

BIDDING DOCUMENT (SINGLE-STAGE)

Issued on: January 8, 2016

for the

**Design, Development, Configuration,
Hardware Supply, Installation and
Maintenance for the Myanmar
National Portal**

IFB No: G 3.1

Project: Telecommunications Sector Reform Project

**Purchaser: Ministry of Communications and
Information Technology, The Republic of the Union
of Myanmar**

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Invitation for Bids (IFB)

January 8, 2016

The Republic of the Union of Myanmar

Myanmar National Portal

Loan/Credit Number: MM-5353

**Design, Development, Configuration, Hardware Supply, Installation and Maintenance
for the Myanmar National Portal**

IFB No: G 3.1

1. This Invitation for Bids (IFB) for this project that appeared in National News Paper, Ministry Official Website and UNDB online on January 8, 2016..
2. The Government of the Union of Myanmar has received financing from the World Bank toward the cost of the “Telecommunications Sector Reform Project” and it intends to apply part of the proceeds of this financing to payments under the agreement(s) resulting from this IFB: Design, Development, Configuration, Hardware Supply, Installation and Maintenance for the Myanmar National Portal.
3. The *Ministry of Communications and Information Technology* serves as the implementing agency for the project and now invites sealed bids from eligible Bidders for Design, Development, Configuration, Hardware Supply and Installation for the Myanmar National Portal.
4. Bidding will be conducted using the International Competitive Bidding (ICB) procedures specified in the World Bank’s Guidelines: Procurement under IBRD Loans and IDA Credits, edition of January 2011, and is open to all Bidders eligible as defined in these Guidelines,⁵ that meet the following minimum qualification criteria;
 - The bidder shall have more than 10 years experience in web portal and electronic service development field;
 - The bidder shall have at least 8 years experience in executing e-Government projects;
 - The bidder shall furnish references to demonstrate the bidder has completed at least **two or more successful government portal projects**, which involve design, development, installation, and provision of web portal system and maintenance.”
 - The bidder should demonstrate its ability to ensure local presence (either existing or planned) or submit plans to establish local presence to support the project.
 - The bidder shall furnish documentary evidence that it meets either of the following financial requirement(s);

- a. Average Annual Turnover of the Bidder should not less than US\$ 3 million or equivalent, for the recent (3) (2012, 2013, 2014) years, Or
 - b. Access to liquid assets of US\$ 1.5 million equivalent
5. Interested eligible Bidders may obtain further information from the Ministry of Communications and Information Technology and inspect the bidding documents at the address given below from *10:00 to 14:00 hours*.
6. A complete set of bidding documents in English *may* be downloaded from Ministry Official Website **www.mcit.gov.mm**. The downloadable version of the bidding documents, and any addenda to it, will be the binding one.
7. Bids must be delivered to the address below at or before ***February 26, 2016, 14:00 hours***. Late bids will be rejected. Bids need to be secured by a Bid Security. The amount of Security required is USD 16,000. Bids will be opened in the presence of Bidders' representatives who choose to attend at the address below at ***February 26, 2016 14:00 hours***.
8. The attention of prospective Bidders is drawn to (i) the fact that they will be required to certify in their bids that all software is either covered by a valid license or was produced by the Bidder and (ii) that violations are considered fraud, which can result in ineligibility to be awarded World Bank-financed contracts.

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Information Technology and Cyber Security Department (ITCSD),
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SECTION I. INSTRUCTIONS TO BIDDERS (ITB)
(Single-Stage Bidding)

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Instructions to Bidders

A. GENERAL

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

loan proceeds.

3. Fraud and Corruption

3.1 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their subcontractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts.¹ In pursuance of this policy, the Bank:

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice"² is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice"³ is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "collusive practice"⁴ is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "coercive practice"⁵ is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to

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

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

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

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

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

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

- (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under sub-clause 3.1 (e) below.
 - (b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;
 - (c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;
 - (d) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a Bank-financed contract; and
 - (e) will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers, and contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.
- 3.2 Furthermore, Bidders shall be aware of the provision stated in Clause 9.8 and Clause 41.2 of the General Conditions of Contract.
- 3.3 Any communications between the Bidder and the Purchaser related to matters of alleged fraud or corruption must be made in

writing.

3.4 By signing the Bid Submission Form, the Bidder represents that it either is the owner of the Intellectual Property Rights in the hardware, software or materials offered, or that it has proper authorization and/or license to offer them from the owner of such rights. For the purpose of this Clause, Intellectual Property Rights shall be as defined in GCC Clause 1.1 (c) (xvii). Willful misrepresentation of these facts shall be considered a fraudulent practice subject to the provisions of Clauses 3.1 through 3.4 above, without prejudice of other remedies that the Purchaser may take.

4. Eligible Bidders

4.1 A Bidder, and all parties constituting the Bidder, may have the nationality of any country, subject to the restrictions specified in Section III, Eligible Countries. A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, incorporated, or registered and operates in conformity with the provisions of the laws of that country.

4.2 If a prequalification process has been undertaken for the Contract(s) for which these Bidding Documents have been issued, only those Bidders may participate that had been prequalified and continue to meet the eligibility criteria of this Clause. A prequalified Joint Venture may not change partners or its structure when submitting a bid.

4.3 A firm may be excluded from bidding if:

(a) it was engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, or other documents to be used for the procurement of the Information System described in these Bidding Documents; or

(b) it is a government-owned enterprise in the Borrower's country, unless it can establish that it (i) is legally and financially autonomous and (ii) operates under commercial law. No dependent agency of the Borrower or Sub-Borrower shall be permitted to bid.

4.4 A firm that has been determined to be ineligible by the Bank in relation to the Bank Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants shall be not be eligible to be awarded a contract.

4.5 A firm or individual is or will be disqualified from participation

in this bidding if, at any time from advertisement of the bidding until and including contract award, the firm or individual is under:

- (a) a suspension by the Purchaser agreed by the Bank as a result of execution of a Bid-Securing Declaration pursuant to ITB Clause 17.6 in another Bank-financed procurement, or under a suspension by the Purchaser for other reasons that have been agreed by the Bank; or
- (b) a declaration of ineligibility by the Bank in accordance with ITB Clause 3.1 (d). The list of individuals and firms debarred from participating in World Bank projects is available at <http://www.worldbank.org/debarr/>, or
- (c) a sanction imposed by the United Nations Security Council, as mentioned in ITB Clause 2.2.

4.6 A firm or other entity that is ineligible according to any of the above provisions of this Clause, may also not participate as a Joint Venture partner, or as Subcontractor for or supplier of goods, works or services. If a bid becomes materially incomplete after removing ineligible entities, the bid may be disqualified.

4.7 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.

5. Eligible Goods and Services

5.1 For the purposes of these Bidding Documents, the Information System means all:

- (a) the required information technologies, including all information processing and communications-related hardware, software, supplies, and consumable items that the Supplier is required to supply and install under the Contract, plus all associated documentation, and all other materials and goods to be supplied, installed, integrated, and made operational (collectively called “the Goods” in some clauses of the ITB); and
- (b) the related software development, transportation, insurance, installation, customization, integration, commissioning, training, technical support, maintenance, repair, and other services necessary for proper operation of the Information System to be provided by the selected Bidder and as specified in the Contract.

5.2 Funds from Bank loans are disbursed only for expenditures for

an Information System made up of goods and services provided by nationals of, and produced in or supplied from, eligible source countries as defined in Section III, Eligible Countries. An Information System is deemed to be produced in a certain country when, in the territory of that country, through software development, manufacturing, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.

5.3 For purposes of this clause, the nationality of the Bidder is distinct from the country in which the Information System and its goods components are produced or from which the related services are supplied.

6. Qualifications of the Bidder

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

(a) that it has the financial, technical, and production capability necessary to perform the Contract, meets the qualification criteria **specified in the BDS**, and has a successful performance history. If a prequalification process has been undertaken for the Contract(s) for which these Bidding Documents have been issued, the Bidder shall, as part of its bid, update any information submitted with its application for prequalification;

(For the purposes of establishing a Bidder's qualifications, and unless stated to the contrary in the BDS, the experience and / or resources of any Subcontractor will not contribute to the Bidder's qualifications; only those of a Joint Venture partner will be considered.)

(b) that, in the case of a Bidder offering to supply key goods components of the Information System, as **identified in the BDS**, that the Bidder does not itself produce, the Bidder is duly authorized by the producer to supply those components in the Purchaser's country under the Contract(s) that may result from this bidding; (This will be accomplished by including Manufacturer's Authorizations in the bid, based on the sample found in Section VII.)

(c) that, if a Bidder proposes Subcontractors for key services if and as **identified in the BDS**, these Subcontractors have agreed in writing to serve for the Bidder under the Contract(s) that may result from this bidding; and

(d) that, in the case of a Bidder not doing business within the

Purchaser's country, the Bidder is or will be (if awarded the Contract) represented by an Agent in that country who is equipped and able to carry out the Bidder's maintenance, technical support, training, and repair obligations prescribed in the General and Special Conditions of Contract, and/or Technical Requirements.

- 6.2 Bids submitted by a Joint Venture of two or more firms as partners shall also comply with the following requirements:
- (a) the bid shall be signed so as to be legally binding on all partners;
 - (b) one of the partners shall be nominated as being in charge, and this nomination shall be evidenced by submitting a power of attorney signed by legally authorized signatories of all the partners;
 - (c) the partner in charge shall be authorized to incur liabilities and receive instructions for and on behalf of any and all partners of the Joint Venture, and the entire execution of the Contract, including payment, shall be done exclusively with the partner in charge;
 - (d) the partner or combination of partners that is responsible for a specific component of the Information System must meet the relevant minimum qualification criteria for that component;
 - (e) a firm may submit bids either as a single Bidder on its own, or as partner in one, and only one, Joint Venture. If, as a result of the bid opening pursuant to ITB Clause 24, this requirement is not met, all bids involving the firm as a single Bidder or Joint Venture partner will be disqualified;
 - (f) all partners of the Joint Venture shall be liable jointly and severally for the execution of the Contract in accordance with the Contract terms, and a statement to this effect shall be included in the authorization mentioned under ITB Clause 6.2 (b) above, in the bid as well as in the Contract (in case of a successful bid).
- 6.3 If a Bidder intends to subcontract major items of supply or services, it shall include in the bid details of the name and nationality of the proposed Subcontractor for each of those items and shall be responsible for ensuring that any Subcontractor proposed complies with the requirements of ITB Clause 4, and that any Goods or Services components of the Information

System to be provided by the Subcontractor comply with the requirements of ITB Clause 5 and the related evidence required by ITB Clause 13.1 (e) (iii) is submitted. Bidders are free to list more than one Subcontractor against each item. Quoted rates and prices will be deemed to apply, whichever Subcontractor is appointed, and no adjustment of the rates or prices will be permitted. The Purchaser reserves the right to delete any proposed Subcontractor from the list. This shall be done prior to Contract signature, by deleting such unacceptable Subcontractors from Appendix 3 to the Contract Agreement, which shall list the approved Subcontractors for each item prior to Contract signature. Subsequent additions and deletions from the list of approved Subcontractors shall be performed in accordance with GCC Clause 20 (as revised in the SCC, if applicable) and Appendix 3 to the Contract Agreement.

For the purposes of these Bidding Documents, a Subcontractor is any supplier or service provider with whom the Bidder contracts for the supply or execution of any part of the Information System to be provided by the Bidder under the Contract (such as the supply of major hardware, software, or other components of the required Information Technologies specified, or the performance of related Services, e.g., software development, transportation, installation, customization, integration, commissioning, training, technical support, maintenance, repair, etc.).

- 6.4 A firm which is a Bidder, whether as a single Bidder or as a partner in a Joint Venture, cannot be a Subcontractor in other bids, except for the supply of commercially available hardware or software by the firm, as well as purely incidental services such as installation/configuration, routine training, and ongoing maintenance/support. If the BDS for ITB Clause 6.1 (a) allows the qualification of Subcontractors nominated for certain components to be taken into account in assessing the Bidder's overall qualifications, any Subcontractor so nominated by any Bidder is automatically disqualified from being a Bidder itself or a partner in a Joint Venture. The same will normally apply to firms that have provided Subcontractor agreements for certain services pursuant to ITB Clause 6.1 (c). Non-compliance may result in the rejection of all bids in which the affected firm participates as Bidder or as partner in a Joint Venture. As long as in compliance with these provisions, or as long as unaffected by them due to not participating as Bidder or as partner in a Joint Venture, a firm may be proposed as a Subcontractor in any number of bids. If the BDS for ITB 28.1 permits the submission of bids for Subsystems, lots, or slices, then the provisions of this

Clause 6.4 apply only to bids for the same Subsystem(s), lot(s), or slice(s);

- 7. Cost of Bidding**
- 7.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser will in no case be responsible or liable for those costs.
- 8. Site Visit**
- 8.1 The Bidder may wish to visit and examine the site or sites of the Information System and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.
- 8.2 The Purchaser will arrange for the Bidder and any of its personnel or agents to gain access to the relevant site or sites, provided that the Bidder gives the Purchaser adequate notice of a proposed visit of at least fourteen (14) days. Alternatively, the Purchaser may organize a site visit or visits concurrently with the pre-bid meeting, as specified in the BDS for ITB Clause 10.2. Failure of a Bidder to make a site visit will not be a cause for its disqualification.
- 8.3 No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.

B. THE BIDDING DOCUMENTS

- 9. Content of Bidding Documents**
- 9.1 The contents of the Bidding Documents are listed below and should be read in conjunction with any addenda issued in accordance with ITB Clause 11:
- Section I Instructions to Bidders (ITB)
 - Section II Bid Data Sheet (BDS)
 - Section III Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement
 - Section IV General Conditions of Contract (GCC)
 - Section V Special Conditions of Contract (SCC)
 - Section VI Technical Requirements (including Implementation Schedule)
 - Section VII Sample Forms
- 9.2 Bidders are expected to examine all instructions, forms, terms,

specifications, and other information in the Bidding Documents. Failure to furnish all information required by the Bidding Documents or to submit a bid not substantially responsive to the Bidding Documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

- 9.3 The Invitation for Bids is not formally part of the Bidding Documents and is included for reference only. In case of inconsistencies, the actual Bidding Documents shall prevail.

10. Clarification of Bidding Documents and Pre-bid Meeting

- 10.1 A prospective Bidder requiring any clarification of the Bidding Documents may notify the Purchaser in writing at the Purchaser's address and by one of the means **indicated in the BDS**. Similarly, if a Bidder feels that any important provision in the documents will be unacceptable, such an issue should be raised as soon as possible. The Purchaser will respond in writing to any request for clarification or modification of the Bidding Documents that it receives no later than twenty-one (21) days prior to the deadline for submission of bids prescribed by the Purchaser. Copies of the Purchaser's response (including an explanation of the query but not identifying its source) will be sent to all prospective Bidders that received the Bidding Documents from the Purchaser.

- 10.2 When **specified in the BDS**, the Purchaser will organize and Bidders are welcome to attend a pre-bid meeting at the time and place **indicated in the BDS**. The purpose of the meeting will be to clarify issues and answer questions on any matter that may be raised at this stage, with particular attention to issues related to the Technical Requirements. Bidders are requested to submit any questions in writing to reach the Purchaser not later than one week before the meeting. Questions and answers will be transmitted in accordance with ITB Clause 10.1. Minutes of the meeting, including the questions raised and responses given, together with any responses prepared after the meeting, will be transmitted without delay to all those that received the Bidding Documents from the Purchaser. Any modification to the Bidding Documents listed in ITB Clause 9.1, which may become necessary as a result of the pre-bid meeting, shall be made by the Purchaser exclusively by issuing an Addendum pursuant to ITB Clause 11 and not through the minutes of the pre-bid meeting.

- 11. Amendment of Bidding Documents**
- 11.1 At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, amend the Bidding Documents. Later amendments on the same subject modify or replace earlier ones.
- 11.2 Amendments will be provided in the form of Addenda to the Bidding Documents, which will be sent in writing to all prospective Bidders that received the Bidding Documents from the Purchaser. Addenda will be binding on Bidders. Bidders are required to immediately acknowledge receipt of any such Addenda. It will be assumed that the amendments contained in such Addenda will have been taken into account by the Bidder in its bid.
- 11.3 In order to afford prospective Bidders reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, in which case, the Purchaser will notify all Bidders in writing of the extended deadline.

C. PREPARATION OF BIDS

- 12. Language of Bid**
- 12.1 The bid prepared by the Bidder and all correspondence and documents related to the bid exchanged by the Bidder and the Purchaser shall be written in the **language specified in the BDS**, or, if the BDS so provides, in either one of two languages specified there. Any printed literature furnished by the Bidder as part of its bid may be in a language not specified in the BDS, as long as such literature is accompanied by a translation of its pertinent passages into the language of the bid, in which case, for purposes of interpretation of the bid, the translation shall govern.
- 13. Documents Comprising the Bid**
- 13.1 The bid submitted by the Bidder shall comprise:
- (a) Bid Submission Form completed and signed by a person or persons duly authorized to bind the Bidder to the Contract;
 - (b) all Price Schedules duly completed in accordance with ITB Clauses 14, 15, and 18 and signed by a person or persons duly authorized to bind the Bidder to the Contract;
 - (c) if required, Bid-securing Declaration or Bid Security furnished in accordance with ITB Clause 17;
 - (d) written confirmation authorizing the signatory of the bid to

commit the Bidder, in accordance with ITB Clause 19.2;

(e) Annexes:

(i) Annex 1: Bidder's Eligibility

In the absence of prequalification, documents establishing to the Purchaser's satisfaction the Bidder's eligibility to bid, including but not limited to documentary evidence that the Bidder is legally incorporated in a territory of an eligible source country as defined under ITB Clause 4;

(ii) Annex 2: Bidder's Qualifications

Documentary evidence establishing to the Purchaser's satisfaction, and in accordance with ITB Clause 6, that the Bidder is qualified to perform the Contract if its bid is accepted. In the case where prequalification of Bidders has been undertaken, and pursuant to ITB Clause 6.1 (a), the Bidder must provide evidence on any changes in the information submitted as the basis for prequalification or, if there has been no change at all in said information, a statement to this effect;

Any Manufacturer's Authorizations and Subcontractor agreements specified as required in the BDS for ITB Clauses 6.1 (b) and 6.1 (c);

(iii) Annex 3: Eligibility of Goods and Services

Documents establishing, to the Purchaser's satisfaction, that the Goods and Services components of the Information System to be supplied, installed, and/or performed by the Bidder are eligible Goods and Services as defined under ITB Clause 5. If awarded the Contract, the Bidder shall submit for such components of the Information System evidence of eligibility, which shall be confirmed by a certificate of origin issued at the time of shipment;

(iv) Annex 4: Conformity of the Information System to the Bidding Documents

Documentary evidence establishing to the Purchaser's satisfaction, and in accordance with ITB Clause 16, that the Goods and Services components of the Information System to be supplied, installed, and/or performed by the Bidder conform to the

Bidding Documents;

(v) Annex 5: Proposed Subcontractors

A list of all major items of Goods or Services that the Bidder proposes to purchase or subcontract from others, and the name and nationality of the proposed Subcontractor, including suppliers, for each of those items;

(vi) Annex 6: Intellectual Property

A list of:

(1) all Software included in the Bidder's bid, assigning each item to one of the software categories defined in GCC Clause 1.1 (c):

(A) System, General Purpose, and Application Software; and

(B) Standard and Custom Software.

(2) all Custom Materials, as defined in GCC Clause 1.1 (c), included in the Bidder's bid.

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

Re-assignments among the Software and Materials categories, if necessary, will be made during the implementation of the Contract according to GCC Clause 39 (Changes to the System).

14. Bid Prices

14.1 All Goods and Services identified in the Supply and Installation Cost Sub-Table and the Recurrent Cost Sub-Table in Section VII (Forms 2.5 and 2.6), and all other Goods and Services proposed by the Bidder to fulfill the requirements of the Information System, must be priced separately in the format of the same tables and summarized in the corresponding Cost Summary Tables in the same Section. Prices must be quoted in accordance with the instructions provided in Section VII for the various cost tables, in the manner specified below.

- 14.2 The price of items that the Bidder has left blank in the cost tables provided in Section VII shall be assumed to be included in the price of other items. Items omitted altogether from the cost tables shall be assumed to be omitted from the bid and, provided that the bid is substantially responsive, an adjustment to the bid price will be made during evaluation in accordance with ITB Clause 28.6 (c) (iii).
- 14.3 Unit prices must be quoted at a level of detail appropriate for calculation of any partial deliveries or partial payments under the contract, in accordance with the Implementation Schedule in Section VI, and with GCC and SCC Clause 12 – Terms of Payment. Bidders may be required to provide a breakdown of any composite or lump-sum items included in the Cost Tables.
- 14.4 The prices for Goods components of the System are to be expressed and shall be defined and governed in accordance with the rules prescribed in the edition of Incoterms **specified in the BDS**, and quoted in the appropriate columns of the cost tables of Section VII as follows:
- (a) Goods supplied from outside the Purchaser's country:
- Unless otherwise **specified in the BDS**, the prices shall be quoted on a CIP (named place of destination) basis, exclusive of all taxes, stamps, duties, levies, and fees imposed in the Purchaser's country. The named place of destination and special instructions for the contract of carriage are as **specified in the BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Bidder may obtain insurance services from any eligible source country.
- (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:
- Unless otherwise **stated in the BDS**, inland transportation, insurance and related local costs incidental to the delivery

of the Goods to the designated Project Sites must be quoted separately as a Service item in accordance with ITB Clause 14.5, whether the Goods are to be supplied locally or from outside the Purchaser's country, except when these costs are already included in the price of the Goods, as is, e.g., the case, when ITB Clause 14.4 (a) specifies CIP, and the named places of destination are the Project Sites.

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

15. Bid Currencies 15.1 Prices shall be quoted in the following currencies:

- (a) The Bidder may quote its prices for all Information Technologies, associated Goods, and Services to be supplied from outside the Purchaser's Country in the currencies of countries eligible according to Section III. If the Bidder wishes to be paid in a combination of different currencies, it must quote unit prices accordingly, but no more than three foreign currencies may be used.
- (b) Unless otherwise **specified in the BDS**, the Bidder shall express its prices for such Information Technologies, associated Goods, and Services to be supplied locally (i.e., from within the Purchaser's Country) in the currency of the Purchaser's Country.

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

16.1 Pursuant to ITB Clause 13.1 (e) (iv), the Bidder shall furnish, as part of its bid, documents establishing the conformity to the Bidding Documents of the Information System that the Bidder proposes to supply and install under the Contract.

