaser
13. Procedures to be followed:
    (a) You are requested to notify us of your acceptance, comments, or rejection of this detailed Change Proposal within *[insert: **number**]* days from your receipt of this Proposal.
    (b) The amount of any increase and/or decrease shall be taken into account in the adjustment of the Contract Price.

For and on behalf of the Supplier

Signed:

Date:

in the capacity of: *[state: **"Supplier's Representative"** or specify a 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 RFP*** *]*

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

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*: [insert* ***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: *[insert **date**]*

in the capacity of: *[state **"Supplier's Representative"** or specify a 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 RFP**]*

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

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

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 specify a higher level authority in the Supplier's organization]*