16.2 The documentary evidence of conformity of the Information System to the Bidding Documents shall be in the form of written descriptions, literature, diagrams, certifications, and client references, including:

- (a) the Bidder's technical bid, i.e., a detailed description of the Bidder's proposed technical solution conforming in all material aspects with the Technical Requirements (Section VI) and other parts of these Bidding Documents, overall as well as in regard to the essential technical and performance characteristics of each component making up the proposed Information System;
- (b) an item-by-item commentary on the Purchaser's Technical Requirements, demonstrating the substantial responsiveness of the Information System offered to those requirements. In demonstrating responsiveness, the commentary shall include explicit cross references to the relevant pages in the supporting materials included in the bid. Whenever a discrepancy arises between the item-by-item commentary and any catalogs, technical specifications, or other preprinted materials submitted with the bid, the item-by-item commentary shall prevail;
- (c) a Preliminary Project Plan describing, among other things, the methods by which the Bidder will carry out its overall management and coordination responsibilities if awarded

the Contract, and the human and other resources the Bidder proposes to use. The Plan should include a detailed Contract Implementation Schedule in bar chart form, showing the estimated duration, sequence, and interrelationship of all key activities needed to complete the Contract. The Preliminary Project Plan must also address any other topics **specified in the BDS**. In addition, the Preliminary Project Plan should state the Bidder's assessment of what it expects the Purchaser and any other party involved in the implementation of the Information System to provide during implementation and how the Bidder proposes to coordinate the activities of all involved parties;

- (d) a written confirmation that the Bidder accepts responsibility for the successful integration and interoperability of all components of the Information System as required by the Bidding Documents.

16.3 For purposes of the commentary to be furnished pursuant to ITB Clause 16.2 (b), the Bidder shall note that references to brand names or model numbers or national or proprietary standards designated by the Purchaser in its Technical Requirements are intended to be descriptive and not restrictive. Except where explicitly **prohibited in the BDS** for specific items or standards, the Bidder may substitute alternative brand/model names or standards in its bid, provided that it demonstrates to the Purchaser's satisfaction that the use of the substitute(s) will result in the Information System being able to perform substantially equivalent to or better than that specified in the Technical Requirements.

17. Securing the Bid

17.1 The BDS for this Clause specifies whether bids must be secured, and if so, whether by a Bid-Securing Declaration or by a Bid Security. If a Bid Security is required or optional, the **BDS also specifies the amount**.

17.2 Securing the bids shall be substantially in accordance with the related sample forms included in Section VII or other forms approved by the Purchaser prior to bid submission. Bids must remain secured for a period of 28 days beyond the validity period of the bids, as extended, if applicable, in accordance with ITB Clause 18.2. In case of a Bid Security, it shall also:

- (a) at the Bidder's option, be in the form of either a certified check, letter of credit, or a bank guarantee from a banking institution, or a bond issued by a surety;

- (b) be issued by a reputable institution selected by the Bidder and located in any eligible country; if the institution issuing the security is located outside the Purchaser's Country, it shall have a correspondent financial institution located in the Purchaser's Country to make the security enforceable;
- (c) be payable promptly upon written demand by the Purchaser in case any of the conditions listed in ITB Clause 17.6 is/are invoked;
- (d) be submitted in its original form; copies will not be accepted.

17.3 The Bid-Securing Declaration or the Bid Security of a Joint Venture shall be issued in the name of the Joint Venture submitting the bid provided the Joint Venture has legally been constituted, or else it shall be issued in the name of all partners proposed for the Joint Venture in the bid. Sanctions due to a breach of the terms of a Bid-Securing Declaration pursuant to ITB Clause 17.6 will apply to all partners to the Joint Venture.

17.4 If a Bid-Securing Declaration or Bid Security is required in accordance with ITB Clause 17.1, any bid not accompanied by a substantially acceptable Bid-Securing Declaration or Bid Security in accordance with ITB Clauses 17.2 and 17.3, shall be rejected by the Purchaser as non-responsive.

17.5 Unless executed or forfeited pursuant to ITB Clause 17.6, Bid-Securing Declarations, if any, will expire for, or Bid Securities, if any, will be returned as promptly as possible to,

- (a) all Bidders upon annulment of the bidding pursuant to ITB Clause 34;
- (b) Bidders refusing a request to extend the period of validity of their bids pursuant to ITB Clause 18.2;
- (c) the successful Bidder once it has signed the Contract Agreement and furnished a valid Performance Security as required;
- (d) the unsuccessful Bidders at the same time as in (c), that is, when they are informed about the successful establishment of the contract with the successful Bidder.

17.6 The Bid-Securing Declaration, if any, may be executed, or the Bid Security, if any, may be forfeited:

- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form or any extension of validity the Bidder has agreed to pursuant to ITB Clause 18.2; or
- (b) in the case of the successful Bidder, if the Bidder fails to:
 - (i) sign the Contract Agreement in accordance with ITB Clause 36; or
 - (ii) furnish the Performance Security in accordance with ITB Clause 37.

17.7 If a bid security is **not required in the BDS**, and

- (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Letter of Bid Form, except as provided in ITB 18.2, or
- (b) if the successful Bidder fails to: sign the Contract in accordance with ITB 36; or furnish a performance security in accordance with ITB 37;

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

18. Period of Validity of Bids

18.1 Bids shall remain valid, at a minimum, for the period **specified in the BDS** after the deadline date for bid submission prescribed by the Purchaser, pursuant to ITB Clause 21. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive. For the convenience of Bidders, the BDS spells out the minimal original expiration dates for the validity of the bid and, if applicable pursuant to ITB Clause 17.1, for securing the bid. However, Bidders are responsible for adjusting the dates in the BDS in accordance with any extensions to the deadline date of bid submission pursuant to ITB Clause 21.2.

18.2 In exceptional circumstances, prior to expiry of the bid validity period, the Purchaser may request that the Bidders extend the period of validity for a specified additional period. The request and the responses to the request shall be made in writing. A Bidder may refuse the request without risking execution of the Bid-Securing Declaration or forfeiting the Bid Security, but in this case the bid will be out of the competition for the award. Except as provided in ITB Clause 18.3, a Bidder agreeing to the

request will not be required or permitted to modify its bid, but will be required to ensure that the bid remains secured for a correspondingly longer period, pursuant to ITB Clause 17.2.

18.3 In the case of fixed price contracts, if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the contract price will be adjusted as specified in the request for extension. Bid evaluation will be based on the bid prices without taking into consideration the above correction.

19. Format and Signing of Bid

19.1 The Bidder shall prepare an original and the number of copies/sets of the bid **specified in the BDS**, clearly marking each one as “ORIGINAL BID,” “COPY NO. 1,” “COPY NO. 2,” etc., as appropriate. In the event of any discrepancy between them, the original shall govern.

19.2 The original and all copies of the bid, each consisting of the documents listed in ITB Clause 13.1, shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. The authorization must be in writing and included in the bid pursuant to ITB Clause 13.1 (d). The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.

19.3 The bid shall contain no interlineations, erasures, or overwriting, except to correct errors made by the Bidder, in which case such corrections shall be initialed by the person or persons signing the bid.

19.4 The Bidder shall furnish in the Bid Submission Form (a sample of which is provided in the Sample Forms Section of the Bidding Documents) information regarding commissions or gratuities, if any, paid or to be paid to agents relating to this procurement and to the execution of the Contract should the Bidder be successful.

D. SUBMISSION OF BIDS

- 20. Sealing and Marking of Bids**
- 20.1 The Bidder shall seal the original and each copy of the bid in separate envelopes, duly marking the envelopes as “ORIGINAL BID” and “COPY NO. *[number]*.” The envelopes shall then be sealed in an outer envelope.
- 20.2 The inner and outer envelopes shall
- (a) be addressed to the Purchaser at the address **given in the BDS**, and
 - (b) bear the loan/Project name indicated in the BDS for ITB Clause 2.1, the Invitation for Bids title and number, and the Contract name(s), as indicated in the BDS for ITB Clause 1.2, and the statement “DO NOT OPEN BEFORE *[time and date]*,” to be completed with the time and date specified in the BDS for ITB Clause 24.1.
- 20.3 The inner envelopes shall also indicate the name and address of the Bidder so that the bid can be returned unopened in case it is declared “late.”
- 20.4 If the outer envelope is not sealed and marked as required by ITB Clause 20.2 above, the Purchaser will assume no responsibility for the bid’s misplacement or premature opening. If the outer envelope discloses the Bidder’s identity, the Purchaser will not guarantee the anonymity of the bid submission, but this disclosure will not constitute grounds for bid rejection.
- 21. Deadline for Submission of Bids**
- 21.1 Bids must be received by the Purchaser at the address specified in the BDS for ITB Clause 20.2 no later than the time and date **stated in the BDS**.
- 21.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the Bidding Documents in accordance with ITB Clause 11.3, in which case all rights and obligations of the Purchaser and Bidders will thereafter be subject to the deadline as extended.
- 22. Late Bids**
- 22.1 Any bid received by the Purchaser after the bid submission deadline prescribed by the Purchaser in the BDS for ITB Clause 21, will be rejected and returned unopened to the Bidder.
- 23. Withdrawal, Substitution, and Modification of**
- 23.1 The Bidder may withdraw, substitute, or modify its bid after submission, provided that written notice of the withdrawal, substitution, or modification is received by the Purchaser prior to the deadline prescribed for bid submission. All notices must be

Bids

duly signed by an authorized representative and shall include a copy of the authorization (the power of attorney) in accordance with ITB Sub-Clause 19.2.

23.2 All notices of withdrawal, substitution, or modification shall

- (a) be addressed to the Purchaser at the address named in the BDS for ITB Clause 20.2 (a), and
- (b) bear the Contract name, the IFB Title and IFB Number, and the words “BID WITHDRAWAL NOTICE”, “BID SUBSTITUTION NOTICE”, or “BID MODIFICATION NOTICE”.

23.3 A notice may also be sent by electronic means such as fax or e-mail, but in this case must include a scan of the mailing receipt showing both the sender's and receiver's addresses for the signed hardcopy of the notice, and a scan of the power of attorney.

23.4 Bids requested to be withdrawn in accordance with ITB 23.1 shall be returned unopened to the Bidders. Bid withdrawal notices received after the bid submission deadline will be ignored, and the submitted bid will be deemed to be a validly submitted bid.

23.5 The substitution or modification of the bid shall be prepared, sealed, marked, and dispatched as follows:

- (a) The Bidders shall provide an original and the number of copies specified in the BDS for ITB Clause 19.1 of any substitution or modification to its bid, clearly identified as such, in two inner envelopes duly marked “BID SUBSTITUTION -- ORIGINAL” or “BID MODIFICATION -- ORIGINAL” and “BID SUBSTITUTION -- COPIES” or “BID MODIFICATION -- COPIES.” The inner envelopes shall be sealed in an outer envelope, which shall be duly marked “BID SUBSTITUTION” or “BID MODIFICATION”.
- (b) Other provisions concerning the marking and dispatch of a bid substitution or modification shall be in accordance with ITB Clauses 20.2, 20.3, and 20.4.

23.6 No bid may be withdrawn, substituted, or modified in the interval between the bid submission deadline and the expiration of the bid validity period specified by the Bidder in the Bid Submission Form, or any extension thereof agreed to by the Bidder. Withdrawal of a bid during this interval may result in the execution of the Bid-Securing Declaration, if any, or forfeiture of the Bid Security, if any, pursuant to ITB Clause

17.6.

E. BID OPENING AND EVALUATION

24. Opening of Bids by Purchaser

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

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

of the Bidding Documents without material deviations, exceptions, objections, conditionalities, or reservations. A material deviation, exception, objection, conditionality, or reservation is one: (i) that limits in any substantial way the scope, quality, or performance of the Information System; or (ii) that limits, in any substantial way that is inconsistent with the Bidding Documents, the Purchaser's rights or the successful Bidder's obligations under the Contract; or (iii) the acceptance of which would unfairly affect the competitive position of other Bidders who have submitted substantially responsive bids.

26.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity. The Purchaser's determination of bid responsiveness will be based on the contents of the bid itself.

27. Conversion to Single Currency

27.1 For evaluation and comparison purposes, the Purchaser shall convert all bid prices expressed in various currencies and amounts into a single currency **specified in the BDS**, using the selling exchange rate established by the source and on the date also **specified in the BDS**.

28. Evaluation and Comparison of Bids

28.1 The Purchaser will evaluate and compare the bids that have been determined to be substantially responsive, pursuant to ITB Clause 26. The evaluation will be performed assuming either that:

- (a) the Contract will be awarded to the lowest evaluated Bidder for the entire Information System; or
- (b) if **specified in the BDS**, Contracts will be awarded to the Bidders for each individual Subsystem, lot, or slice defined in the Technical Requirements whose bids result in the lowest combined evaluated price for the entire System.

In the latter case, discounts that are conditional on the award of more than one Subsystem, lot, or slice may be offered in bids. However, such discounts will only be considered in the price evaluation if so **confirmed in the BDS**.

28.2 To be considered for Contract award, Bidders must have submitted bids

- (a) for which detailed bid evaluation using the same standards for compliance determination as listed in ITB Clauses 26.3 and 26.4 confirms that the bids are commercially and technically responsive, and include the hardware,

Software, related equipment, products, Materials, and other Goods and Services components of the Information System in, substantially, the full required quantities for the entire Information System or, if allowed in the BDS for ITB Clause 28.1, the individual Subsystem, lot or slice bid on; and

- (b) that offer Information Technologies that are proven to perform up to the standards promised in the bid by having successfully passed the performance, benchmark, and/or functionality tests the Purchaser may require, pursuant to ITB Clause 31.2.

28.3 The Purchaser's evaluation of a bid will be made on the basis of prices quoted in accordance with ITB Clause 14 (Bid Prices).

28.4 If **indicated by the BDS**, the Purchaser's evaluation of responsive bids will take into account technical factors, in addition to cost factors. An Evaluated Bid Score (B) will be calculated for each responsive bid using the following formula, which permits a comprehensive assessment of the bid price and the technical merits of each bid:

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

where

C = Evaluated Bid Price

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

T = the total Technical Score awarded to the bid

T_{high} = the Technical Score achieved by the bid that was scored highest among all responsive bids

X = weight for the Price as **specified in the BDS**

The bid with the highest Evaluated Bid Score (B) among responsive bids shall be termed the Lowest Evaluated Bid and is eligible for Contract award, provided the Bidder was prequalified and/or it was found to be qualified to perform the Contract in accordance with ITB Clause 31 (Post qualification).

28.5 If, in addition to the cost factors, the Purchaser has chosen to give weight to important technical factors (i.e., the price weight, X, is less than 1 in the evaluation), that cannot be reduced to life-cycle costs or pass/fail criteria, the Total Technical Points

assigned to each bid in the Evaluated Bid Formula will be determined by adding and weighting the scores assigned by an evaluation committee to technical features of the bid in accordance with the criteria set forth below.

- (a) The technical features to be evaluated are generally defined below and specifically **identified in the BDS**:
 - (i) Performance, capacity, or functionality features that either exceed levels specified as mandatory in the Technical Requirements; and/or influence the life-cycle cost and effectiveness of the Information System.
 - (ii) Usability features, such as ease of use, ease of administration, or ease of expansion, which influence the life-cycle cost and effectiveness of the Information System.
 - (iii) The quality of the Bidder's Preliminary Project Plan as evidenced by the thoroughness, reasonableness, and responsiveness of: (a) the task and resource schedules, both general and specific, and (b) the proposed arrangements for management and coordination, training, quality assurance, technical support, logistics, problem resolution, and transfer of knowledge, and other such activities as specified by the Purchaser in Section VI (Technical Requirements) or proposed by the Bidder based on the Bidder's experience.
- (b) Feature scores will be grouped into a small number of evaluation categories, generally defined below and specifically **identified in the BDS**, namely:
 - (i) The technical features that reflect how well the Information System meets the Purchaser's Business Requirements (including quality assurance and risk-containment measures associated with the implementation of the Information System).
 - (ii) The technical features that reflect how well the Information System meets the System's Functional Performance Standards.
 - (iii) The technical features that reflect how well the Information System meets the General Technical Requirements for hardware, network and

communications, Software, and Services.

- (c) As **specified in the BDS**, each category will be given a weight and within each category each feature may also be given a weight.
- (d) During the evaluation process, the evaluation committee will assign each desirable/preferred feature a whole number score from 0 to 4, where 0 means that the feature is absent, and 1 to 4 either represent predefined values for desirable features amenable to an objective way of rating (as is the case for, e.g., extra memory, or extra mass storage capacity, etc., if these extras would be conducive for the utility of the system), or if the feature represents a desirable functionality (e.g., of a software package) or a quality improving the prospects for a successful implementation (such as the strengths of the proposed project staff, the methodology, the elaboration of the project plan, etc., in the bid), the scoring will be 1 for the feature being present but showing deficiencies; 2 for meeting the requirements; 3 for marginally exceeding the requirements; and 4 for significantly exceeding the requirements.
- (e) The score for each feature (i) within a category (j) will be combined with the scores of features in the same category as a weighted sum to form the Category Technical Score using the following formula:

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

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

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

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

where:

S_j = the Category Technical Score of category “j”

W_j = the weight of category “j” as **specified in the BDS**

n = the number of categories

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

28.6 The Evaluated Bid Price (C) for each responsive bid will be determined as the sum of the Adjusted Supply and Installation Costs (P) plus the Recurrent Costs (R);

where the Adjusted Supply and Installation Costs (P) are determined as:

- (a) The price of the hardware, Software, related equipment, products, Materials and other Goods offered from within or from outside the Purchaser’s Country, in accordance with ITB 14.4; plus
- (b) The total price for all software development, transportation, insurance, installation, customization, integration, Commissioning, testing, training, technical support, repair, and other Services, in accordance with ITB 14.5;
- (c) with adjustments for:
 - (i) Deviations proposed to the Implementation Schedule in the Technical Requirements resulting in delayed completion of the entire Information System, if **permitted in the BDS** and provided they do not exceed the maximum permissible delay period **specified in the BDS**. For evaluation purposes, a pro rata increase of the total Supply and Installation Costs will be added using the percentage(s) **specified in the BDS** for each week of delay. Bids offering deliveries beyond the maximum permissible delay specified may be rejected.
 - (ii) Deviations taken to the Contract payment schedule specified in the SCC. If deviations are **permitted in the BDS**, for evaluation purposes the total Supply and Installation Costs will be increased pro rata by the amount of interest that could otherwise be earned on the amount of any payments that would fall due under the proposed schedule earlier than the schedule

stipulated in the SCC, at the interest rate **specified in the BDS**.

- (iii) Goods and Services that are required for the Information System but have been left out or are necessary to correct minor deviations of the bid will be added to the total Supply and Installation Costs using costs taken from the highest prices from other responsive bids for the same Goods and Services, or in the absence of such information, the cost will be estimated at prevailing list prices. If the missing Goods and Services are a scored technical feature, the relevant score will be set at zero.
 - (iv) Corrections to errors in arithmetic, in accordance with ITB Clause 26.2.
 - (v) Any discounts offered for the award of more than one Subsystem, lot, or slice, if the BDS for ITB Clause 28.1 permits the consideration of discounts in the price evaluation.
- (d) The Recurrent Costs (R) are reduced to net present value and determined using the following formula:

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

where

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

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

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

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

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

29. Domestic Preference

29.1 No margin of domestic preference will apply.

- 30. Contacting the Purchaser**
- 30.1 From the time of bid opening to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bid, it should do so in writing.
- 30.2 If a Bidder tries to directly influence the Purchaser or otherwise interfere in the bid evaluation process and the Contract award decision, its bid may be rejected.

F. POSTQUALIFICATION AND AWARD OF CONTRACT

- 31. Post-qualification**
- 31.1 The Purchaser will determine at its own cost and to its satisfaction whether the Bidder (including Joint Venture Partners, and any Subcontractors for which the BDS for ITB Clause 6.1 (a) permits that their qualifications count towards the required Bidder qualifications) that is selected as having submitted the Lowest Evaluated Bid is qualified to perform the Contract satisfactorily, in accordance with ITB Clause 6. If a prequalification process was undertaken for the Contract(s) for which these Bidding Documents were issued, the Purchaser will determine in the manner described above that no material changes have occurred after the prequalification that negatively affect the ability of the Bidder that has submitted the Lowest Evaluated Bid to perform the Contract.
- 31.2 Pursuant to ITB Clauses 6 and 16, and as additionally may be **specified in the BDS**, the determination will evaluate the Bidder's financial, technical, design, integration, customization, production, management, and support capabilities and will be based on an examination of the documentary evidence of the Bidder's qualifications, as well as other information the Purchaser deems necessary and appropriate. This determination may include visits or interviews with the Bidder's clients referenced in its bid, site inspections, and any other measures. If so **specified in the BDS**, at the time of postqualification the Purchaser may also carry out tests to determine that the performance or functionality of the Information System offered meets those stated in the Technical Requirements.
- 31.3 An affirmative postqualification determination will be a prerequisite for award of the Contract to the Lowest Evaluated Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated Bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.
- 32. Award**
- 32.1 Subject to ITB Clause 34, the Purchaser will award the Contract

- Criteria** to the Bidder whose bid has been determined to be substantially responsive and the Lowest Evaluated Bid, provided further that the Bidder has been determined to be qualified to perform the Contract satisfactorily, pursuant to ITB Clause 31.
- 33. Purchaser's Right to Vary Quantities at Time of Award**
- 33.1 The Purchaser reserves the right at the time of Contract award to increase or decrease, by the percentage(s) **indicated in the BDS**, any of the following:
- (a) the quantity of substantially identical Subsystems; or
 - (b) the quantity of individual hardware, Software, related equipment, Materials, products, and other Goods components of the Information System; or
 - (c) the quantity of Installation or other Services to be performed,
- from that originally specified in the Technical Requirements (as amended by any Addenda issued pursuant to ITB Clause 11), without any change in unit prices or other terms and conditions.
- 34. Purchaser's Right to Accept Any Bid and to Reject Any or All Bids**
- 34.1 The Purchaser reserves the right to accept or reject any bid or to annul the bidding process and reject all bids at any time prior to Contract award, without thereby incurring any liability to the Bidders.
- 35. Notification of Award**
- 35.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its bid has been accepted.
- 35.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 35.3 The Purchaser shall promptly publish in UNDB online and in dgMarket the results, identifying the bid and lot numbers and the following information: (i) name of each Bidder who submitted a bid; (ii) bid prices as read out at bid opening; (iii) name, evaluated price and, if the bidding conditions included scoring for technical quality, the technical score of each bid that was evaluated; (iv) name of Bidders whose bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful Bidders may make a request in writing to the Purchaser for a debriefing seeking explanations on the grounds

on which their bids were not selected. The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after publication of contract award, requests a debriefing.

35.4 Upon the successful Bidder furnishing the signed Contract Agreement and the Performance Security pursuant to ITB Clause 37, the Purchaser will promptly notify each unsuccessful Bidder, and will discharge all remaining Bid Securities, if any, as provided in ITB Clause 17.5 (c) and (d).

36. Signing of Contract

36.1 At the same time as the Purchaser notifies the successful Bidder that its bid has been accepted, the Purchaser will send the Bidder the Contract Agreement provided in the Bidding Documents, incorporating all agreements between the parties.

36.2 As soon as practically possible, but no more than twenty-eight (28) days following receipt of the Contract Agreement, the successful Bidder shall sign and date it, and return it to the Purchaser.

37. Performance Security

37.1 As soon as practically possible, but no more than twenty-eight (28) days following receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the GCC, using the Performance Security form provided in the Bidding Documents or another form acceptable to the Purchaser.

37.2 Failure of the successful Bidder to comply with the requirements of ITB Clause 36 or ITB Clause 37.1 shall constitute sufficient grounds for the annulment of the award and, if and as applicable, execution of the Bid-Securing Declaration or forfeiture of the Bid Security, in which event the Purchaser may make the award to the next lowest evaluated bid submitted by a qualified Bidder or call for new bids.

38. Adjudicator

38.1 Unless otherwise **stated in the BDS**, the Purchaser proposes that the person named in the BDS be appointed as Adjudicator under the Contract to assume the role of informal Contract dispute mediator, as described in GCC Clause 6. In this case, a résumé of the named person is **attached to the BDS**. The proposed hourly fee for the Adjudicator is **specified in the BDS**. The expenses that would be considered reimbursable to the Adjudicator are also **specified in the BDS**. If a Bidder does not accept the Adjudicator proposed by the Purchaser, it should state its non-acceptance in its Bid Submission Form and make a counterproposal of an Adjudicator and an hourly fee, attaching a résumé of the alternative. If the successful Bidder and the Adjudicator nominated in the BDS happen to be from the same

country, and this is not the country of the Purchaser too, the Purchaser reserves the right to cancel the Adjudicator nominated in the BDS and propose a new one. If by the day the Contract is signed, the Purchaser and the successful Bidder have not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed, at the request of either party, by the Appointing Authority specified in the SCC clause relating to GCC Clause 6.1.4, or if no Appointing Authority is specified there, the Contract will be implemented without an Adjudicator.

SECTION II. BID DATA SHEET (BDS)

Bid Data Sheet

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

A. GENERAL

ITB 1.1	<p>Name of Purchaser: Ministry of Communications and Information Technology</p> <p>Name of authorized Purchasing Agent: None</p> <p>Description of the System for which bids are invited: Design, Development, Configuration, Hardware Supply, Installation and Maintenance for the Myanmar National Portal.</p>
ITB 1.2	<p>Title of IFB: Design, Development, Configuration, Hardware Supply, Installation and Maintenance for the Myanmar National Portal.</p> <p>Number of IFB: G 3.1</p> <p>Name of resulting Contract(s): Design, Development, Configuration, Hardware Supply, Installation and Maintenance for the Myanmar National Portal.</p>
ITB 1.4	<p>Alternative e-Tendering procedures are not available in this procurement.</p>
ITB 2.1	<p>Name of the Borrower: The Government of the Republic of the Union of Myanmar</p> <p>Credit number: MM-5353</p> <p>Credit amount: US\$ 31.5 million</p> <p>Name of Project: Telecommunication Sector Reform Project</p>
ITB 6.1 (a)	<p>Qualification requirements for Bidders are:</p> <ol style="list-style-type: none"> 1. The bidder shall have more than 10 years experience in web portal and electronic service development field; 2. The bidder shall have at least 8 years experience in executing e-Government projects. 3. The bidder shall furnish references to demonstrate that it has completed at least two or more successful government portal projects, which involve design, development, installation, and provision of web portal system and maintenance. In reference to this requirement, documentary evidence to demonstrate

	<p>involving design, development, installation, and provision of software and technical support for portal system must be provided.</p> <ol style="list-style-type: none"> 4. The bidder should demonstrate its ability to ensure local presence (either existing or planned) or submit plans to establish local presence to support the project. 5. The bidder shall furnish documentary evidence that it meets either of the following financial requirement(s); <ol style="list-style-type: none"> a. Average Annual Turnover of the Bidder should not less than US\$ 3 million or equivalent, for the recent (3) (2012, 2013, 2014) years, Or b. Access to liquid assets of US\$ 1.5 million equivalent 6. The bidder and each of partners in case of joint venture should have the bank's certificate of solvency and a statement from their bank certifying their financial capability to undertake the project. 7. The bidder shall disclose details to any pending litigation against the bidder, or any member of the joint venture or Consortium, or any of its owners/partners. <p>All above information must be submitted in order to determine whether bidder is qualified.</p>
ITB 6.1 (b)	<p>Manufacturer's Authorizations for Information Technologies - except for those technologies which the Bidder itself manufactures - are required for the following types/categories:</p> <p>“NO MAF is required for proprietary software and hardware supplied as part of the National Portal Development. However MAF are required for Server, Load Balancer, San Storage, Firewall and Switch”</p>
ITB 6.1 (c)	<p>If the Bidder proposes to use Subcontractors for the provision of certain key services, written agreements by the proposed firms to provide these services in case of contract(s) resulting from this bidding are required for the following types/categories of services:</p> <p>“All services to be specified are covered by such an agreement”</p>

B. THE BIDDING DOCUMENTS

ITB 10.1	<p>Purchaser's / duly authorized Purchasing Agent's addresses:</p> <p>Ministry of Communications and Information Technology Building Number 2, Nay Pyi Taw, Myanmar Contact Person: Mr. Than Htun Aung (Director, Post and Telecommunications)</p>
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	<p>Department) Facsimile +95 67 407539, E-mail: tsrproject2014@gmail.com; thanhtunaung@mptngw.net.mm</p> <p>Ministry of Communications and Information Technology, e-Government Department, Information Technology and Cyber Security Department (ITCSD), S12 Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar. Contact Person: Ms. Nwe Ni Soe Yin (Director, Information Technology and Cyber Security Department) Facsimile +95 67 422447 Email: nwenisoeyin@e-mcit.gov.mm; nwenisoeyin@gmail.com</p>
ITB 10.2	<p>Dates, times, and places for the pre-bid meeting: Date: January 25, 2016 Time: 10:00 AM Place: Data Centre, e-Government Department, Information Technology and Cyber Security Department (ITCSD), S12 Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar.</p>

C. PREPARATION OF BIDS

ITB 12.1	The language of the bid and of all correspondence and documents related to it is: English
ITB 14.1	Recurrent cost items are not required.
ITB 14.4	The Incoterms edition is “ Incoterms 2010 — ICC Official Rules for the Interpretation of Trade Terms” published in September 1999 by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France”.
ITB 14.4 (a)	For foreign goods priced on a CIP to named Nay Pyi Taw and will include all costs including taxes payable under the contract. The bidder should estimate applicable costs separately in the letter of submission and cost tables.

	<p>Final taxes will be finalized during pre-contract discussion with successful bidder.</p> <p>The named place of destination shall be the</p> <p>Address: Data Centre, e-Government Department, Information Technology and Cyber Security Department (ITCSD), Ministry of Communications and Information Technology, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar.</p>
ITB 14.7	Prices quoted by the Bidder shall be fixed.
ITB 15.1 (b)	The currency to be used for quoting prices of the Goods and Services components of the System offered locally (i.e., from within the Purchaser's Country), as well as local currency expenditures for local technical support, training, maintenance, transportation, insurance, and other local services incidental to delivery, installation and operation of the System, is: Myanmar Kyats.
ITB 16.2 (c)	<p>In addition to the topics described in ITB Clause 16.2 (c), the Preliminary Project Plan must address the following topics:</p> <ul style="list-style-type: none"> a. Project Management Plan b. Task, Time, and Resource Schedule c. Implementation Plan d. Requirements verification, and Detailed Design e. Installation Plan and Delivery of Hardware f. Change Management Plan g. Training Plan h. Test Plans i. Warranty Service Plan j. Maintenance Plan k. Technical Support Plan l. System Quality Assurance and Control Plan m. Turnover plan

ITB 16.3	In the interest of effective integration, cost-effective technical support, and reduced re-training and staffing costs, Bidders are required to offer specific brand names and models for the following limited number of specific items: None.
ITB 17.1	A bid security will be required. The amount of bid security required is: <i>US\$, 16,000.00</i> . The bid security should be valid for a period of 148 days after the deadline for bid submission, as specified below in reference to ITB Clause 21.
ITB 18.1	The bid validity period shall be 120 days after the deadline for bid submission, as specified below in reference to ITB Clause 21. Accordingly, each bid shall be valid through: the actual date of the expiration of the bid validity period (i.e., the date that happens to be 90 days after the date of bid opening).
ITB 19.1	Required number of bid copies, besides the original: five (5) copies.

D. SUBMISSION OF BIDS

ITB 20.2 (a)	The addresses for bid submission are: Ministry of Communications and Information Technology e-Government Department, Information Technology and Cyber Security Department (ITCSD). S12, Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar Contact Person: Ms. Nwe Ni Soe Yin (Director, Information Technology and Cyber Security Department)
ITB 21.1	Deadline for bid submission is: <i>February 26, 2016</i>

E. BID OPENING AND EVALUATION

ITB 24.1	Time, date, and place for bid opening are: Date: February 26, 2016 Time: 14:00 hours Place: Ministry of Communications and Information Technology
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	<p>e-Government Department, Information Technology and Cyber Security Department (ITCSD). S12 Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar.</p>								
<p>ITB 27.1</p>	<p>The currency chosen for the purpose of converting to a common currency is: Myanmar Kyats.</p> <p>The source of exchange rate is: Central Bank of Myanmar.</p> <p>The date of exchange rate determination is: Date of Opening the Bid.</p> <p>In case that no exchange rates are available on this date from the source indicated above, the latest available exchange rates from the same source prior to this date would be used.</p>								
<p>ITB 28.1</p>	<p>Bids for Subsystems, lots, or slices of the overall Information System will not be accepted.</p> <p>Discounts for the award of multiple Subsystems, lots, or slices will not be considered in bid evaluation.</p>								
<p>ITB 28.4</p>	<p>The bid evaluation will take into account technical factors in addition to cost factors.</p> <p>The weight of the Price (“X” multiplied by 100 in the Evaluated Bid Score formula) = 70%</p>								
<p>ITB 28.5</p>	<p>As specified in ITB Clause 16.2 (a), specifications of features defined in Technical Requirements and other parts of these Bidding Documents are all mandatory unless explicitly specified as not, so if the Bidder’s proposal does not meet those minimal specifications, it will be eliminated from the evaluation process.</p> <p>The Bidder's proposal must directly correspond to all mandatory requirements; otherwise it will be eliminated from the evaluation process. However, the responsiveness to those requirements can be stronger than required. The responsiveness to some of the requirements will be scored as technical evaluation criteria. During the evaluation process, the evaluation committee will assign to such evaluation feature a whole number score from 0 to 4, in accordance to the following definitions:</p> <table border="1" data-bbox="540 1759 1414 1923"> <thead> <tr> <th data-bbox="540 1759 605 1923">T E C (j)</th> <th data-bbox="605 1759 894 1923">Technical Evaluation Category</th> <th data-bbox="894 1759 992 1923">Evaluation Weight W_j</th> <th data-bbox="992 1759 1414 1923">Points Definition</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	T E C (j)	Technical Evaluation Category	Evaluation Weight W_j	Points Definition				
T E C (j)	Technical Evaluation Category	Evaluation Weight W_j	Points Definition						

	1	<p>Methodology</p> <p>The bidder shall provide methodology for the portal requirements gathering, detailed design, development, testing and system commissioning.</p>	15%	<p>0 Does not provide the methodology this bid will be automatically disqualified;</p> <p>1 Provides the methodology with insufficient depth e.g. sections of the methodology e.g. requirements gathering is not at the action item level;</p> <p>2 Provides the methodology with sufficient depth i.e. clear steps for the methodology and at the action item level;</p> <p>3 Marginally exceeds requirements. The bidder is able to itemize each action item. For each action item, the bidder shall provide clear description, state the roles and responsibilities for the bidder and the client;</p> <p>4 Significantly exceeds requirements The bidder is able to itemize each action item. For each action item, the bidder shall provide clear description, state the roles and responsibilities for the bidder and the client, highlight the interdependencies between the action items, and state the intended outcomes.</p>
	2	<p>Project Plan</p> <p>The Quality and level of detail of the other segments of the Preliminary Project Plan.</p>	20	<p>0 Does not provide the project plan – this bid will be automatically disqualified;</p> <p>1 Submits project plan with missing sections e.g. no project schedule;</p> <p>2 Submits project plan with all key sections in place;</p> <p>3 Marginally exceeds requirements with a project plan with good clarity and depth at the action item level for all key sections;</p> <p>4 Significantly exceeds requirements with a project plan with good clarity and depth at the action item level for all key sections. In addition, the project plan identifies potential risks and recommends mitigating</p>

			measures.
3	<p>Proposed Portal Platform</p> <p>The bidder shall provide the solution for a suitable portal software platform to meet the functional requirements.</p>	20	<p>0 Does not propose the portal platform – this bid will be automatically disqualified;</p> <p>1 Proposed the portal platform that is deemed inappropriate as the software is intended for other purposes;</p> <p>2 Proposed an appropriate portal platform but does not contextualize the platform against the functional requirements;</p> <p>3 Proposed an appropriate portal platform with contextualization done against the functional requirements incompletely;</p> <p>4 Proposed an appropriate portal platform with contextualization done against the functional requirements completely;</p>
4	<p>Validate Portal Hardware</p> <p>The bidder shall validate that the hardware architecture and hardware specifications meets the portal performance requirement.</p>	20	<p>0 Does not validate the portal hardware amongst the portal performance requirement – this bid will be automatically disqualified;</p> <p>1 Validates the portal hardware but does not provide details on the validation proof;</p> <p>2 Validates the portal hardware and provides details on the validation proof but does not provide details on the recommendations for additional/alternative hardware architecture and equipment to meet the performance standards;</p> <p>3 Validates the portal hardware and provides details on the validation proof and details the recommendations for additional/alternative hardware architecture and equipment to meet the performance standards;</p> <p>4 Validates the portal hardware and provides details on the validation proof and provides details the recommendations for</p>

				additional/alternative hardware architecture and equipment to meet the performance standards. In addition, the bidder highlights the challenges and assumptions in relation to the hardware architecture meeting the performance standards;
5	<p>Organization and Staffing</p> <p>Including the following sub-criteria and weights of the Supplier's HR</p> <ul style="list-style-type: none"> a. Team Leader. Minimum 10 years of experience. (35%) b. Portal Software Solution & Development specialist. Minimum 5 years of experience. (20%) c. Lead e-Service developer. Minimum 5 years of experience (15%) d. Lead DBMS Architect. Minimum 5 years of experience (10%) e. Web Designer. Minimum 5 years of experience (10%) f. Hardware Engineer. Minimum 5 	25	<p>0 Does not provide details of the staffing – this bid will be automatically disqualified;</p> <p>1 Provides details with inexperienced staffing e.g. insufficient years of experience;</p> <p>2 Provides details of the staffing, all with sufficient years of experience;</p> <p>3 Provides details of the staffing, all with sufficient years of experience, with experience in portal implementations;</p> <p>4 Provides details of the staffing, all with sufficient years of experience, with experience in national level eGovernment portal implementations.</p>	

	<table border="1"> <tr> <td></td> <td>years of experience (10%)</td> <td></td> <td></td> </tr> </table>		years of experience (10%)		
	years of experience (10%)				
	The score for each feature will be combined as a weighted sum to form the Category Technical Score. The Category Technical Scores will be combined in a weighted sum to form the total Technical Bid Score using the formula stipulated in ITB 28.5				
ITB 28.6 (c) (i)	<p>The Purchaser will accept deviations in the schedule of installation and commissioning specified in the Implementation Schedule. If the bidder can deliver the milestones earlier, the Bidder can propose the range in weeks (i.e Start and End Dates, based on the bidder's methodology).</p> <p>The percentage for adjustment of a bid offering to complete installation and commissioning later than the specified date, but earlier than the maximum delay, is 0.5 % of the bid price per week</p>				
ITB 28.6 (c) (ii)	The Purchaser will not accept deviations in the payment schedule in the SCC.				
ITB 28.6 (d)	Not applicable				

F. POSTQUALIFICATION AND AWARD OF CONTRACT

ITB 31.2	<p>As additional postqualification measures, the Information System (or components/parts of it) offered by the Lowest Evaluated Bidder may be subjected to the following tests and performance benchmarks prior to Contract award:</p> <p>Tests run demonstration of similar applications software developed by the Bidder or reference site visits.</p> <p>Evaluation Committee or the officials or their designated representatives will carry out the post-qualification measures.</p>
ITB 33.1	Percentage for quantity increase or decrease: 10% on hardware.
ITB 38.1	There will be an Adjudicator under this Contract.
ITB 39	<p>Complaints Procedure</p> <ul style="list-style-type: none"> • Any party may make a complaint at any stage of the procurement process. No complaint will be responded to during the evaluation period. The Purchaser will review complaints received during the evaluation period and a response issued only after the evaluation is completed. • Complaints shall be addressed to the Purchaser as named in the BDS (ITB 10.1). The Purchaser will investigate the

	<p>grounds for the complaint and, with the exception of those complaints received during the evaluation period as described above, respond to in writing within 14 calendar days of receiving the complaint</p> <ul style="list-style-type: none">• In the event that the response from the Purchaser does not satisfy the bidder or there is no response to the complaint it should be referred to the designated official of the Ministry of Finance.• The address to sending complaints to: <p>Attention: Mr. Than Htun Aung Director, Post and Telecommunications Department Facsimile +95 67 407539, E-mail: tsrproject2014@gmail.com; thanhtunaung@mptngw.net.mm City: Nay Pyi Taw Country: Myanmar</p> <p>cc</p> <p>Ms. Tenzin Dolma Norbhu Task Team Leader The World Bank Country Office Email: tnorbhu@worldbank.org</p>
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**SECTION III. ELIGIBLE COUNTRIES FOR THE PROVISION OF
GOODS, WORKS, AND SERVICES IN BANK-FINANCED
PROCUREMENT**

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

As of September 2007

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

SECTION IV. 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 Forms Section of the Bidding Documents and any modifications to this form agreed to by the Purchaser and the Supplier. The date of the Contract Agreement shall be recorded in the signed form.

(iv) “GCC” means the General Conditions of Contract.

(v) “SCC” means the Special Conditions of Contract.

(vi) “Technical Requirements” means the Technical Requirements Section of the Bidding Documents.

(vii) “Implementation Schedule” means the Implementation Schedule Sub-section of the Technical Requirements.

viii) “Contract Price” means the price or prices defined in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.

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

by the Supplier.

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

supply, install, customize, integrate, and make operational the System. Such Services may include, but are not restricted to, activity management and quality assurance, design, development, customization, documentation, transportation, insurance, inspection, expediting, site preparation, installation, integration, training, data migration, Pre-commissioning, Commissioning, maintenance, and technical support.

- (vi) “The Project Plan” means the document to be developed by the Supplier and approved by the Purchaser, pursuant to GCC Clause 19, based on the requirements of the Contract and the Preliminary Project Plan included in the Supplier’s bid. The “Agreed and Finalized Project Plan” is the version of the Project Plan approved by the Purchaser, in accordance with GCC Clause 19.2. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.
- (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 and Finalized Project Plan to be carried out to ascertain whether the System, or a specified Subsystem, is able to attain the functional and performance requirements specified in the Technical Requirements and Agreed and Finalized Project Plan, in accordance with the provisions of GCC Clause 27.2 (Operational Acceptance Test).
 - (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) “Project Site(s)” means the place(s) **specified in the SCC** 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 Guidelines. (**Note:** The World Bank maintains a list of countries from which Bidders, Goods, and Services are not eligible to participate in procurement financed by the Bank. The list is regularly updated and can be obtained from the Public Information Center of the Bank or its web site on procurement. A copy of the list is contained

in the Section of the Bidding Documents entitled “Eligible Countries for the Provision of Goods, Works, and Services in Bank-Financed Procurement”).

- (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 **specified in the SCC**.
- (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 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).

(xiii) “The Coverage Period” means the Days of the Week and the hours of those Days during which maintenance, operational, and/or technical support services (if any) must be available.

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 All Contract Documents and related correspondence exchanged between Purchaser and Supplier shall be written in the language **specified in the SCC**, and the Contract shall be construed and interpreted in accordance with that language.

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 current Incoterms (“Incoterms 2010” or a more recent version if

and as published). Incoterms are the international rules for interpreting trade terms published by the International Chamber of Commerce, 38 Cours Albert 1er, 75008 Paris, France.

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

4.1.1 Any notice sent by cable, telegraph, telex, facsimile,

electronic mail, or EDI shall be confirmed within two (2) days after dispatch by notice sent by airmail post or special courier, except as otherwise specified in the Contract.

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 cable, telegraph, telex, 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, cable, telex, 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.

6. Settlement of Disputes

6.1 Adjudication

6.1.1 If any dispute of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity, or termination, or the operation of the System (whether during the progress of implementation or after its achieving Operational Acceptance and whether before or after the termination, abandonment, or breach of the Contract), the parties shall seek to resolve any such dispute by mutual consultation. If the parties fail to resolve such a dispute by mutual consultation within fourteen (14) days after one party has notified the other in writing of the dispute, then, if the Contract Agreement in Appendix 2 includes and names an Adjudicator, the dispute shall, within another fourteen (14) days, be referred in writing by either party to the Adjudicator, with a copy to the other party. If there is no Adjudicator specified in the Contract Agreement, the mutual consultation period stated above shall last twenty-eight (28) days (instead of fourteen), upon expiry of which either party may move to the notification of arbitration pursuant to GCC Clause 6.2.1.

6.1.2 The Adjudicator shall give his or her decision in writing to both parties within twenty-eight (28) days of the dispute being referred to the Adjudicator. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either the Purchaser or the Supplier within fifty-six (56) days of such reference, the decision shall become final and binding upon the Purchaser and the Supplier. Any decision that has become final and binding shall be implemented by the parties forthwith.

6.1.3 The Adjudicator shall be paid an hourly fee at the rate specified in the Contract Agreement plus reasonable expenditures incurred in the execution of duties as Adjudicator, and these costs shall be divided equally between the Purchaser and the Supplier.

6.1.4 Should the Adjudicator resign or die, or should the Purchaser and the Supplier agree that the Adjudicator is not fulfilling his or her functions in accordance with

the provisions of the Contract, a new Adjudicator shall be jointly appointed by the Purchaser and the Supplier. Failing agreement between the two within twenty-eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority **specified in the SCC**, or, if no Appointing Authority is **specified in SCC**, the Contract shall, from this point onward and until the parties may otherwise agree on an Adjudicator or an Appointing Authority, be implemented as if there is no Adjudicator.

6.2 Arbitration

6.2.1 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 6.1.2, or
- (b) the Adjudicator fails to give a decision within the allotted time from referral of the dispute pursuant to GCC Clause 6.1.2, and the Purchaser or the Supplier acts within the following fourteen (14) days, or
- (c) in the absence of an Adjudicator from the Contract Agreement, the mutual consultation pursuant to GCC Clause 6.1.1 expires without resolution of the dispute and the Purchaser or the Supplier acts within the following fourteen (14) days,

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.

- 6.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Clause 6.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after Installation of the Information System.

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

6.3 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.

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 and Finalized 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 bid, such as consumables, spare parts, and technical services (e.g., maintenance, technical assistance, and operational support), are as **specified in the SCC**, including the relevant terms, characteristics, and timings.

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 in the Technical Requirements Section and any refinements made in the Agreed and Finalized 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) within the time **specified in the SCC** and in accordance with the time schedule specified in the Implementation Schedule in the Technical Requirements Section and any refinements made in the Agreed and Finalized Project Plan, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

9. Supplier's Responsibilities

9.1 The Supplier shall conduct all activities with due care and diligence, in accordance with the Contract and with the skill and care expected of a competent provider of information technologies, information systems, support, maintenance, training, and other related services, or in accordance with best industry practices. In particular, the Supplier shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.

9.2 The Supplier confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the System provided by the Purchaser and on the basis of information that the Supplier could have obtained from a visual inspection of the site (if access to the site was available) and of other data readily available to the Supplier relating to the System as at the date twenty-eight (28) days prior to bid submission. The Supplier acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Contract.

9.3 The Supplier shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach a mutually Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for termination pursuant to GCC Clause 41.2.

- 9.4 The Supplier shall acquire in its name all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the Purchaser's Country that are necessary for the performance of the Contract, including, without limitation, visas for the Supplier's and Subcontractor's personnel and entry permits for all imported Supplier's Equipment. The Supplier shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Purchaser under GCC Clause 10.4 and that are necessary for the performance of the Contract.
- 9.5 The Supplier shall comply with all laws in force in the Purchaser's Country. The laws will include all national, provincial, municipal, or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless the Purchaser from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Clause 10.1. The Supplier shall not indemnify the Purchaser to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of the Purchaser.
- 9.6 The Supplier shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs, and all local laws and regulations pertaining to the employment of labor.
- 9.7 Any Information Technologies or other Goods and Services that will be incorporated in or be required for the System and other supplies shall have their Origin, as defined in GCC Clause 3.12, in a country that shall be an Eligible Country, as defined in GCC Clause 1.1 (e) (iv).
- 9.8 The Supplier shall permit the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors appointed by the Bank if required by the Bank. The Supplier's attention is drawn to Sub-Clause 41.2.1(c), which provides, inter alia, that acts intended to materially impede the exercise of the

Bank's inspection and audit rights provided for under Sub-Clause 9.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility under the Procurement Guidelines)

9.9 Other Supplier responsibilities, if any, are as **stated in the SCC**.

10. Purchaser's Responsibilities

10.1 The Purchaser shall ensure the accuracy of all information and/or data to be supplied by the Purchaser to the Supplier, except when otherwise expressly stated in the Contract.

10.2 The Purchaser shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed and Finalized Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.3.1 (b).

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

10.4 If requested by the Supplier, the Purchaser shall use its best endeavors to assist the Supplier in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities or public service undertakings that such authorities or undertakings require the Supplier or Subcontractors or the personnel of the Supplier or Subcontractors, as the case may be, to obtain.

10.5 In such cases where the responsibilities of specifying and acquiring or upgrading telecommunications and/or electric power services falls to the Supplier, as specified in the Technical Requirements, SCC, Agreed and Finalized Project Plan, or other parts of the Contract, the Purchaser shall use its best endeavors to assist the Supplier in obtaining such services in a timely and expeditious manner.

10.6 The Purchaser shall be responsible for timely provision of all resources, access, and information necessary for the Installation and Operational Acceptance of the System (including, but not limited to, any required telecommunications or electric power services), as identified

in the Agreed and Finalized Project Plan, except where provision of such items is explicitly identified in the Contract as being the responsibility of the Supplier. Delay by the Purchaser may result in an appropriate extension of the Time for Operational Acceptance, at the Supplier's discretion.

- 10.7 Unless otherwise specified in the Contract or agreed upon by the Purchaser and the Supplier, the Purchaser shall provide sufficient, properly qualified operating and technical personnel, as required by the Supplier to properly carry out Delivery, Pre-commissioning, Installation, Commissioning, and Operational Acceptance, at or before the time specified in the Technical Requirements Section's Implementation Schedule and the Agreed and Finalized Project Plan.
- 10.8 The Purchaser will designate appropriate staff for the training courses to be given by the Supplier and shall make all appropriate logistical arrangements for such training as specified in the Technical Requirements, SCC, the Agreed and Finalized Project Plan, or other parts of the Contract.
- 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 Other Purchaser responsibilities, if any, are **as stated in the SCC.**

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 The Contract Price shall be a firm lump sum not subject to any alteration, except:
- (a) in the event of a Change in the System pursuant to GCC Clause 39 or to other clauses in the Contract;
 - (b) in accordance with the price adjustment formula (if any) **specified in the SCC.**
- 11.3 The Supplier shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
- 12. Terms of Payment**
- 12.1 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the System or Subsystem(s), Delivered, Pre-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 All payments shall be made in the currency(ies) specified in the Contract Agreement, pursuant to GCC Clause 11. For Goods and Services supplied locally, payments shall be made in the currency of the Purchaser's Country, unless

otherwise **specified in the SCC**.

- 12.5 Unless otherwise **specified in the SCC**, payment of the foreign currency portion of the Contract Price for Goods supplied from outside the Purchaser's Country shall be made to the Supplier through an irrevocable letter of credit opened by an authorized bank in the Supplier's Country and will be payable on presentation of the appropriate documents. It is agreed that the letter of credit will be subject to Article 10 of the latest revision of Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce, Paris.

13. Securities

13.1 Issuance of Securities

The Supplier shall provide the securities specified below in favor of the Purchaser at the times and in the amount, manner, and form specified below.

13.2 Advance Payment Security

13.2.1 As **specified in the SCC**, the Supplier shall provide a security equal in amount and currency to the advance payment, and valid until the System is Operationally Accepted.

13.2.2 The security shall be in the form provided in the Bidding Documents or in another form acceptable to the Purchaser. The amount of the security shall be reduced in proportion to the value of the System executed by and paid to the Supplier from time to time and shall automatically become null and void when the full amount of the advance payment has been recovered by the Purchaser. The way the value of the security is deemed to become reduced and, eventually, voided is as **specified in the SCC**. The security shall be returned to the Supplier immediately after its expiration.

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 Forms Section of the Bidding Documents, or it shall be in another form acceptable

to the Purchaser.

13.3.3 The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The security shall be returned to the Supplier no later than twenty-eight (28) days after its expiration.

13.3.4 Upon Operational Acceptance of the entire System, the security shall be reduced to the amount **specified in the SCC**, on the date of such Operational Acceptance, so that the reduced security would only cover the remaining warranty obligations of the Supplier.

14. Taxes and Duties

14.1 For Goods or Services supplied from outside the Purchaser's country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country. Any duties, such as importation or customs duties, and taxes and other levies, payable in the Purchaser's country for the supply of Goods and Services from outside the Purchaser's country are the responsibility of the Purchaser unless these duties or taxes have been made part of the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to, in which case the duties and taxes will be the Supplier's responsibility.

14.2 For Goods or Services supplied locally, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods or Services to the Purchaser. The only exception are taxes or duties, such as value-added or sales tax or stamp duty as apply to, or are clearly identifiable, on the invoices and provided they apply in the Purchaser's country, and only if these taxes, levies and/or duties are also excluded from the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to.

14.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

14.4 For the purpose of the Contract, it is agreed that the Contract

Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of bid submission in the Purchaser's Country (also called "Tax" in this GCC Clause 14.4). If any Tax rates are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of the Contract, which was or will be assessed on the Supplier, its Subcontractors, or their employees in connection with performance of the Contract, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to or reduction from the Contract Price, as the case may be.

D. INTELLECTUAL PROPERTY

15. Copyright

- 15.1 The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such rights.
- 15.2 The Purchaser agrees to restrict use, copying, or duplication of the Standard Software and Standard Materials in accordance with GCC Clause 16, except that additional copies of Standard Materials may be made by the Purchaser for use within the scope of the project of which the System is a part, in the event that the Supplier does not deliver copies within thirty (30) days from receipt of a request for such Standard Materials.
- 15.3 The Purchaser's contractual rights to use the Standard Software or elements of the Standard Software may not be assigned, licensed, or otherwise transferred voluntarily except in accordance with the relevant license agreement or as may be otherwise **specified in the SCC**.
- 15.4 As applicable, the Purchaser's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software, including any license agreements, and with respect to Custom Materials or elements of the Custom Materials, are specified in the SCC. **Subject to the SCC**, the Intellectual Property Rights in all Custom Software and Custom Materials specified in Appendices 4 and 5 of the Contract Agreement (if any) shall, at the date of this Contract or on creation of the rights (if later than the date of this Contract), vest in the Purchaser. The Supplier shall do

and execute or arrange for the doing and executing of each necessary act, document, and thing that the Purchaser may consider necessary or desirable to perfect the right, title, and interest of the Purchaser in and to those rights. In respect of such Custom Software and Custom Materials, the Supplier shall ensure that the holder of a moral right in such an item does not assert it, and the Supplier shall, if requested to do so by the Purchaser and where permitted by applicable law, ensure that the holder of such a moral right waives it.

15.5 The parties shall enter into such (if any) escrow arrangements in relation to the Source Code to some or all of the Software as are **specified in the SCC** and in **accordance with the SCC**.

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) valid throughout the territory of the Purchaser's Country (or such other territory as **specified in the SCC**); and
 - (iv) subject to additional restrictions (if any) as **specified in the SCC**.
- (b) permit the Software to be:
 - (i) used or copied for use on or with the computer(s) for which it was acquired (if specified in the Technical Requirements and/or the Supplier's bid), plus a backup computer(s) of the same or similar capacity, if the primary is(are) inoperative, and during a reasonable transitional period when use is being transferred between primary and backup;

- (ii) as **specified in the SCC**, used or copied for use on or transferred to a replacement computer(s), (and use on the original and replacement computer(s) may be simultaneous during a reasonable transitional period) provided that, if the Technical Requirements and/or the Supplier's bid specifies a class of computer to which the license is restricted and unless the Supplier agrees otherwise in writing, the replacement computer(s) is(are) within that class;
- (iii) if the nature of the System is such as to permit such access, accessed from other computers connected to the primary and/or backup 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) as **specified in the SCC**, disclosed to, and reproduced for use by, support service suppliers and their subcontractors, (and the Purchaser may sublicense such persons to use and copy for use the Software) to the extent reasonably necessary to the performance of their support service contracts, subject to the same restrictions as are set forth in this Contract; and
- (vii) disclosed to, and reproduced for use by, the Purchaser and by such other persons as are **specified in the SCC** (and the Purchaser may sublicense such persons to use and copy for use the Software), subject to the same restrictions as are set forth in this Contract.

16.2 The Standard Software may be subject to audit by the Supplier, in accordance with the terms **specified in the SCC**, to verify compliance with the above license agreements.

17. Confidential Information

17.1 Except if otherwise **specified in the SCC**, the "Receiving Party" (either the Purchaser or the Supplier) shall keep confidential and shall not, without the written consent of the other party to this Contract ("the Disclosing Party"), divulge to any third party any documents, data, or other information of a confidential nature ("Confidential Information") connected with this Contract, and furnished directly or indirectly by the Disclosing Party prior to or during performance, or following termination, of this Contract.

17.2 For the purposes of GCC Clause 17.1, the Supplier is also deemed to be the Receiving Party of Confidential Information generated by the Supplier itself in the course of the performance of its obligations under the Contract and relating to the businesses, finances, suppliers, employees, or other contacts of the Purchaser or the Purchaser's use of the System.

17.3 Notwithstanding GCC Clauses 17.1 and 17.2:

- (a) the Supplier may furnish to its Subcontractor Confidential Information of the Purchaser to the extent reasonably required for the Subcontractor to perform its work under the Contract; and
- (b) the Purchaser may furnish Confidential Information of the Supplier: (i) to its support service suppliers and their subcontractors to the extent reasonably required for them to perform their work under their support service contracts; and (ii) to its affiliates and subsidiaries,

in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and abides by the Receiving Party's obligations under this GCC Clause 17 as if that person were party to the Contract in place of the Receiving Party.

17.4 The Purchaser shall not, without the Supplier's prior written consent, use any Confidential Information received from the Supplier for any purpose other than the operation, maintenance and further development of the System. Similarly, the Supplier shall not, without the Purchaser's prior written consent, use any Confidential Information received from the Purchaser for any purpose other than those that are required for the performance of the Contract.

- 17.5 The obligation of a party under GCC Clauses 17.1 through 17.4 above, however, shall not apply to that information which:
- (a) now or hereafter enters the public domain through no fault of the Receiving Party;
 - (b) can be proven to have been possessed by the Receiving Party at the time of disclosure and that was not previously obtained, directly or indirectly, from the Disclosing Party;
 - (c) otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of confidentiality.
- 17.6 The above provisions of this GCC Clause 17 shall not in any way modify any undertaking of confidentiality given by either of the parties to this Contract prior to the date of the Contract in respect of the System or any part thereof.
- 17.7 The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for three (3) years or such longer period as may be **specified in the SCC**.

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. Subject to the extensions and/or limitations **specified in the SCC** (if any), the Project Manager shall have the authority to represent the Purchaser on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the

Purchaser pursuant to GCC Clause 4.

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 Subject to the extensions and/or limitations **specified in the SCC** (if any), the Supplier's Representative shall have the authority to represent the Supplier on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Supplier pursuant to GCC Clause 4.

18.2.3 The Supplier shall not revoke the appointment of the Supplier's Representative without the Purchaser's prior written consent, which shall not be unreasonably withheld. If the Purchaser consents to such an action, the Supplier shall appoint another person of equal or superior qualifications as the Supplier's Representative, pursuant to the procedure set out in GCC Clause 18.2.1.

18.2.4 The Supplier's Representative and staff are obliged to work closely with the Purchaser's Project Manager and staff, act within their own authority, and abide by directives issued by the Purchaser that are consistent with the terms of the Contract. The Supplier's Representative is responsible for managing the activities of its personnel and any subcontracted

personnel.

18.2.5 The Supplier's Representative may, subject to the approval of the Purchaser (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions, and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Supplier's Representative and shall specify the powers, functions, and authorities thereby delegated or revoked. No such delegation or revocation shall take effect unless and until the notice of it has been delivered.

18.2.6 Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with GCC Clause 18.2.5 shall be deemed to be an act or exercise by the Supplier's Representative.

18.3 Objections and Removals

18.3.1 The Purchaser may by notice to the Supplier object to any representative or person employed by the Supplier in the execution of the Contract who, in the reasonable opinion of the Purchaser, may have behaved inappropriately, be incompetent, or be negligent. The Purchaser shall provide evidence of the same, whereupon the Supplier shall remove such person from work on the System.

18.3.2 If any representative or person employed by the Supplier is removed in accordance with GCC Clause 18.3.1, the Supplier shall, where required, promptly appoint a replacement.

19. Project Plan

19.1 In close cooperation with the Purchaser and based on the Preliminary Project Plan included in the Supplier's bid, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract. The contents of the Project Plan shall be as **specified in the SCC** and/or Technical Requirements.

19.2 The Supplier shall formally present to the Purchaser the Project Plan in accordance with the procedure specified in the SCC.

- 19.3 If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed and Finalized Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 39 and 40.
- 19.4 The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed and Finalized Project Plan and the Contract.
- 19.5 The Progress and other reports **specified in the SCC** shall be prepared by the Supplier and submitted to the Purchaser in the format and frequency specified in the Technical Requirements.

20. Subcontracting

- 20.1 Appendix 3 (List of Approved Subcontractors) to the Contract Agreement specifies critical items of supply or services and a list of Subcontractors for each item that are considered acceptable by the Purchaser. If no Subcontractors are listed for an item, the Supplier shall prepare a list of Subcontractors it considers qualified and wishes to be added to the list for such items. The Supplier may from time to time propose additions to or deletions from any such list. The Supplier shall submit any such list or any modification to the list to the Purchaser for its approval in sufficient time so as not to impede the progress of work on the System. The Purchaser shall not withhold such approval unreasonably. Such approval by the Purchaser of a Subcontractor(s) shall not relieve the Supplier from any of its obligations, duties, or responsibilities under the Contract.
- 20.2 The Supplier may, at its discretion, select and employ Subcontractors for such critical items from those Subcontractors listed pursuant to GCC Clause 20.1. If the Supplier wishes to employ a Subcontractor not so listed, or subcontract an item not so listed, it must seek the Purchaser's prior approval under GCC Clause 20.3.
- 20.3 For items for which pre-approved Subcontractor lists have not been specified in Appendix 3 to the Contract Agreement, the Supplier may employ such Subcontractors as it may select, provided: (i) the Supplier notifies the Purchaser in writing at least twenty-eight (28) days prior to the proposed mobilization date for such Subcontractor; and (ii) by the end of this period either the Purchaser has granted its approval in writing or fails to respond. The Supplier shall not engage any Subcontractor to which the Purchaser has objected in writing prior to the end of the notice period. The absence of a written objection by the Purchaser during the above

specified period shall constitute formal acceptance of the proposed Subcontractor. Except to the extent that it permits the deemed approval of the Purchaser of Subcontractors not listed in the Contract Agreement, nothing in this Clause, however, shall limit the rights and obligations of either the Purchaser or Supplier as they are specified in GCC Clauses 20.1 and 20.2, in the SCC, or in Appendix 3 of the Contract Agreement.

21. Design and Engineering

21.1 Technical Specifications and Drawings

21.1.1 The Supplier shall execute the basic and detailed design and the implementation activities necessary for successful installation of the System in compliance with the provisions of the Contract or, where not so specified, in accordance with good industry practice.

The Supplier shall be responsible for any discrepancies, errors or omissions in the specifications, drawings, and other technical documents that it has prepared, whether such specifications, drawings, and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors, or omissions are not because of inaccurate information furnished in writing to the Supplier by or on behalf of the Purchaser.

21.1.2 The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification of such design, drawings, specification, or other documents provided or designated by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Project Manager.

21.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of bid submission shall apply unless otherwise **specified in the SCC**. During Contract execution, any changes in such codes and standards shall be applied after approval by the Purchaser and shall be treated in accordance with GCC Clause 39.3.

21.3 Approval/Review of Technical Documents by the Project Manager

21.3.1 The Supplier shall prepare and furnish to the Project Manager the documents as **specified in the SCC** for the Project Manager's approval or review.

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 6.1 (Adjudicator). 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 6.1.2, then the Supplier shall be reimbursed by the Purchaser for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Adjudicator shall decide, and the Time for Achieving Operational Acceptance shall be extended accordingly.
- 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 telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate, with a copy to the cargo

insurance company:

- (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 telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Purchaser by mail or courier, as appropriate:

- (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 bid and still to be delivered, the Supplier shall be obligated to offer to the Purchaser the latest versions of the available Information Technologies having equal or better performance or functionality at the same or lesser unit prices, pursuant to GCC Clause 39 (Changes to the System).
- 23.2 At any point during performance of the Contract, for Information Technologies still to be delivered, the Supplier will also pass on to the Purchaser any cost reductions and additional and/or improved support and facilities that it offers to other clients of the Supplier in the Purchaser's Country, pursuant to GCC Clause 39 (Changes to the System).
- 23.3 During performance of the Contract, the Supplier shall offer to the Purchaser all new versions, releases, and updates of Standard Software, as well as related documentation and technical support services, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Purchaser's Country, and no later than twelve (12) months after they are released in the country of origin. In no case will the prices for these Software exceed those quoted by the Supplier in the Recurrent Costs tables in its bid.
- 23.4 During the Warranty Period, unless otherwise **specified in the SCC**, the Supplier will provide at no additional cost to the Purchaser all new versions, releases, and updates for all Standard Software that are used in the System, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Purchaser's country, and no later than twelve (12) months after they are released in the country of origin of the Software.
- 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 and Finalized Project Plan in accordance with the highest standards of professional competence and integrity.
- 24.2 Prices charged by the Supplier for Services, if not included in the Contract, shall be agreed upon in advance by the parties (including, but not restricted to, any prices submitted by the Supplier in the Recurrent Cost Schedules of its Bid) and shall not exceed the prevailing rates charged by the Supplier to other purchasers in the Purchaser's Country for similar services.

25. Inspections and Tests

- 25.1 The Purchaser or its representative shall have the right to inspect and/or test any components of the System, as specified in the Technical Requirements, to confirm their good working order and/or conformity to the Contract at the point of delivery and/or at the Project Site.
- 25.2 The Purchaser or its representative shall be entitled to attend any such inspections and/or tests of the components, provided that the Purchaser shall bear all costs and expenses incurred in connection with such attendance, including but not limited to all inspection agent fees, travel, and related expenses.
- 25.3 Should the inspected or tested components fail to conform to the Contract, the Purchaser may reject the component(s), and the Supplier shall either replace the rejected component(s),

or make alterations as necessary so that it meets the Contract requirements free of cost to the Purchaser.

25.4 The Project Manager may require the Supplier to carry out any inspection and/or test not specified in the Contract, 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 6 (Settlement of Disputes), starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.

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 and Finalized 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 Forms Section in the Bidding Documents, stating that the System, or major component or Subsystem (if Acceptance by major component or Subsystem is specified pursuant to the SCC for GCC Clause 27.2.1), has achieved Installation by the date of the Supplier's notice under GCC Clause 26.1, or notify the Supplier in writing of any defects and/or deficiencies, including, but not limited to, defects or deficiencies in the interoperability or integration of the various components and/or Subsystems making up the System. The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies that the Project Manager has notified the Supplier of. The Supplier shall then promptly carry out retesting of the System or

Subsystem and, when in the Supplier's opinion the System or Subsystem is ready for Commissioning and Operational Acceptance Testing, notify the Purchaser in writing, in accordance with GCC Clause 26.1. The procedure set out in this GCC Clause 26.2 shall be repeated, as necessary, until an Installation Certificate is issued.

26.3 If the Project Manager fails to issue the Installation Certificate and fails to inform the Supplier of any defects and/or deficiencies within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, or if the Purchaser puts the System or a Subsystem into production operation, then the System (or Subsystem) shall be deemed to have achieved successful Installation as of the date of the Supplier's notice or repeated notice, or when the Purchaser put the System into production operation, as the case may be.

27. Commissioning and Operational Acceptance

27.1 Commissioning

27.1.1 Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 27.2.1) shall be commenced by the Supplier:

- (a) immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 26.2; or
- (b) as otherwise specified in the Technical Requirement or the Agreed and Finalized 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] if **specified in the SCC** and supported by the Technical Requirements), to ascertain whether the System (or major component or Subsystem[s]) conforms to the Technical Requirements and meets the standard of performance quoted in the Supplier's bid, including, but not restricted to, the functional and technical performance requirements. The Operational Acceptance Tests during Commissioning will be conducted as **specified in the SCC**, the Technical Requirements and/or the Agreed and Finalized Project Plan.

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 the period **specified in the SCC**, from the date of Installation or any other period agreed upon in writing by the Purchaser and the Supplier, the Supplier shall be deemed to have fulfilled its obligations with respect to the technical and functional aspects of the Technical Specifications, SCC and/or the Agreed and Finalized Project Plan, and GCC Clause 28.2 and 28.3 shall not apply.

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 and Finalized Project Plan have been successfully completed; or
- (b) the Operational Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to the Purchaser within the period from the date of Installation or any other agreed-upon period as

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 in the Technical Requirements Section and/or the Agreed and Finalized Project Plan pursuant to GCC Clause 8.2, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

28.2 If the Supplier fails to supply, install, commission, and achieve Operational Acceptance of the System (or Subsystems pursuant to the SCC for GCC Clause 27.2.1) within the time for achieving Operational Acceptance specified in the Implementation Schedule in the Technical Requirement or the Agreed and Finalized Project Plan, or any extension of the time for achieving Operational Acceptance previously granted under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance), the Supplier shall pay to the Purchaser liquidated damages at the rate **specified in the SCC** as a percentage of the Contract Price, or the relevant part of the Contract Price if a Subsystem has not achieved Operational Acceptance. The aggregate amount of such liquidated damages shall in no event exceed the amount specified in the SCC (“the Maximum”). Once the Maximum is reached, the Purchaser may consider termination of the Contract, pursuant to GCC Clause 41.2.2.

28.3 Unless otherwise **specified in the SCC**, liquidated damages

payable under GCC Clause 28.2 shall apply only to the failure to achieve Operational Acceptance of the System (and Subsystems) as specified in the Implementation Schedule in the Technical Requirements and/or Agreed and Finalized Project Plan. This Clause 28.3 shall not limit, however, any other rights or remedies the Purchaser may have under the Contract for other delays.

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. Exceptions and/or limitations, if any, to this warranty with respect to Software (or categories of Software), shall be as **specified in the SCC**. Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the provisions of this Contract.

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 In addition, the Supplier warrants that: (i) all Goods components to be incorporated into the System form part of the Supplier's and/or Subcontractor's current product lines, (ii) they have been previously released to the market, and (iii) those specific items **identified in the SCC** (if any) have been in the market for at least the minimum periods **specified in the SCC**.

29.4 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 the length of time **specified in the SCC**.

- 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 If the Supplier fails to commence the work necessary to remedy such defect or any damage to the System caused by such defect within the time period **specified in the SCC**, the Purchaser may, following notice to the Supplier, proceed to do such work or contract a third party (or parties) to do such work, and the reasonable costs incurred by the Purchaser in connection with such work shall be paid to the Purchaser by the Supplier or may be deducted by the Purchaser from any monies due the Supplier or claimed under the Performance Security.

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.

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 Bid; or
- (c) results from the alteration of the System, including the Materials, by the Purchaser or any persons other than the Supplier or a person authorized by the Supplier.

32.4 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Clause 32.1, the Purchaser shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify the Purchaser within the twenty-eight (28) days, the Purchaser shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

32.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided to the Supplier in connection with this Contract by the Purchaser or any persons (other than the Supplier) contracted by the Purchaser, except to the extent that such losses, liabilities, and costs arise as a result of the Supplier's breach of GCC Clause 32.8.

32.6 Such indemnity shall not cover

- (a) any use of the design, data, drawing, specification, or other documents or materials, other than for the purpose indicated by or to be reasonably inferred from the Contract;
- (b) any infringement resulting from the use of the design, data, drawing, specification, or other documents or materials, or any products produced thereby, in association or combination with any other Goods or Services not provided by the Purchaser or any other person contracted by the Purchaser, where the infringement arises because of such association or combination and not because of the use of the design, data, drawing, specification, or other documents or materials in its own right.

32.7 Such indemnities shall also not apply:

- (a) if any claim of infringement is asserted by a parent, subsidiary, or affiliate of the Supplier's organization;
- (b) to the extent that any claim of infringement is caused by the alteration, by the Supplier, or any persons contracted by the Supplier, of the design, data, drawing, specification, or other documents or materials provided to the Supplier by the Purchaser or any persons contracted by the Purchaser.

32.8 If any proceedings are brought or any claim is made against the Supplier arising out of the matters referred to in GCC Clause 32.5, the Supplier shall promptly give the Purchaser notice of such proceedings or claims, and the Purchaser may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Purchaser fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless the Purchaser has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Supplier shall, at the Purchaser's request, afford all available assistance to the Purchaser in conducting such proceedings or claim and shall be reimbursed by the Purchaser for all reasonable expenses incurred in so doing.

33. Limitation of Liability

- 33.1 Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law:
- (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify the Purchaser with respect to intellectual property rights infringement.

G. RISK DISTRIBUTION

34. Transfer of Ownership

- 34.1 With the exception of Software and Materials, the ownership of the Information Technologies and other Goods shall be transferred to the Purchaser at the time of Delivery or otherwise under terms that may be agreed upon and specified in the Contract Agreement.
- 34.2 Ownership and the terms of usage of the Software and Materials supplied under the Contract shall be governed by GCC Clause 15 (Copyright) and any elaboration in the Technical Requirements.
- 34.3 Ownership of the Supplier's Equipment used by the Supplier and its Subcontractors in connection with the Contract shall remain with the Supplier or its Subcontractors.

35. Care of the System

- 35.1 The Purchaser shall become responsible for the care and custody of the System or Subsystems upon their Delivery. The Purchaser shall make good at its own cost any loss or damage that may occur to the System or Subsystems from any cause from the date of Delivery until the date of Operational Acceptance of the System or Subsystems, pursuant to GCC Clause 27 (Commissioning and Operational Acceptance), excepting such loss or damage arising from acts or omissions of the Supplier, its employees, or subcontractors.

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

- (a) (insofar as they relate to the country where the Project Site is located) nuclear reaction, nuclear radiation, radioactive contamination, a pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, insofar as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance taken out under GCC Clause 37;
- (b) any use not in accordance with the Contract, by the Purchaser or any third party;
- (c) any use of or reliance upon any design, data, or specification provided or designated by or on behalf of the Purchaser, or any such matter for which the Supplier has disclaimed responsibility in accordance with GCC Clause 21.1.2,

the Purchaser shall pay to the Supplier all sums payable in respect of the System or Subsystems that have achieved Operational Acceptance, notwithstanding that the same be lost, destroyed, or damaged. If the Purchaser requests the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Supplier shall make good the same at the cost of the Purchaser in accordance with GCC Clause 39. If the Purchaser does not request the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Purchaser shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the System thereby lost, destroyed, or damaged, or, where the loss or damage affects a substantial part of the System, the Purchaser shall terminate the Contract pursuant to GCC Clause 41.1.

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

36.1 The Supplier and each and every Subcontractor shall abide

**Damage to
Property;
Accident or
Injury to
Workers;
Indemnification**

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 effected by it pursuant to this GCC Clause 37, and all monies payable by any insurers shall be paid to the Supplier. The Purchaser shall give to the Supplier all such reasonable assistance as may be required by the Supplier in connection with any claim under the relevant insurance policies. With respect to insurance claims in which the Purchaser's interest is involved, the Supplier shall not give any release or make any compromise with the insurer without the prior written consent of the Purchaser. With respect to insurance claims in which the Supplier's interest is involved, the Purchaser shall not give any release or make any compromise with the insurer without the prior written consent of the Supplier.

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 Forms Section in the Bidding Documents.
- 39.1.5 Moreover, the Purchaser and Supplier will agree, during development of the Project Plan, to a date prior to the scheduled date for Operational Acceptance, after which the Technical Requirements for the System shall be “frozen.” Any Change initiated after this time will be dealt with after Operational Acceptance.

39.2 Changes Originating from Purchaser

- 39.2.1 If the Purchaser proposes a Change pursuant to GCC Clauses 39.1.1, it shall send to the Supplier a “Request for Change Proposal,” requiring the Supplier to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following:
- (a) brief description of the Change;
 - (b) impact on the Time for Achieving Operational Acceptance;

- (c) detailed estimated cost of the Change;
 - (d) effect on Functional Guarantees (if any);
 - (e) effect on any other provisions of the Contract.
- 39.2.2 Prior to preparing and submitting the “Change Proposal,” the Supplier shall submit to the Project Manager an “Change Estimate Proposal,” which shall be an estimate of the cost of preparing the Change Proposal, plus a first approximation of the suggested approach and cost for implementing the changes. Upon receipt of the Supplier’s Change Estimate Proposal, the Purchaser shall do one of the following:
- (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.

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 6.

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 and its Subcontractors' personnel from the site, remove from the site any wreckage, rubbish, and debris of any kind;
- (d) in addition, the Supplier, subject to the payment specified in GCC Clause 41.1.3, shall
 - (i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;
 - (ii) to the extent legally possible, assign to the

Purchaser all right, title, and benefit of the Supplier to the System, or Subsystem, as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;

- (iii) deliver to the Purchaser all nonproprietary drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

41.1.3 In the event of termination of the Contract under GCC Clause 41.1.1, the Purchaser shall pay to the Supplier the following amounts:

- (a) the Contract Price, properly attributable to the parts of the System executed by the Supplier as of the date of termination;
- (b) the costs reasonably incurred by the Supplier in the removal of the Supplier's Equipment from the site and in the repatriation of the Supplier's and its Subcontractors' personnel;
- (c) any amount to be paid by the Supplier to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;
- (d) costs incurred by the Supplier in protecting the System and leaving the site in a clean and safe condition pursuant to GCC Clause 41.1.2 (a); and
- (e) the cost of satisfying all other obligations, commitments, and claims that the Supplier may in good faith have undertaken with third parties in connection with the Contract and that are not covered by GCC Clauses 41.1.3 (a) through (d) above.

41.2 Termination for Supplier's Default

41.2.1 The Purchaser, without prejudice to any other rights or remedies it may possess, may terminate the Contract forthwith in the following circumstances by giving a notice of termination and its reasons therefore to the Supplier, referring

to this GCC Clause 41.2:

- (a) if the Supplier becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, if the Supplier is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Supplier takes or suffers any other analogous action in consequence of debt;
- (b) if the Supplier assigns or transfers the Contract or any right or interest therein in violation of the provision of GCC Clause 42 (Assignment); or
- (c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract, including but not limited to willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the owner to offer, the hardware, software, or materials provided under this Contract.

For the purposes of this Clause:

- (i) “corrupt practice”¹ is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- (ii) “fraudulent practice”² is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an

¹ “Another party” refers to a public official acting in relation to the procurement process or contract execution]. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions.

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

obligation;

- (iii) “collusive practice”¹ 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”² 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
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (bb) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under Sub-Clause 9.8.

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

¹ “Parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non competitive levels.

² A “party” refers to a participant in the procurement process or contract execution.

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 and Finalized Project Plan furnished under GCC Clause 19 at rates of progress that give reasonable assurance to the Purchaser that the Supplier can attain Operational Acceptance of the System by the Time for Achieving Operational Acceptance as extended;

then the Purchaser may, without prejudice to any other rights it may possess under the Contract, give a notice to the Supplier stating the nature of the default and requiring the Supplier to remedy the same. If the Supplier fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then the Purchaser may terminate the Contract forthwith by giving a notice of termination to the Supplier that refers to this GCC Clause 41.2.

41.2.3 Upon receipt of the notice of termination under GCC Clauses 41.2.1 or 41.2.2, the Supplier shall, either immediately or upon such date as is specified in the notice of termination:

- (a) cease all further work, except for such work as the Purchaser may specify in the notice of termination for the sole purpose of protecting that part of the System already executed or any work required to leave the site in a clean and safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to GCC Clause 41.2.3 (d) below;
- (c) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;
- (d) to the extent legally possible, assign to the Purchaser all right, title and benefit of the Supplier to the System or Subsystems as at the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded

between the Supplier and its Subcontractors;

(e) deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as at the date of termination in connection with the System.

41.2.4 The Purchaser may enter upon the site, expel the Supplier, and complete the System itself or by employing any third party. Upon completion of the System or at such earlier date as the Purchaser thinks appropriate, the Purchaser shall give notice to the Supplier that such Supplier's Equipment will be returned to the Supplier at or near the site and shall return such Supplier's Equipment to the Supplier in accordance with such notice. The Supplier shall thereafter without delay and at its cost remove or arrange removal of the same from the site.

41.2.5 Subject to GCC Clause 41.2.6, the Supplier shall be entitled to be paid the Contract Price attributable to the portion of the System executed as at the date of termination and the costs, if any, incurred in protecting the System and in leaving the site in a clean and safe condition pursuant to GCC Clause 41.2.3 (a). Any sums due the Purchaser from the Supplier accruing prior to the date of termination shall be deducted from the amount to be paid to the Supplier under this Contract.

41.2.6 If the Purchaser completes the System, the cost of completing the System by the Purchaser shall be determined. If the sum that the Supplier is entitled to be paid, pursuant to GCC Clause 41.2.5, plus the reasonable costs incurred by the Purchaser in completing the System, exceeds the Contract Price, the Supplier shall be liable for such excess. If such excess is greater than the sums due the Supplier under GCC Clause 41.2.5, the Supplier shall pay the balance to the Purchaser, and if such excess is less than the sums due the Supplier under GCC Clause 41.2.5, the Purchaser shall pay the balance to the Supplier. The Purchaser and the Supplier shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

41.3 Termination by Supplier

41.3.1 If:

- (a) the Purchaser has failed to pay the Supplier any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause **pursuant to the SCC**, or commits a substantial breach of the Contract, the Supplier may give a notice to the Purchaser that requires payment of such sum, with interest on this sum as stipulated in GCC Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires the Purchaser to remedy the same, as the case may be. If the Purchaser fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Supplier's notice; or
- (b) the Supplier is unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser, including but not limited to the Purchaser's failure to provide possession of or access to the site or other areas or failure to obtain any governmental permit necessary for the execution and/or completion of the System;

then the Supplier may give a notice to the Purchaser of such events, and if the Purchaser has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Supplier is still unable to carry out any of its obligations under the Contract for any reason attributable to the Purchaser within twenty-eight (28) days of the said notice, the Supplier may by a further notice to the Purchaser referring to this GCC Clause 41.3.1, forthwith terminate the Contract.

- 41.3.2 The Supplier may terminate the Contract immediately by giving a notice to the Purchaser to that effect, referring to this GCC Clause 41.3.2, if

the Purchaser becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Purchaser takes or suffers any other analogous action in consequence of debt.

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

- (a) cease all further work, except for such work as may be necessary for the purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition;
- (b) terminate all subcontracts, except those to be assigned to the Purchaser pursuant to Clause 41.3.3 (d) (ii);
- (c) remove all Supplier's Equipment from the site and repatriate the Supplier's and its Subcontractor's personnel from the site.
- (d) In addition, the Supplier, subject to the payment specified in GCC Clause 41.3.4, shall:
 - (i) deliver to the Purchaser the parts of the System executed by the Supplier up to the date of termination;
 - (ii) to the extent legally possible, assign to the Purchaser all right, title, and benefit of the Supplier to the System, or Subsystems, as of the date of termination, and, as may be required by the Purchaser, in any subcontracts concluded between the Supplier and its Subcontractors;
 - (iii) to the extent legally possible, deliver to the Purchaser all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

41.3.4 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, the Purchaser shall pay to the Supplier all payments specified in GCC Clause 41.1.3, and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Supplier arising out of, in connection with, or in consequence of such termination.

41.3.5 Termination by the Supplier pursuant to this GCC Clause 41.3 is without prejudice to any other rights or remedies of the Supplier that may be exercised in lieu of or in addition to rights conferred by GCC Clause 41.3.

41.4 In this GCC Clause 41, the expression “portion of the System 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.

SECTION V. SPECIAL CONDITIONS OF CONTRACT (SCC)

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Special Conditions of Contract

A. CONTRACT AND INTERPRETATION

1. Definitions (GCC Clause 1)

GCC 1.1 (a) (ix)	The applicable edition of the Procurement Guidelines is dated: <i>January 2011</i> .
GCC 1.1 (b) (i)	The Purchaser is: Ministry of Communications and Information Technology, Myanmar.
GCC 1.1 (b) (ii)	The Project Manager is: Ms. Nwe Ni Soe Yin (Director) e-Government Department, Information Technology and Cyber Security Department (ITCSD), Ministry of Communications and Information Technology. S12, Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar. Facsimile +95 67 422447 Email: nwenisoeyin@e-mcit.gov.mm;nwenisoeyin@gmail.com
GCC 1.1 (e) (i)	The Purchaser's Country is: The Republic of the Union of Myanmar.
GCC 1.1 (e) (iii)	The Project Sites are: Data Centre, e-Government Department, Information Technology and Cyber Security Department (ITCSD), Ministry of Communications and Information Technology S12, Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar. For DR site: e-Government Department, Overseas Communications Building, Mayangon Township, Yangon, Myanmar.
GCC 1.1 (e) (x)	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.

2. Contract Documents (GCC Clause 2)

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

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

GCC 4.3	<p>Address of the Project Manager:</p> <p>Ms. Nwe Ni Soe Yin (Director) e-Government Department, Information Technology and Cyber Security Department (ITCSD), Ministry of Communications and Information Technology. S12, Exchange Building, Ground Floor, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar. Facsimile +95 67 422447 Email: nwenisoeyin@e-mcit.gov.mm; nwenisoeyin@gmail.com</p> <p>Fallback address of the Purchaser:</p> <p>Mr. Than Htun Aung (Director) Ministry of Communications and Information Technology Post and Telecommunications Department, Building Number 2, Nay Pyi Taw, Myanmar Contact Person: Facsimile +95 67 407539, E-mail: tsrproject2014@gmail.com; thanhtunaung@mptngw.net.mm</p>
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5. Governing Law (GCC Clause 5)

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

GCC 6.1.4	The Appointing Authority for the Adjudicator is: We are in the process of identifying an Adjudicator.
GCC 6.2.3	<p>The rules of procedure for arbitration proceedings are:</p> <p>(a) <u>if the Supplier is foreign (including a Joint Venture when at least one partner is foreign):</u></p> <p>Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.</p> <p>(b) <u>if the Supplier is a national of the Purchaser's country:</u></p> <p>Any dispute between the Purchaser and a Supplier who is a national of the Purchaser's country arising in connection with the present Contract shall be referred to adjudication or arbitration in accordance with the laws of the Purchaser's country.</p>

B. SUBJECT MATTER OF CONTRACT

7. Scope of the System (GCC Clause 7)

GCC 7.3	<p>The Supplier's obligations under the Contract will include the following:</p> <ul style="list-style-type: none"> - Portal maintenance plan shall include a minimum of <u>fifty (50)</u> man-days per year, for the Contract duration, and the tasks performed within this amount of man-days are all inclusive without additional charges to the Government. - Any Services that are performed beyond the stipulated man-days limit will then be chargeable to the Government based on the price plan proposed in the Portal maintenance plan. - The Portal maintenance plan shall state the effort in man-days required for different types of services such as content update requests, new content creation, graphics creation, and simple/complex eservice development. - The Portal maintenance plan should based on the criteria such as minor request, major request, and urgent request. - The Supplier may include other criteria, if required, to cover regular minor service requests such as user creation, password
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	<p>reset, minor content update, and minor spelling corrections.</p> <p><i>(The contract & cost of Post –Warranty support will be negotiated separately from the main contract)</i></p>
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8. Time for Commencement and Operational Acceptance (GCC Clause 8)

GCC 8.1	The Supplier shall commence work on the System within Seven (7) of days from the Effective Date of the Contract.
GCC 8.2	Operational Acceptance will occur within Eight (8) calendar months of contract signing.

9. Supplier’s Responsibilities (GCC Clause 9)

GCC 9.9	<p>The Supplier shall have the following additional responsibilities:</p> <ol style="list-style-type: none"> 1. The supplier needs to guarantee that the tender item/services will be working well during three years. 2. The items must be authentic and the Supplier must report the certification of standardization from the vendor. The End User must be mentioned as Myanmar. The items must be brand new unused and supported by the Manufactures MAF.
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10. Purchaser’s Responsibilities (GCC Clause 10)

GCC 10.12	<p>The Purchaser shall have the following additional responsibilities:</p> <ul style="list-style-type: none"> - Purchaser has to provide responsible contact persons on behalf of the Purchaser, which will solve problems for smooth implementation of the contract. -Purchaser has to provide the access to data center site on which the hardware equipment will be installed, and tested.
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C. PAYMENT

12. Terms of Payment (GCC Clause 12)

GCC 12.1	Subject to the provisions of GCC Clause 12 (Terms of Payment), the Purchaser shall pay the Contract Price to the Supplier in the manner
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specified below. Except as otherwise noted, all payments shall be made for the portion of the Contract Price corresponding to the goods or services actually Delivered, Installed, or Operationally Accepted, per the Contract Implementation Schedule, at unit prices and in the currencies specified in the Price Schedules of the Contract Agreement.

Payment Schedule

a) *Advance Payment*

Ten percent (10%) 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) *Analysis, System Design Architecture, and System Prototype and Development*

Twenty percent (20%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid after Approval of Analysis report, System Design Architecture and System prototype and development.

c) *Supply and installation of Hardware Equipment*

Twenty percent (20%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid upon the supply and installation of the hardware equipment in the data center.

d) *Testing*

Fifteen percent (15%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid after Approval of Successful Operational Acceptance Test of the System integrated as whole.

e) *Deployment*

Twenty percent (20 %) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid upon successful system commissioning of the National Portal..

f) *Execution of Training Program*

Five percent (5%) of the total Contract Price will be paid upon execution of training program and submission of acceptable training report;

g) *Operation and Maintenance*

Ten percent (10%) of the total Contract Price will be paid upon

	the completion of the maintenance period
GCC 12.3	The Purchaser shall pay to the Supplier interest on the delayed payments at a rate of: “0.25%” per annum.
GCC 12.4	For Goods and Services supplied locally, the Purchaser will pay the Supplier in the currency stated in the Contract Agreement and the Price Schedules it refers to.

13. Securities (GCC Clause 13)

GCC 13.2.1	The Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security in the amount and currency of the Advance Payment specified in SCC for GCC Clause 12.1 above.
GCC 13.2.2	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 12.1.
GCC 13.3.1	The Performance Security shall be denominated in currency specified in the contract price 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 2.5 percent of the Contract Price, excluding any Recurrent Costs.

14. Taxes and Duties (GCC Clause 14)

GCC 14	The payable taxes and duties will collect based on the Republic of the Union of Myanmar’s taxation laws.
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D. INTELLECTUAL PROPERTY

15. Copyright (GCC Clause 15)

GCC 15.3	The Purchaser may assign, license, or otherwise voluntarily transfer its contractual rights to use the Standard Software or elements of the Standard Software, without the Supplier's prior written consent, under the following circumstances: "In the event that the Client is restructured, all licenses will be transferred to the successor organization".
GCC 15.4	<p>The Purchaser's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software are as follows:</p> <p>All custom software developed under the contract shall be the property of the Purchaser. The Purchaser shall retain all intellectual property rights. Neither the Supplier nor any sub-contractor nor employee working on the custom software shall have any rights whatsoever to the custom software, or any part, segment or sub-module of the custom software.</p> <p>The Purchaser's and Supplier's rights and obligations with respect to Custom Materials or elements of the Custom Materials are as follows:</p> <p>Custom materials developed under the contract shall be the property of the Purchaser. The Purchaser shall retain all intellectual Property rights. Neither the Supplier nor any sub-contractor, nor employee working on the custom materials shall have any rights whatsoever to the custom materials, nor to any part, segment or module thereof.</p>
GCC 15.5	No software escrow contract is required for the execution of the Contract.

16. Software License Agreements (GCC Clause 16)

GCC 16.1 (a) (iii)	The Standard Software license shall be valid throughout the territory of the Purchaser's Country.
GCC 16.1 (a) (iv)	Use of the software shall be subject to the following additional restrictions "none".
GCC 16.1 (b) (ii)	The Software license shall permit the Software to be used or copied for use or transferred to a replacement computer provided the replacement computer falls within approximately the same class of machine and maintains approximately the same number of users, if a multi-user machine.

GCC 16.1 (b) (vi)	The Software license shall permit the Software to be disclosed to and reproduced for use (including a valid sublicense) by support service suppliers or their subcontractors, exclusively for such suppliers or subcontractors in the performance of their support service contracts; subject to the same restrictions set forth in this Contract.
GCC 16.1 (b) (vii)	In addition to the persons specified in GCC Clause 16.1 (b) (vi), the Software may be disclosed to, and reproduced for use by, None.
GCC 16.2	<p>The Supplier's right to audit the Standard Software will be subject to the following terms:</p> <p>The Purchaser will allow, under a pre-specified procedure, execution of embedded software functions under Supplier's control, and unencumbered transmission of resulting information on software usage.</p>

17. Confidential Information (GCC Clause 17)

GCC 17.1	There are no modifications to the confidentiality terms expressed in GCC Clause 17.1
GCC 17.7	The provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for 3 Years.

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

18. Representatives (GCC Clause 18)

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

19. Project Plan (GCC Clause 19)

GCC 19.1	<p>Chapters in the Project Plan shall address the following subject:</p> <ol style="list-style-type: none"> a. Project Management Plan b. Task, Time, and Resource Schedule c. Implementation Plan d. Requirements verification, and Detailed Design e. Installation Plan and Delivery of Hardware f. Change Management Plan g. Training Plan h. Test Plans i. Warranty Service Plan j. Maintenance Plan k. Technical Support Plan l. System Quality Assurance and Control Plan m. Turnover plan
GCC 19.2	<p>Within twenty eight (28) days from the Effective Date of the Contract, the Supplier shall present a Project Plan to the Purchaser. The Purchaser shall, within fourteen (14) days of receipt of the Project Plan, notify the Supplier of any respects in which it considers that the Project Plan does not adequately ensure that the proposed program of work, proposed methods, and/or proposed Information Technologies will satisfy the Technical Requirements and/or the SCC (in this Clause 19.2 called “non-conformities” below). The Supplier shall, within seven (7) days of receipt of such notification, correct the Project Plan and resubmit to the Purchaser. The Purchaser shall, within Ten (10) days of resubmission of the Project Plan, notify the Supplier of any remaining non-conformities. This procedure shall be repeated as necessary until the Project Plan is free from non-conformities. When the Project Plan is free from non-conformities, the Purchaser shall provide confirmation in writing to the Supplier. This approved Project Plan (“the Agreed and Finalized Project Plan”) shall be contractually binding on the Purchaser and the Supplier.</p>
GCC 19.5	<p>The Supplier shall submit to the Purchaser the following reports:</p>

	<p>for example:</p> <ul style="list-style-type: none"> (a) Monthly progress reports, summarizing: <ul style="list-style-type: none"> (i) results accomplished during the prior period; (ii) cumulative deviations to date from schedule of progress milestones as specified in the Agreed and Finalized Project Plan; (iii) corrective actions to be taken to return to planned schedule of progress; proposed revisions to planned schedule; (iv) other issues and outstanding problems; proposed actions to be taken; (v) resources that the Supplier expects to be provided by the Purchaser and/or actions to be taken by the Purchaser in the next reporting period; (vi) other issues or potential problems the Supplier foresees that could impact on project progress and/or effectiveness. (b) inspection and quality assurance reports (c) training participants test results (d) monthly log of service calls and problem resolutions
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20. Subcontracting (GCC Clause 20)

GCC 20	There are no Special Conditions of Contract applicable to GCC Clause 20.
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21. Designs and Engineering (GCC Clause 21)

GCC 21.2	The Contract shall be executed in accordance with the edition or the revised version of all referenced codes and standards current at the date as specified in the GCC.
GCC 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.

	<p>For example:</p> <ul style="list-style-type: none"> a. Project Management Plan b. Task, Time, and Resource Schedule c. Implementation Plan d. Requirements verification, and Detailed Design e. Installation Plan and Delivery of Hardware f. Change Management Plan g. Training Plan h. Test Plans i. Warranty Service Plan j. Maintenance Plan k. Technical Support Plan l. System Quality Assurance and Control Plan m. Turnover plan
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22. Procurement, Delivery, and Transport (GCC Clause 22)

GCC 22.4.3	No Special Conditions.
GCC 22.5	The Supplier shall provide the Purchaser with shipping and other necessary documents as specified in the GCC.

23. Product Upgrades (GCC Clause 23)

GCC 23.4	The Supplier shall provide the Purchaser: with all new versions, releases, and updates to all Standard Software during the Warranty Period, for free, as specified in the GCC.
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24. Implementation, Installation, and Other Services (GCC Clause 24)

GCC 24	There are no Special Conditions of Contract applicable to GCC Clause 24
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25. Inspections and Tests (GCC Clause 25)

GCC 25	There are no Special Conditions of Contract applicable to GCC Clause 25.
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26. Installation of the System (GCC Clause 26)

GCC 26	<p>The following Special Conditions are mandatory:</p> <ul style="list-style-type: none"> a) The supplied solution will be installed in the existing Government data centre at Nay Pyi Taw, Myanmar. b) The provided solution must be turnkey, fully functional; all necessary (even if not mentioned in the proposal but critical for proposed solution) licenses, software and equipment must be provided and explicitly described in the bid proposal for achieving this requirement.
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27. Commissioning and Operational Acceptance (GCC Clause 27)

GCC 27.2.1	Operational Acceptance Testing shall be conducted in accordance with the Test Plans.
GCC 27.2.2	If the Operational Acceptance Test of the System, or Subsystem(s), cannot be successfully completed within fifty (50) days from the date of Complete Installation or any other period agreed upon by the Purchaser and the Supplier, then GCC Clause 27.3.5 (a) or (b) shall apply, as the circumstances may dictate.

F. GUARANTEES AND LIABILITIES

28. Operational Acceptance Time Guarantee (GCC Clause 28)

GCC 28.2	Liquidated damages shall be assessed at 0.5 percent per week. The maximum liquidated damages are ten 10% percent of the Contract Price, or relevant part of the Contract Price if the liquidated damages apply to a Subsystem.
GCC 28.3	Liquidated damages shall be assessed only with respect to achieving Operational Acceptance;

29. Defect Liability (GCC Clause 29)

GCC 29.1	For Software, exceptions or limitations to the Supplier's warranty obligations shall be as follows: "None"
GCC 29.3 (iii)	The Supplier warrants that the following items have been released to the market for the following specific minimum time periods: "No specific minimum time requirements are established for this Contract other than that the Information Technologies which must have been previously released to the market at least 6 months in advance"
GCC 29.4	The Warranty Period (N) shall begin from the date of Operational Acceptance of the System or Subsystem and extend for 36 months.
GCC 29.10	During the Warranty Period, the Supplier must commence the work necessary to remedy defects or damage within 24 hours of notification.

30. Functional Guarantees (GCC Clause 30)

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

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

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

GCC 33	There are no Special Conditions of Contract applicable to GCC Clause 33.
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G. RISK DISTRIBUTION

34. Transfer of Ownership (GCC Clause 34)

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

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

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

GCC 37.1 (c)	<p>The Supplier shall obtain Third-Party Liability Insurance in the amount of 10% of the quoted bid price in Myanmar Kyats "or an equivalent amount in a freely convertible currency"</p> <p>The insured Parties shall the Supplier and the Purchaser.</p> <p>The Insurance shall cover the period from beginning date, relative to the Effective Date of the Contract until expiration date, relative to the Effective Date of the Contract or its completion.</p>
GCC 37.1 (e)	There are no Special Conditions of Contract applicable to GCC Clause 37.1 (e).

38. Force Majeure (GCC Clause 38)

GCC 38	There are no Special Conditions of Contract applicable to GCC Clause 38.
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H. CHANGE IN CONTRACT ELEMENTS**39. Changes to the System (GCC Clause 39)**

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

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

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

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

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Technical Requirements

A. BACKGROUND

0.1 The Purchaser

0.1.1 The Government of the Union of Myanmar has received financing from the World Bank toward the cost of the “Telecommunications Sector Reform Project” and intends to apply part of the proceeds for the development of a National Portal. The Government of Myanmar is keen to use ICT to deliver e-Government services to its constituents, enhance competitiveness and attract investors, and for making the Government more accountable, responsive and transparent.

0.1.2 The Ministry of Communications and Information Technology as the primary driver for e-Government program is tasked to oversee the implementation of the National portal.

0.1.3 The objective of this project is to establish a National Portal for the Government of Myanmar. The National Portal project is to ensure the following:

- I. Providing easy, anywhere and anytime access to Government Services. (both Informational & Transactional)
- II. Reducing the number of visits of citizens to a Government office/Department for availing the services.
- III. Reducing administrative burden and service fulfillment time and costs for the Government, Citizens, Businesses and Visitors.
- IV. Facilitating direct interaction of citizens with the Government and encourage e“-interaction and more efficient communication through the Portal.
- V. Enhancing perception and image of the Government and its respective Departments.

0.2 Business Objectives of the Purchaser

0.2.1 The following vision statement has been proposed for the Myanmar National Portal:

Create an online presence for the ministries, departments, directorates, divisions, districts and unions to provide the value and virtue of information and services to general public electronically.

0.2.2 The following mission statement has been proposed for the Myanmar National Portal:

To create an enabling environment for sustainable growth of national portal by involving Ministries and department offices sector participation which will lead to effectiveness, efficiency and reliability of information and services.

0.2.3 **User Benefits.** The Users will derive the following direct benefits from the portal:

- Faster - Users will be able to locate and access information and services faster.
- Easier - Users can easily find the information and services they want through a well-developed navigation structure and easy-to-use search tool.
- One-stop shop- A convenient online venue for users to remember, where all Government related information and services can be found.
- One-stop Feedback Channel – A central online venue where users could provide feedback and suggestions on improvement of the portal and respective sectors which may required by citizens, business and visitors.
- Convenient and cost-effective - Users will not be required to travel to a Government Ministries Department Office (GMDO) during office hours, unless the nature of service is not appropriate for delivery via the portal. Users will be able to carry out a service at any time, from anywhere through multiple devices.
- Impartial delivery of information and services - Users will receive impartial delivery of information and services regardless of their age, race, disability, location or other factors.

0.2.4 **Benefits.** The portal delivers the following direct benefits to the GMDOs:

- *National Communications Platform* - The Ministries and Institutions would be able to utilise the national portal to communicate and engage with the citizens, business, and visitors. The Ministries and Institutions would benefit from using the portal's ability to create awareness for their information and services, and interact through Internet and mobile channels.

- *User feedback* - The portal will provide a feedback channel for users to send feedback. The portal governance structure comprising representatives from various Ministries and Institutions would be a key forum to review the feedback, respond with resolutions, and develop future phases of user focused services.

Department offices can derive a multitude of further benefits indirectly from the portal:

- *Reduced workload* - The effective delivery of electronic services and information via the portal in lieu of other channels will reduce the workloads of GMDOs. The portal's search engine and navigation structure will allow users to get the answers they want easily. The portal will be able to facilitate provision of information linked to specific situation, requiring less interaction with agency offices. During the initial stages of service delivery, there may be increased demand on agency offices because of issues that users may encounter as early users of the portal and its technologies. Over time, as users become familiar with the portal, agency workload is expected to diminish.
- *Better relationships with the citizens and business community* - The barriers to access Government information and services will be significantly reduced. GMDOs can be more pro-active and targeted in their relationships with the users.
- *Cost effective service delivery channel* to increase compliance - The portal provides an easy and cost effective method to provide fast accurate information, communicate notifications and alerts, thereby increasing compliance.

B. BUSINESS FUNCTION AND PERFORMANCE REQUIREMENTS

1.1 General Requirements

Ministry of Communications and Information Technology requires the national portal to publish information and deliver electronic services to citizens, businesses, and visitors. The portal shall support the following key technical and functional requirements.

- 1.1.1 The Supplier shall validate the **cloud environment architecture** in the context of existing data centre infrastructure, facility, portal platform and required portal performance. The cloud environment architecture and minimum hardware and system software requirement can be found in the clause 2.4 and annex 2.
- 1.1.2 The Supplier shall procure, setup and configure a suitable national portal platform based on the functional requirements 1.2 to 1.3 (the functional requirements provided are indicative and supplier is required to validate the functional requirements).
- 1.1.3 The Supplier shall validate the user requirements, design and configure national portal based on functional requirements clause 1.2.20 to 1.2.29.

1.2 Functional Requirements of the System

- 1.2.1 The Supplier shall propose a portal design that is sensitive towards the Myanmar culture. The Supplier shall propose the information architecture, and user-friendly navigation features for key sections in the Portal, namely the Government-to-Citizens, Government-to-Business, and Government-to-Visitors..
- 1.2.2 The Portal shall be developed based on prevailing World Wide Web Consortium (W3C) standards and industry web design best practices.
- 1.2.3 The Supplier shall develop a complementary sub-site design template and style guide for the Portal. The sub-site design template shall be easily adopted into different designs for different sub-sites of the Portal, but still retaining the visual or sub-site linkages to the main Portal design.
- 1.2.4 The Supplier shall develop the portal to available in two languages (Myanmar, English) and these languages can be switched on the fly. The Supplier shall work closely with Natural Language Processing (NLP) to utilise Myanmar Unicode font. such as onscreen keyboard, and CSS font embedded technology.

- 1.2.5 The Supplier shall design a site map that is comprehensive and easy-to-understand. The site map shall enable users to locate content in the web site in a simple and logical manner.
- 1.2.6 The navigation structure and menus shall be designed to be intuitive and user-friendly. The navigation menu must be easy to maintain and modify, and is able to handle at least three (3) levels (depth) of content structure. Where appropriate, other navigational features such as breadcrumbs and visual pointers (e.g. page pointers/Back crumbs) should be incorporated to allow users to easily traverse through the various pages in the website.
- 1.2.7 The Portal should adopt different forms of media e.g. videos, audio, pictures, in the presentation of information, in order to create an interesting, dynamic and vibrant website.
- 1.2.8 The Portal shall adopt responsive web design for best viewing on common desktop web and mobile browsers, such as Internet Explorer, Firefox, Opera, Chrome, and Safari for both Windows-based and Mac OS based personal computer. The web page design shall appear consistent on these different web browsers.
- 1.2.9 The Portal shall be accessible to the public who has Internet connection via mobile devices such as mobile text-based phones, smartphones and tablets. The Portal shall have the capability to re-purpose its web pages for optimal viewing according to the form factor for the various mobile devices.
- 1.2.10 For users without internet connection, the Supplier shall propose an optional approach where hot content can be accessed using mobile text-based phones with SMS and USSD.
- 1.2.11 The Portal shall be accessible to people with disabilities, and it has to conform minimally to W3C Web Content Accessibility Guidelines.
- 1.2.12 The portal design shall take into consideration the principle of good user interface practices to improve the user experience for Myanmar users. The design will be professional yet simple, with limited graphics, so that those with slow internet connectivity can still access the information in a reasonable speed.
- 1.2.13 The homepage of the portal at minimum shall contain the following content/features in its design layout:

Responsive web design (mobile compactable) feature should be included to access the web portal from any device.

Site search, feature to facilitate user searching for information and services easily on the Portal.

Feedback feature, where users could provide feedback and suggestions on citizens and business related regulations, policies, processes and transactions.

Back crump links should be included for users to know where they are and to easily go back to previous visited pages.

Searchable FAQs. A searchable Frequently Asked Question database for citizens, businesses and visitors to find answers to their questions.

News RSS feed feature, which can capture the information from other web portal, should include. The list of news and speeches may be made available via RSS feed from an external system.

Social Media feature, which can be used to share latest news on other third party website.

Single Sign-on features will let user to authenticate and permits a user to enter one name and password in order to access multiple applications of Web Portal.

Multilingual feature in the portal content should offer both Myanmar and English languages.

Government Directory feature where contacts for government ministries and department offices can be listed.

Highlights of national campaigns/event, news and media releases, which will be the main content centrepiece for the homepage.

Calendar of Events feature that display selected upcoming key Government events and campaigns, and has a link to the whole-of-government calendar of events system provided by a collaborator agency. The list of events may be made available via RSS feed from an external system.

Banners feature that display promotional banners for Governments' campaigns, events or content.

Links to existing Government websites and pages that are providing information and services related. Details of the websites and pages and how to model description are listed on paragraph 1.2.14.

1.2.14 The Portal should provide hyperlinks to existing information and services from the Government websites, as listed below:

Sr/No	Government Information Services for Citizen	Related Site
01.	Update news from all government agencies.	http://www.moi.gov.mm/?q=news
02.	The Government of Myanmar's Directory Listing	http://www.president-office.gov.mm

03.	Legal Information	http://www.unionsupremecourt.gov.mm/?q=content/laws
04.	Labor Laws, Social Welfare and Insurance Information	http://www.mol.gov.mm/en/?page_id=9 http://www.mol.gov.mm/en/?page_id=1107
05.	Taxation Information, Tax laws and regulations	http://www.mof.gov.mm/my/content/payment-tax-system http://www.irdmyanmar.gov.mm/ird/KnowledgeLaw.aspx
06.	Central Bank Laws	http://www.cbm.gov.mm/content/377
07.	Immigration Laws	http://www.mip.gov.mm/%E1%80%94%E1%80%AD%E1%80%AF%E1%80%84%E1%80%BA%E1%80%84%E1%80%B6%E1%80%81%E1%80%BC%E1%80%AC%E1%80%B8%E1%80%9E%E1%80%AC%E1%80%B8%E1%80%A1%E1%80%99%E1%80%BC%E1%80%B2%E1%80%94%E1%80%B1%E1%80%91%E1%80%AD/
08.	Myanmar Citizen Investment Laws	http://www.mnped.gov.mm http://www.dica.gov.mm/includes/MCIL.pdf
09.	National Healthcare Information	http://www.moh.gov.mm http://www.moh.gov.mm/file/Diseases%20of%20National%20Concern.pdf
10.	Educational Information	http://www.moemyanmar.net
11.	Financial Information	http://www.mof.gov.mm
12.	Government Jobs opportunities information Employee Rights Information	http://www.mol.gov.mm/mm/information/employee-rights/ http://www.mol.gov.mm
13.	Election and Parliament Information	http://uecmyanmar.org/index.php/election/2013-12-03-07-25-46/2013-12-03-07-25-44 http://www.uec.gov.mm
14.	Hotel and Tourism information	http://www.myanmar-tourism.org
15.	Organization, NGO and INGOs Information	http://www.ircmyanmar.org/en/ http://www.themimu.info
16.	Weather Forecast and Disaster/Hazards Information	http://www.dmh.gov.mm/content/cyclone-disasters http://www.dmh.gov.mm/content/flood http://www.dmh.gov.mm/earthquake-disaster%20 http://www.dmh.gov.mm/tsunami-disaster%20

Sr/No	Government Information Services for Business	Related Site
01.	Update news from all government agencies.	http://www.moi.gov.mm/?q=news
02.	The Government of Myanmar's Directory Listing	http://www.president-office.gov.mm
03.	Legal Information	http://www.unionsupremecourt.gov.mm/?q=content/laws
04.	Myanmar Companies Act	http://www.dica.gov.mm/includes/MCA%20Regulation.pdf
05.	Labors Laws and Regulations	http://www.mol.gov.mm/en/?page_id=9
06.	Taxation laws, rules and regulations and Commercial Tax	http://www.mof.gov.mm/my/content/payment-tax-system http://www.irdmyanmar.gov.mm/ird/KnowledgeLaw.aspx
07.	Central Bank Laws and Myanmar Securities Exchange Laws	http://www.cbm.gov.mm/content/foreign-exchange-management-law-0
08.	Financial Information	http://www.mof.gov.mm
09.	Election and Parliament Information	http://www.uec.gov.mm
10.	Hotel and Tourism information	http://www.myanmar-tourism.org
11.	Trading Information	http://www.commerce.gov.mm
12.	Agriculture and Livestock Information	http://www.mlfrd.gov.mm
13.	Organization, NGO and INGOs Information	http://www.ircmyanmar.org/en / http://www.themimu.info

Sr/No	Government Information Services for Visitor	Related Site
01.	Tax and Insurance Information	http://www.mof.gov.mm , http://www.irdmyanmar.gov.mm
02.	Hotel and Tourism, Itinerary and Ticketing	http://www.myanmar-tourism.org http://www.oway.com.mm
03.	Visa and Consular Information	http://www.mip.gov.mm/announcements-in-english/
04.	Tourist Zone Fees Information	http://www.myanmar-tourism.org

Sr/No	Target	Government Electronic Services	Related Site
01.	G2V	e-Visa	http://evisa.moip.gov.mm
02.	G2C/G2B	Online export/import licensing	http://www.myanmartradenet.com.mm
03.	G2C/G2B	Applying online Form for YCDC services	http://www.ycdc.gov.mm
04.	G2C/G2B	Online taxation (e-Filing Service)	http://www.irdmyanmar.gov.mm
05.	G2C/G2B	Ministry of Electric Power's e-service form	http://www.moep.gov.mm/e-service-form
06.	G2G	Ministry of Transport (Document Exchange and Management, Internal Information System)	http://www.mot.gov.mm
07.	G2C/G2B	Track and Trace Express Mail	http://www.dems.net.mm
08.	G2C/G2B	e-Telegram Services (Myanma Posts)	http://www.etelegram.net.mm/
09.	G2C	Online Exam Result Checking (Ministry of Education)	http://www.moemyanmar.net/
10.	G2C	Check Voter List (Union Election Commission)	https://checkvoterlist.uecmyanmar.org/
11.	G2C	e-Pension, Phone Billing (Myanmar Economic Bank)	http://www.meb.gov.mm/mm/
12.	G2C	e-Billing System (YPay)	http://ebilling.ypay.com.mm
13.	G2C / G2B	Company Name Availability Search	http://dica.gov.mm.x-aas.net/

1.2.15 The Portal shall introduce profiling services and eAdvisor services as new online services for citizens, business and visitors. The supplier shall validate the requirement of the following services.

1.2.15.1 The Supplier is expected to design and develop up to 2 profiling services. A profiling service aids the user to make sense of a wide spread of available information and options by seeking the user to answer several simple-to-answer questions. From the responses given by the user, the profiling service would map and display only the relevant pieces of information and option(s) need by the user for his specific situation or need. The intention of a profiling service is to simplify the wealth of information and option for the user.

1.2.15.1.1 The 2 profiling services to be designed and developed are:

(1) A license & permit profiling service.

The license & permit profiling service should provide searchable and navigable content for the top 20 most frequently transacted licenses and permits.

This profiling service shall present the licenses and permits by alphabetical order, by industry and by business type.

For each license or permit selected, the business user shall be able to view the relevant content i.e. criteria for application, procedure to apply for the license or permit, and Ministry contact details.

The business user shall be able to download a PDF form if the form is provided by the respective government authority.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of a license & permit profiling service can be found in the following

URL:
<https://licences.business.gov.sg/SHINE/sop/WebPageHandler?p=OASIS&pn=SelectLicences&ApplyNew=Y>; and

(2) A Government assistance profiling service.

The Government assistance profiling service should provide searchable and navigable content for the top 20 most frequently applied assistance schemes.

This profiling service shall present the assistance schemes by alphabetical order, by industry and by business type.

For each assistance scheme selected, the business user shall be able to view the relevant content i.e. criteria for application, procedure to apply for the scheme, and Ministry contact details.

The business user shall be able to download a PDF form if the form is provided by the government authority.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of a Government assistance profiling service can be found in the following

URL:
<http://www.enterpriseone.gov.sg/Home/Government%20Assistance.aspx>.

1.2.15.2 The Supplier is expected to design and develop up to 5 eAdvisor services. An eAdvisor service packages information and services into a user-centric step-by-step order. The eAdvisor service recommends to the user the appropriate next step(s) and provides tips of “what-to-do” and highlights detailed instructions necessary for the user to complete his task. The intention of an eAdvisor service aims to provide user with clarity on the steps and actions needed to complete a particular task.

1.2.15.2.1 The 5 eAdvisor services to be designed and developed are:

(1) Apply and Renew Passport eAdvisor.

The Apply and Renew Passport eAdvisor provides the list of steps and content to guide the applicants on the process, procedures, and forms required for applying and renewing the passport.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of an Apply and Renew passport eAdvisor can be found in the following URL:

<https://www.ecitizen.gov.sg/Topics/Pages/Passport-How-to-apply-and-renew.aspx>

(2) Lost/Stolen/Misplaced National Registration Card (NRC) eAdvisor

The national registration card (NRC) eAdvisor provides the list of steps and content to guide the citizens on the process, procedures, and forms required for applying and reapplying the NRC.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of an lost/stolen/misplaced national registration card eAdvisor can be found in the following URL:

http://www.mfa.gov.sg/content/mfa/overseasmission/london/consular_services/lost_passport.html

(3) Import Step-by-Step eAdvisor.

The import Step-by-step eAdvisor provides the list of steps and content to guide potential importers on the process, procedures, and forms required for importing goods into Myanmar.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of an Import Step-by-Step eAdvisor can be found in the following URL: <http://www.cbsa-asfc.gc.ca/sme-pme/i-guide-eng.html>

(4) Export Step-by-Step eAdvisor.

The Export Step-by-step eAdvisor provides the list of steps and content to guide potential exporters on the process, procedures, and forms required for exporting goods overseas.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of an Import Step-by-Step eAdvisor can be found in the following
URL: e.g. <http://www.cbsa-asfc.gc.ca/sme-pme/e-guide-eng.html>

(5) Visa and Immigration eAdvisor.

The Visa and Immigration eAdvisor provides the list of steps and content to guide foreign investors and expatriates on the process, procedures, and forms required for visiting, working, and living in Myanmar.

The Supplier shall work with the Ministry to collate the required content if the Ministry requires assistance.

An example of a Visa and Immigration eAdvisor can be found in the following URL: e.g. <http://www.path2usa.com/visitor-visa-guide>

- 1.2.16 The Supplier shall work with the client to populate up to 80 web pages content for the Portal in two languages (Myanmar and English). The Supplier shall translate the content available in Myanmar language to English and vice versa.
- 1.2.17 The Portal shall have a polling feature for the Government to conduct quick poll surveys to gather public feedback and sentiments. The feature shall allow the public to view the result after they have submitted their responses. The polling feature shall have an administration module for the government to create the survey questions,

- push out via SMS, view the results online, and export the results in Word or Excel file formats.
- 1.2.18 The Portal shall have a subscription feature for public users to subscribe to its publicity, news and announcements e-mailers.
- 1.2.19 The Supplier shall deliver the source files (e.g. Photoshop, Illustrator files) of all graphics created and source codes (e.g. CSS style sheet) for the Portal.

1.2.20 Content Management

- 1.2.20.1 The Supplier shall propose a full workflow enabled content management system many portal websites include a great deal of content that requires regular updates. The Portal content should be created, reviewed, published, and managed by web Content Management System (CMS) using well-defined content authoring and publication process. CMS should provide multiple authorization levels and different views for Ministry/Agency users, involved in editing, reviewing and publishing content. CMS should ensure that all content updates and changes be reflected over the various delivery channels with a well-defined process. In addition, it is required to provide a web-enabled mechanism of communication between the different groups within Ministry/Agency with the capability to log all communication and updates in a secure and reliable manner. The Supplier is required to explain capabilities of CMS in details and present a well-defined process for creating, updating, testing, and publishing the portal content.
- 1.2.20.2 A CMS should have the following key features and to facilitate ease in managing and publishing content:
- Necessary Features:***
- Intuitive WYSIWYG editor , easy to use HTML editor
 - Form builder such as drag and drop field creation, quickly create completely customized forms
 - Workflow Integration: Run content through an approval or review process.
 - Web Content Display: A portlet that allows content manager to place web content on a page in your portal.
 - Asset Publisher: A portlet which can aggregate different types of content together in one view.
 - Scheduler: Lets content manager schedule when content is reviewed, displayed and removed.

- Staging: Use a separate staging server or stage content locally to keep proposed changes separate from the live site.

Non-mandatory features:

- Professional design options such as design themes, fully customization design, integrated design manager and editor
- Images and Photo galleries feature such as drag and drop uploading, supports one or more multiple images
- Files and Links feature such as create list of files and links

1.2.21 Portal Information, Content, & Views

1.2.21.1 The Portal platform should enable users to access published information and content with different views according to the following:

- Topics: Users should be able to navigate and browse the content by topics e.g. health, and education.
- E-Services: Users should be able to navigate and browse the portal eservices by Ministries, by A-Z and by topics.

1.2.22 Integration Feature

1.2.22.1 The portal platform shall have an integration feature to integrate with various existing government agencies' eservices. The integration feature could come in the form of the Web Service API (Application Programming Interface), which speeds up the development of portal applications.

1.2.23 Notification Feature

1.2.23.1 Portal shall include notification function. Notification (push technology) is referred to as a system in which a user receives information automatically from a network server. Push technologies are designed to send information and software directly to a user's desktop without the user actively requesting it. Thus, the user has the opportunity to subscribe to active information sources (such as newsfeeds and periodically updated reports) and asks to be alerted when documents are updated.

1.2.24 Workflow Feature

1.2.24.1 The Portal platform should incorporate a workflow engine. A workflow consists of a sequence of connected steps. It is a depiction of a sequence of operations, declared as work of a person, a group of persons, an organization of staff, or one or more simple or complex mechanisms. The workflow system

allows the users to create and publish content in a step-by-step way. It will allow a user to define any number of simple to complex business processes/workflows, deploy them, and manage them through a portal interface.

The workflow engine should have the following functions:

- The ability to verify the current status. The workflow engine should perform a check on whether the command is valid in executing a task.
- The ability to determine the authority of users. To check if the current user is permitted to execute the task.
- The ability to execute the condition script. After passing the previous two steps, workflow engine would evaluate condition script in which two processes are carried out. If the condition is true, workflow engine executes the task, and if execution successfully completes, it returns the success status to the application, if not, it reports the error to trigger and roll back the change.

1.2.25 Collaboration Feature

12.25.1 The portal platform ability to allow individuals to create their own communities empowers teams to create a web area and assign a set of collaborative tools (blog, wiki, calendar, tasks, alerts, doc sharing, etc.) to the group. An individual can create or join one or more communities and organize all collaboration within that community. They can also define who can access their pages. Team members can then collaborate together within their community site.

1.2.26 Social Feature

- 1.2.26.1 The portal platform should serve as an integration platform for social applications. It should support the Open Social framework which is a set of public specification that defines a component hosting environment (container) and a set of common application programming interfaces (APIs) for web-based applications. The portal platform should also support social media applications such as Facebook and twitter applications. No additional coding should be necessary to publish the portal applications on social media applications.
- 1.2.26.2 The portal platform should also support social media applications such as Facebook and twitter applications. No additional coding should be necessary to publish the portal applications on social media applications.
- 1.2.26.3 The portal platform shall provide a list of social related portlets for interaction and collaboration. Some of these portlets are designed to help the users work together as a team for purposes of partnerships and collaborations, while others are designed to foster social interactions between users e.g. between government officials and the business community. Some of the social portlets should be used on the public pages of the portal, while others should be used as part of a user's personal site.
- 1.2.26.4 The portal platform shall be set up to use social media applications e.g. Facebook, for sign in as an option. This makes it easier for national web portal users to sign in to the site, since they won't need to remember another user name and password.
- 1.2.26.5 The Supplier is expected to configure the social networking tools to facilitate social networking activities within the portal.

1.2.27 Online Form Tool

- 1.2.27.1 The Portal platform shall have an Online Form tool to provide for the following capability:
- **Simplicity** — The administrator could design forms with using an interactive online form creator, with no web design or HTML knowledge.
 - **Mobile Forms** — The portal platform detects if the user is access the forms via a mobile device and displays the form in a format adapted to the iPhone, iPad and other smart phones and tablets.
 - **Build Any Type of Form** — Online form creator allows the administrator to create almost any type of HTML form, from a simple feedback form to a complex survey form, registration form and order form. The form creator should supports all standard HTML fields.

- Form Submission Confirmation Email & PDF Receipt — The portal platform should allow online form users to receive an email confirmation of their form submission or download a PDF receipt.
- Web API / Web Hooks — The portal platform should facilitate integration of online forms with any other online service or web applications. Safety — The online forms should have a built-in form validation and offers advanced form spam protection.

1.2.28 Security Features

- 1.2.28.1 Portal platform should use industry standard, government-grade encryption technologies, including advanced algorithms such as DES, MD5, and RSA, and was benchmarked as among the most secure portal platforms using Logic Library's Logic scan suite. It offers a customizable single sign-on (SSO) that integrates with Yale CAS, JAAS, LDAP, Netegrity, Microsoft Exchange, and more.
- 1.2.28.2 Portal platform should come with robust user management and security features including password policies, user reminder settings, and complete log-in security procedures. Portal also should abide by OWASP guidelines to reduce the risk of security vulnerabilities. Other security features include:
- Pluggable Authentication
 - Email Verification
 - Session Management
- 1.2.28.3 The Supplier should provide server plugin Web Application Firewall that applies a set of rules to cover common attacks such as cross-site scripting (XSS) and SQL injection to an HTTP conversation.

1.2.29 Delivery Channels

- 1.2.29.1 The Portal platform should support delivery of information and e-services across multiple channels via the Mobile, Web and SMS. The Portal platform should facilitate content updates to be reflected on all the various delivery channels. The Portal should be able to log all communications across different channels including Mobile, Web browsers and SMS.

1.3 Portal Performance

- 1.3.1 The response time for the Portal is defined as the time taken from the moment an online action is performed on the user's workstation (e.g. a 'mouse click' on a hyperlink or an action button is clicked on in an online form), to the time the expected response is displayed on the screen of the user's workstation.
- 1.3.2 The Supplier shall ensure the response time of the Portal as below

1. Shall not exceed three(3) seconds for ninety-eight percentage (98%) of the time under an environment of 3,000 concurrent users for a specific session with a download speed of 512 Kbps from user location
2. Shall not exceed Five(5) seconds for ninety-eight percentage (98%) of the time under an environment of 3,000 concurrent users for a specific session with a download speed of 256 Kbps from user location
3. Shall not exceed Eight(8) seconds for ninety-eight percentage (98%) of the time under an environment of 3,000 concurrent users for a specific session with a download speed of 128 Kbps from user location

1.3.3 The Supplier shall provide and execute the necessary test programs to verify the specified response time is met during the UAT. Representatives from the MCIT should conduct UAT and the representatives of both parties should confirm the report before submitting to the MCIT. The Supplier shall submit the reports from the tests and explain the findings to the MCIT for feedback and fine-tuning if required.

1.3.4 The Supplier shall not be liable for any non-compliance if the Portal's performance is dependent on the performance and reliability of external systems.

C. TECHNICAL SPECIFICATIONS

2.0 General Technical Requirements

2.0.1 The Supplier shall provide detail information on the types of hardware configuration, software and technologies, and service components that it would utilise and support for the Portal. These minimally include:

- List of mandatory and optional client and server side software plug-ins and components required for installation;
- Other third party application tools (e.g. content migration tools, content conversions tools, content export tools, content meta-tagging tools);
- Web analytical capabilities to serve reporting purposes; and
- Any other service components required deploying, operating and supporting the Portal.

2.0.2 In the design of the Portal and/or service requests, the following characteristics shall be incorporated

- The Portal shall be flexible to allow new functionalities to be added and existing functionalities to be enhanced, with minimal changes to the Portal;
- The Portal shall be designed to share / re-use the codes as much as possible, for example, for common modules, components, reports, queries;
- The Portal shall separate content from presentation and produce clean XHTML/CSS;
- When any feature hosted outside the Portal is not available to and/or through the Portal, the Portal should present a suitable alternative and indicate that the feature is currently offline.

2.0.3 The supplier shall validate national portal logical architecture; national portal cloud architecture and required hardware list found in enclosed annex 1 and annex 2.

2.1 Solution Components

The components required to supply, install, develop and maintain, but not limited to:

1. Hardware (servers, storage, backup devices etc.).
2. Network and Security solution (switches, firewall, two factor authentication solution, Single sign on etc.).
3. Systems software (operating systems, interface software etc.)
4. Integrated portal development platform with supports application integration
5. Ancillary services (documentation, training, structured cabling, racks and associated cabling, support etc.)
6. Performance Monitoring tool

2.2 Security Specification

- 2.2.1 The Supplier shall propose a security management and governance framework. The framework shall include at least the following:
 - i. Security policies, standards and procedures for the System;
 - ii. Security architecture and design; and
 - iii. Security management and operation processes.
- 2.2.2 The Supplier shall implement the security management and governance framework for the System.
- 2.2.3 The Supplier shall be required to develop and maintain the security policies, standards and procedures specific to the System. The security policies, standards and procedures and their subsequent updates or changes shall be reviewed and approved by the Government.
- 2.2.4 The Supplier shall fully comply with the Government's system security policies, standards and instructions as well as standards and policies issued by the Government subsequently.

2.2.5 *Personal Security*

- 2.2.5.1 The Supplier shall observe the requirement for secure usage and handling of all Government information. All the Supplier's personnel shall sign a confidentiality agreement to protect the Government information against unauthorised disclosures by the Supplier's personnel in the course of their work. The Supplier shall ensure that all its personnel and subcontractors are informed that failure to comply with this agreement would be a criminal offence and may also lead the Supplier to take disciplinary action against the Supplier's personnel and subcontractors.

2.2.5.2 All the Supplier's personnel shall fully comply with any written instructions on security matters that may be issued by the Government.

2.2.6 Access Control

2.2.6.1 The Supplier's response shall specify in detail the proposed access control regime, including administration, operational and audit operations both at system and application level. The requirements for access control are as follows

1. secure, auditable management of user-ids, access rights, passwords and tokens
2. passwords to be a minimum of eight characters and to have a parameter driven lifespan after which users will be required to change their passwords
3. there will be a parameter driven inactivity delay after which users will be logged off
4. the ability to setup user groups of users with access to the same functionality and to limit the functionality of users to just those functions that they have a need to perform (roles and rules based)
5. detection and reporting of illegal attempts to access the system or functions within the system
6. the maintenance of a secure, auditable log of access to the system, identifying User ID, date, time, functions accessed, operations performed etc.

2.2.7 Authentication

2.2.7.1 The Supplier shall put in place strong authentication and access control mechanisms to ensure that only authorised users are granted access to controlled features (e.g. remote administration) in the System and networks.

2.2.7.2 The Supplier shall support strong password administration, secure creation, distribution, termination, storage and destruction of passwords. User's credentials (i.e. User ID and password) shall be distributed to users in such a manner that their confidentiality is maintained. The Supplier shall in its proposal provide information on how this is achieved.

2.2.7.3 The Supplier shall ensure that unique passwords are assigned to each new user account, or assigned during password resets. The Supplier shall not use a single, or a set of, common passwords when issuing new user accounts or regenerated passwords.

2.2.7.4 Strong passwords shall, unless otherwise approved by the Government:

- i. Implement sufficient password length to hinder brute force attacks (minimum eight (8) characters);

- ii. Be changed on a frequent, regular basis (every sixty (60) to ninety (90) days) where applicable;
- iii. Be unique and not repeatable for a number (minimally five(5)) of changes;
- iv. Be locked out after a number (minimally three(3)) of failed login attempts;
- v. Support creation of non-guessable password. The password shall be of alphanumeric inputs, including A-Z, a-z, 0-9 and applicable symbols/characters (e.g. \$,#,@);
- vi. Be logged out after a period of non-activity (minimally fifteen (15) minutes) of user's session;
- vii. Be changed when users log in for the first time;
- viii. Be set with an expiry date where necessary. The System shall prompt for change of password prior to password expiration; and Be stored in a one-way encrypted form on the System.

2.2.8 Change Control and Database Access Control

2.2.8.1 The Supplier must provide solution of mechanisms to prevent fraud or error arising in the course of implementing changes to the system. These mechanisms would be expected to include segregation of duties, acceptance testing and computerized processes for introducing and authorizing new applications or changes

2.2.8.2 The Supplier's response should describe how the following features are implemented in the system.

1. the confidentiality of information
2. data protection and database access controls
3. database security
4. user privileges

2.2.9 Security Incident Management

2.2.9.1 The Vendor shall propose and develop a security incident handling and response plan for the System. The plan shall comply with the Government's procedures for incident reporting.

2.2.9.2 The Vendor shall ensure that all their personnel are briefed on the incident reporting procedures.

2.2.9.3 All security incidents such as virus infection, security compromises, unauthorized access and security vulnerability, shall be reported to Government immediately. The Vendor shall take the necessary actions to

ensure that all security incidents are properly handled and managed.

2.2.9.4 In the event of any computer security incidents, the Vendor's responsibilities shall include:

- Investigating, resolving and recovering from security incidents; and
- Ensuring the preservation and admissibility of evidence by protecting and documenting all access to incident information.

2.2.9.5 The Vendor shall generate detail incident investigation report for each incident and submit it to the Government.

2.2.9.6 The Vendor shall also implement preventive measures to thwart the recurrence of security incidents.

2.3 Reporting Tool

2.3.1 The Portal platform must be capable of doing analyze visitor traffic and paint a complete picture of the audience and their needs. The characteristics of the reporting tools include at least the following features:

a. **Data Collection Feature**

The collection feature could measure how users interact with the content and services on any device and platform.

b. **Content Analytics Feature**

Content reporting tools to understand which parts of portal are performing well and which pages are most popular so as to create a better experience for the customers.

D. HARDWARE SPECIFICATIONS

3.0 General Requirements

- 3.0.1 The Supplier shall review the suitability of the hardware infrastructure needed to meet the portal performance standard as defined in clause 1.3. The minimum hardware infrastructure requirement can be found in the Annex 2.
- 3.0.2 The Supplier shall purchase hardware and work with the appointed authority to setup the infrastructure in the Data Centre.
- 3.0.3 It is the Supplier's responsibility to ensure that the portal platform, and electronic services works seamlessly on the hardware infrastructure as validated by the Supplier, according to the stated portal performance standard defined in clause 1.3.
- 3.0.4 The Supplier must collaborate with MCIT's appointed IT facility management team in any of the works performed at the data centre.
- 3.0.5 The Supplier must be certified (by principal product supplier) to manage and configure all the hardware equipment.
- 3.0.6 The Supplier must propose an engagement team that must at least, consist of the following roles:
- a) Service Delivery Manager – responsible for overall service level management, issue tracking and management reporting, support team organization, general requirements fulfilment, contract management and customer satisfaction.
 - b) Hardware Engineer – responsible for the hardware installation and testing to ensure the setup fulfils the stated portal performance standard.
- 3.0.7 The service engagement team should have managed projects of similar complexity and scale that involve hardware installation, configuration and maintenance within the last three (3) years.
- 3.0.8 The Supplier shall participate and/or coordinate technical design, implementation & migration relating to the data center.

3.1 Cloud Enable Environment

- 3.1.1 The Supplier shall validate the **Cloud environment architecture** in the context of scaling and existing data center infrastructure and facility. The physical topology and logical diagram for cloud environment architecture can be found in the Annex 2. The establishment of the Cloud environment in the Data Centre is meant for only the National Portal usage. No transition of the Data Centre to Cloud-enabled Data Centre or migration of existing systems to Cloud is required.
- 3.1.2 The Supplier shall need to build the portal components (hardware, OS, and application) on cloud ready environment at the Data Centre and shall deploy the National Portal on that cloud ready environment.
- 3.1.3 The Supplier shall validate the system software to build cloud environment such as cloud platform, cloud network infrastructure, cloud security and cloud management reference in Required System Software List Table, Annex2.
- 3.1.4 The Supplier shall provide 99.9% per cent uptime guarantee for the cloud environment.
- 3.1.5 The Supplier shall provide schedule details for cloud environment setup at the data center.
- 3.1.6 The Supplier shall provide the backup/recovery solution for National Portal.

3.2 General Technical Requirements

- 3.2.1 Dates: All information technologies MUST properly display, calculate, and transmit date data, including, but not restricted to 21st-Century date data.
- 3.2.2 Electrical Power: All active equipment must include power plugs standard used in the data centre.
- 3.2.3 Environmental: Unless otherwise specified, all equipment must operate in environments of 0-35 degrees centigrade, 20%-80% relative humidity, and 0-40 grams per cubic meter of dust.
- 3.2.4 Acoustic safety: Unless otherwise specified, all equipment must operate at noise levels no greater than 55 decibels.
- 3.2.5 Electromagnetic Safety: All electronic equipment that emits electromagnetic energy must be certified as meeting ISO 270001 standards.

3.3 Service Requirements

- 3.3.1 The Supplier shall execute and complete the hardware implementation to ensure that it is configured, installed and integrated flawlessly into the data center.
- 3.3.2 The Supplier shall acquaint himself with the installation site prior to installation and integration of network components.
- 3.3.3 The Supplier shall setup the production and testing/QA servers in the data center.
- 3.3.4 The Supplier shall configure the cloud environment in the data center with the proposed design.
- 3.3.5 The Supplier shall configure the cloud environment with the proposed portal platform to allow the porting of software codes between the testing/QA server to the production servers.
- 3.3.6 The Supplier shall complete all the implementation and testing of the hardware equipment within the agreed time frame with MCIT. MCIT, however reserves the right to re-confirm or reschedule the implementation period.
- 3.3.7 The works shall be accepted by MCIT only when the following conditions are met:
- a) All hardware components for the cloud environment are installed and operational.
 - b) The National Portal is functioning according to the requirements from clause 1.2. to 1.3 in the cloud environment.
 - c) The whole setup inclusive of the production environment, testing/QA environment and the backup data storage are fully networked, integrated, secured, operational and stable in the data center.
- 3.3.8 The Supplier shall fine-tune the system and make minor adjustments in order to optimise the network performance.
- 3.3.9 The Supplier shall propose a comprehensive contingency plan to be put in place if one or more components of the system fails, or when the implementation strategy and/or the system does not produce the following expected results.

- 3.3.10 The contingency plan shall involve, at no cost to MCIT, installation, configuration and removal of the contingency components in order to make the system fully operational while the failed components or the proposed design is being replaced or rectified.
- 3.3.11 The contingency plan shall be put in place immediately upon detection of a fault or when the question on the performance of the System arises, at the discretion of MCIT's Representative.
- 3.3.12 Once the contingency plan is implemented, it shall remain until all problems are resolved and the system is operationally ready.

3.4 Testing and Quality Assurance Requirements

- 3.4.1 Technical Specifications of all hardware equipment needs to be supported in form of product Data Sheets from the manufacturers. Factory inspections are not required for IT equipment supplied by manufacturers with ISO 9001 or ISO 90003 quality certification. Any other manufacturer of hardware, electrical, mechanical, switching, telecom, cabinet enclosures, or software requires (mandatory) an MCIT representative's inspection.
- 3.4.2 All hardware delivered must be inspected upon arrival by both Supplier and MCIT representatives to ensure no damages occurred in shipping or transit.
- 3.4.3 Each piece of hardware must have manufacturer start up procedures prepared, completed, and conducted as part of normal installation and configuration. All start-ups will be fully documented and start-up documents provided to MCIT's national web portal team.
- 3.4.4 During the system integration testing, the Supplier must show that the hardware setup is able to achieve the performance at $\geq 90\%$ utilization with all components, including CPUs.

3.5 Faulty Hardware Replacement

- 3.5.1 The Supplier shall not use as replacements, any parts/components which are not original, parts/components which have not been approved by the Manufacturers of the network equipment unless he has the prior consent of MCIT.

- 3.5.2 In the case where the substitute equipment or components require interfacing software drivers, the Supplier shall immediately provide MCIT, at his own expense, with such software, subject to MCIT's satisfaction, for the period during which the substitute equipment or part remains in operation at the data centre premise. The substitute equipment or part thereof must be of equivalent or higher performance to the original equipment or part.
- 3.5.3 The response time for onsite hardware maintenance service on any calendar day shall be 4 hours.
- 3.5.4 The Supplier shall not remove/replace any hardware or part(s) thereof without the consent of the MCIT or its appointed representative.
- 3.5.5 Any defective hard disks removed from the storage hardware are the property of the MCIT. It must be returned to the MCIT or its appointed representative.
- 3.5.6 Any replacement part to the supported hardware shall become the property of the MCIT at no cost.
- 3.5.7 The Supplier must collaborate with the MCIT's IT facility management (ITFM) team in any of the works performed at the data centres.
- 3.5.8 The Supplier shall make prior arrangements to confirm with the MCIT on the time and date before commencement of maintenance works.
- 3.5.9 The Supplier shall, at the beginning of the service, discuss with MCIT's representative and document the list of personnel to be notified, via electronic mail and hand phone for any service call.
- 3.5.10 The Supplier shall label all the equipment covered under this requirement. The label shall clearly indicate the start and end date of the maintenance period.

3.6 Responsibility Matrix

- 3.6.1 The responsibility matrix specifies the division of responsibilities between Supplier and MCIT for Supply, Installation and Commissioning of hardware equipment for the National Portal.
- 3.6.2 For the tasks listed below the responsibility can be with:
- One party alone: respective column marked "R"
 - Both Parties: both columns marked "R"
 - One party with the support / Assistance from the other Party: responsible column marked "R", other party marked "A"

S/No.	Description	MCIT	Supplier
1.	Design		
1.1	Preparation of Installation Drawings & Plan		R
1.2	Preparation of hardware implementation based on installation Drawings & Plan		R
1.3	Check and Verification of Installation Drawings & Plan	R	A
1.4	Approval of the Installation Drawings and Plan	R	
2.	Acquisition of permissions and preparation of Sites		
2.1	Acquisition of permission on the activity of Supplier personnel (e.g work permits)	A	R
2.2	Provision of sites and installation space for hardware equipment	R	
3.	Manufacture, Procurement and Delivery of the Hardware Equipment		
3.1	Procurement of Other Installation Materials		R
3.2	Custom Clearance in Myanmar	A	R
3.3	Delivery to sites and Storage		R
3.4	Inspection upon delivery	R	A
3.5	Inventory Control and Safety of equipment / Materials		R
4.	Safety Precaution		R
5.	Installation / Construction		

S/No.	Description	MCIT	Supplier
5.1	Preparation of Detailed Implementation Schedule		R
5.2	Provision of necessary implementation tools and machinery		R
5.3	Installation of equipment and related materials / accessories		R
5.4	Supervision of Installation works		R
5.5	Disposal of excess materials		R
6.	Acceptance and Commissioning		
6.1	Preparation of acceptance test procedures		R
6.2	Approval of acceptance test procedures	R	
6.3	Provisional Acceptance Testing	A	R
6.4	Preparation of Acceptance Report		R
6.5	Approval of the Acceptance Testing Report and issuance of provisional acceptance certificate	R	
6.6	Clearance of snag lists		R
6.7	Preparation of Final Acceptance Report		R
6.8	Approval of Final Acceptance Report and issuance of Final acceptance certificate	R	
7.	Documentation		
7.1	Preparation of red-marked drawings/documents		R
7.2	Approval of red-marked drawings/documents	R	
7.3	Preparation of As-Built drawings/documents for		R

S/No.	Description	MCIT	Supplier
	easy maintenance of the systems		
7.4	Approval of As-Built drawings/documents for easy maintenance of the systems	R	
8.	Project Management		
8.1	Progress Monitoring and Control	R	R
8.2	Quality Assurance	R	R
8.3	Compliance to Relevant Local Regulations		R
8.4	Coordination of Meetings	R	R
9.	Training to Purchaser personnel on Equipment O & M	A	R
10.	Maintenance & warranty services		R
11	Insurance		
11.1	Third Party Liability Insurance		R

E. IMPLEMENTATION SPECIFICATIONS

4.0 Implementation Plan

- 4.0.1 The Supplier shall propose an implementation plan for detailing the project schedule to meet the key project milestones. The project schedule shall show details up to task level, how each milestone could be achieved within the timeframe specified in the implementation plan. The project schedule shall reflect possible overlaps between key activities and their interdependencies. The project schedule shall also highlight the critical path. The key project milestones and completion date are as follows:

<i>S/N</i>	<i>Project Milestones</i>	<i>Completion Date</i>
1	Submission of Implementation Plan	Within <u>twenty eight (28)</u> calendar days from the effective date of contract.
2	System Acceptance	Not later than <u>one hundred and twenty five (125)</u> calendar days from the effective date of contract.
3	Performance Guarantee Period (PGP)	Commence on after Operational Acceptance completion date for a period of twenty eight (28) calendar days.
4	System Commissioning	<u>Seven (7) calendar days</u> upon successful completion of Operational Acceptance Test Approval by the Government.
5	System Warranty Period (for System)	Commence on Operational Acceptance Test approval Date for a period of <u>thirty six (36)</u> calendar months.

- 4.0.2 The Supplier may propose a schedule where the milestones can be achieved earlier. The Supplier shall draw up the schedule using Microsoft Project or Excel.

4.1 Performance Guarantee Period (PGP)

- 4.1.1 The System shall have successfully completed the PGP if the System meets the performance and Service Availability for each calendar month or part thereof during the PGP.

- 4.1.2 In the event that the System fails to meet the requirements, the PGP shall continue from day to day until the System has met the System performance and System Availability as stipulated, over a period of twenty-eight (28) consecutive working days which period shall not begin earlier than sixty (60) working days from the Commissioning Date.
- 4.1.3 The Supplier shall provide the MCIT with daily records of the System for monitoring of the System performance during PGP to determine the successful completion of the PGP.
- 4.1.4 Once the System has successfully completed the PGP, the MCIT shall issue a written notice to the Supplier commissioning the System. The date of the notice or the date when such notice should be issued as determined from the records kept (if different from the date of the notice) shall be the Commissioned Date.
- 4.1.5 During the PGP, the Supplier shall at all times and under all conditions be entirely responsible for the functioning of the System in accordance with the Requirement Specifications, and for the compliance of such additional requirements as may be mutually agreed upon, during the system development stage, between the MCIT and the Supplier at no additional cost to the MCIT.
- 4.1.6 The Supplier shall remedy and make good at no cost to the MCIT all defects, deficiencies, failures or damage to the System or any part thereof arising at any time prior to the commencement of the System Warranty Period. For avoidance of doubt, defects shall include defective design, materials, workmanship, incorrect operating or maintenance instructions given by the Supplier in writing, and any damage to the System or operational data. The Supplier shall be required to carry out corrective action within one (1) calendar days from the date of the notice given by the Government of any defect, deficiency, failure or damage to the System or any part thereof. The Supplier shall furnish the MCIT with a report to explain the defects and to advise on the corrective action taken within three (3) calendar days after the defects have been rectified.

4.2 System Acceptance

- 4.2.1 The Supplier shall propose a detailed acceptance test plan showing the time schedule and sequence of events necessary for the acceptance of the System including a delivery schedule for the documentation and the respective dates for development, testing, installation, delivery and acceptance of the System.

- 4.2.2 The proposed acceptance test plan is subjected to the approval of the MCIT, who reserves the right to modify the actual scope of testing or specify different procedures or tests to be conducted within the scope of contract.
- 4.2.3 The Acceptance Tests shall comprise of system integration testing, UAT, System Performance Tests and cloud enabled solution testing.
- 4.2.4 The Supplier shall provide the environment for conducting the various tests specified, and work closely with the MCIT to generate test scenarios and test cases.
- 4.2.5 The Supplier shall notify the MCIT two (2) weeks in advance of the Acceptance Tests, and conduct the Acceptance Tests in the presence of a Client and other representatives of the MCIT.

4.2.6 System Integration Testing

- 4.2.6.1 The System shall be developed and tested before installation in the production environment. The Supplier shall provide documentation to satisfy the MCIT that the Supplier has tested the functionality, performance and resilience of the various components of the System prior to UAT.
- 4.2.6.2 The Supplier shall conduct the tests on the System in the testing and production environment to ensure that the software and hardware have been installed and setup properly.
- 4.2.6.3 The scope of the system integration tests shall cover integration tests on the System including any customised functions and functional tests on the functional requirements and customisations specified in this tender.
- 4.2.6.4 The Supplier shall submit the system integration and test report detailing the test results from the successful completion of the tests to the MCIT for review at least two (2) weeks before the commencement of the UAT. The MCIT reserves the right to hold back the UAT until the evidence of the successful completion of the tests is produced.

4.2.7 User Acceptance Testing (UAT)

- 4.2.7.1 The Supplier shall conduct the UAT with a proposed group of end users comprising of representatives of the client and other from the MCIT. The Supplier shall conduct training to this proposed group of end users who are performing the test to guide them on the test procedures.

4.2.7.2 The scope of the UAT shall include functional tests of the System to test all the functional requirements specified in this Tender.

4.2.7.3 The Supplier shall submit a comprehensive UAT plan for on-site acceptance testing of the System, primarily to verify the full compliance of the installed System. It shall include:

- a. Acceptance tests approach, test procedures, test scenarios, test cases, test scripts, expected test results and environment setups;
- b. Activities and procedures for carrying them out;
- c. Roles and responsibilities of project personnel involved in the test;
- d. Fault reporting control and progress; and
- e. Design of forms, checklist and acceptance certificates for the various deliverables at each delivery milestone.

4.2.7.4 The Supplier shall work closely with the MCIT to generate all UAT scenarios, test cases and test data to the satisfaction of the MCIT. The MCIT reserves the right to modify the actual scope of testing or make changes to the test cases and test data.

4.2.7.5 The UAT shall not be deemed completed until all the tests and documentations are accepted and signed off by the MCIT. All costs for UAT shall be borne by the Supplier, which include:

- a. Software performance and load testing tools;
- b. Monitoring and analysis tools; and
- c. Manpower and other resources required for conducting the tests.

4.2.7.6 The Supplier shall repeat any part of the UAT if any of the following scenarios happen:

- a. The System does not meet all the requirements specified in this tender document; and
- b. Any of the test cases or test scenarios failed.

4.2.7.7 The Supplier shall demonstrate to verify the correct operation of file system and

storages, demonstrate system performance, ensure file system and storages are robust, prove success of data migration techniques, validate integrity of file transferred and verify the correct operation of backup and restore procedure.

4.2.7.8 The Supplier shall provide the UAT report detailing the test cases, test results (both expected and actual test results), problems identified, and rectification actions taken.

4.2.7.9 The UAT Report shall be submitted to the MCIT two (2) weeks after the end of the UAT for approval and acceptance by the MCIT, before the System is rolled out to production environment.

4.2.8 System Performance Testing

4.2.8.1 The Supplier shall propose the scope and criteria for System performance testing, which shall encompass planning, benchmarking, identifying the areas of performance bottlenecks, fine-tuning and stress testing the System.

4.2.8.2 The Supplier shall conduct the entire performance testing exercise to ensure that the System can support the System performance and Service Availability.

4.2.8.3 The Supplier shall provide the equipment and software to perform the load simulation test at no additional costs to the MCIT.

4.2.8.4 The Supplier shall conduct the performance test in the production environment and shall achieve all performance requirements as stated in the approved test plan before the launch of the System.

4.2.8.5 The Supplier shall install the necessary monitoring agents in the production environment for the purpose of collating performance statistics.

4.2.8.6 The Supplier shall document the complete performance test results and fine-tuning methods to achieve the System performance.

4.2.8.7 In the event that the response time cannot meet the requirements, the Supplier shall carry out all necessary remedial actions and remedial services and absorb all subsequent costs to upgrade the hardware and software until the committed performance level is achieved.

4.3 System Commissioning

- 4.3.1 The Supplier shall demonstrate that the delivered System has adequately met all the required specifications.
- 4.3.2 The Supplier shall ensure that the following requirements are met before the System is commissioned:
- a. The System is operational;
 - b. UAT is completed and accepted by the Client;
 - c. The documentation has been accepted by the Client;
 - d. The services to support Service delivery are in place, including the helpdesk service and problem management system;
 - e. The required operational procedures have been reviewed and accepted by the MCIT;
 - f. The security plan has been executed and accepted by the Client; and
 - g. All system and security audit findings are mitigated to the satisfaction of the auditors and the Client.
- 4.3.3 In the event of non-compliance with requirements, the Client may reject the System. The Supplier shall then take immediate action to analyse the failure and rectify the problem discovered within five (5) working days. For avoidance of doubt, a bypass or other temporary solutions shall not qualify as rectification of a problem.

4.4 Warranty for System and Software

- 4.4.1 The Supplier shall provide warranty for the System and all other software proposed by the Supplier in this tender.
- 4.4.2 The warranty period shall commence on the System Acceptance Test approval Date and shall last for thirty six (36) calendar months.
- 4.4.3 During the System Warranty Period, the Supplier shall at all times and under all conditions be entirely responsible for the satisfactory operation of the System and all other software supplied.

- 4.4.4 The Supplier shall ensure that the System and all other software supplied complies with the MCIT's specifications and shall be of the highest quality and fit for purposes set up in the Tender specifications and additional requirements agreed upon between the MCIT and the Supplier. The Supplier shall be responsible to work with his sub-contractors to rectify any defects with the System and all other software supplied, including those arising out of faulty and inferior system design.
- 4.4.5 The Supplier shall bear all costs of testing or examining incurred in repairing defects if such defects are discovered within the Warranty Period. These include overseas phone calls / fax and air freight charges.

4.5 Exit Plan

- 4.5.1 The Supplier shall submit an exit plan six (6) months after the issuance of the Letter of Acceptance. The exit plan and the detailed schedule shall be subjected to the MCIT's approval.
- 4.5.2 The exit transition period shall be managed and supervised by the MCIT.
- 4.5.3 The Supplier shall be given a maximum of three (3) months to hand over the System and all backup media to a new Supplier appointed by the MCIT upon the expiry or termination of the contract. The Supplier should plan the transition accordingly to ensure that it shall be completed before the expiry of the contract. Any additional cost incurred due to the delay in transition caused by the Supplier shall be borne by the Supplier.
- 4.5.4 The Supplier shall be responsible to conduct a detailed hand-over, inclusive of briefing and training sessions, of the complete System to the appointed MCIT personnel and the new Supplier. Any cost incurred by the Supplier during the period of hand-over shall be borne by the Supplier. The hand-over shall be conducted concurrently with the on-going support required of the Supplier without affecting the service levels.
- 4.5.5 The Supplier shall duly document all items comprising the System, including hardware, software, backup media and login account information, in both hard and editable softcopy in Microsoft Office file format. The Supplier shall ensure the accuracy and completeness of information documented and handed over to the new Supplier.
- 4.5.6 The Supplier shall remain fully responsible and accountable for ensuring the smooth on-going operations and deliver all required Services stipulated in the current contract, while going through the transition process. The Supplier shall bring in the relevant resources at no cost to the MCIT to cover the daily operations if required so as not to degrade the System performance during the transition period.
- 4.5.7 All user accounts and access rights assigned to the Supplier shall be revoked upon the expiry of the Contract. The revocation shall be carried out in a timely manner.

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- 4.5.8 The Supplier shall present periodically (at least once a week) on the progress update of the transition to the MCIT, for proper tracking and monitoring.
 - 4.5.9 If the Supplier demonstrates unwillingness in cooperating fully with the new Supplier to achieve a smooth transition process, the MCIT reserves the right to further extend the transition period until the whole transition process is completed; the Supplier shall then bear the full cost incurred as a result of the extension.
 - 4.5.10 All efforts expended for the conduct of handing over shall not result in any cost to the MCIT, whether it is to the MCIT Representative or to a third party service provider.

F. INCIDENT AND MAINTENANCE

5.0 Incident Management

5.0.1 The Supplier shall provide a single contact point (technical support) for all enquiries, incident logging, problem reporting, service request administration, and follow-up.

5.0.2 The Supplier shall front incidents reported by the Government Helpdesk and/or the facilities management vendor appointed by the Government, by interacting with the affected parties directly and drive the resolution of the incident by directly engaging other relevant parties, including 3rd party vendors, till the full resolution and closure of the incident.

5.0.3 The Supplier shall offer full assistance to the Government helpdesk and/or the facilities management vendor, to achieve the required service levels as stipulated.

5.0.4 The alert shall describe the problem encountered and advise affected parties on the possible resolution time and/or follow up action to be undertaken by affected parties. Subsequent updates will be provided every hour via email and SMS until services are restored to normal.

5.0.5 The Supplier shall provide the Government with an incident report that gives an analysis of the problems, corrective and preventive actions taken.

5.0.6 The “Problem Resolution Time” shall begin upon detection of the problem until the problem is resolved and the defect is restored to a complete working condition.

5.0.7 The Supplier shall be measured on its service levels for production support via the incident management mechanism as shown below:

Business Impact Level	Definition	Escalation	Expected Service Resumption or Response Time
1	<p>A) Impact on Business Operations</p> <ul style="list-style-type: none"> • Results in significant negative publicity for the Government; for example, the problem is reported in newspapers or other publications in the public domain; or 	<p>Inform Government Project Manager immediately (not more than 120 min) upon problem detection via phone and</p>	<p>Service Resumption:</p> <p>First 120 minutes: Establish the cause of problem and resolve the problem. Contingency or bypass methods should be used if problem occurs during office hour to quickly resume the normal service.</p> <p>Next 2 hours: The Supplier</p>

	<ul style="list-style-type: none"> • Prevents users from accessing web content/services on the production environment. <p>B) Impact key decision-making users</p> <ul style="list-style-type: none"> • affects Permanent Secretary and above. <p>C) Impact public at large</p> <ul style="list-style-type: none"> • creates public inconvenience / alarm / chaos. <p>D) Security Breaches of Govt System</p> <p><u>Malicious security attacks</u></p> <ul style="list-style-type: none"> • incidents affecting govt-wide (central infrastructure) and/or national level (denial of service, targeted attacks, sabotage) ; or • potentially affects the ability of the Government to perform its functions. • incident which has an adverse impact on the business operation of the Portal. <p><u>Web defacement</u></p> <ul style="list-style-type: none"> • affects the Portal. • potentially results in negative image or adverse impact on the reputation of the Government. 	<p>SMS.</p> <p>Inform Affected Parties within next 120 minutes upon problem detection, via SMS or other appropriate means.</p> <p>To provide hourly update to all parties on the latest status until problem is resolved.</p> <p>The Supplier shall analyse the cause of problem and an Incident report shall be submitted to the Government within 2 working days upon the occurrence of the incident.</p>	<p>should report on-site within 2 hours.</p> <p>Total problem resolution time shall not exceed 6 hours upon problem detection.</p>
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	<p><u>Virus/Worm/Trojans</u></p> <ul style="list-style-type: none"> • virus attacks disrupting the Portal; or attacks affecting the Portal. • virus attacks affecting users and resulting in adverse impact on the business operation of the Portal. 		
<p>2</p>	<p>A) Impact on Business Operations</p> <ul style="list-style-type: none"> • disruption of service which prevents users from creating, editing, approving and/or publishing content on the production or staging servers; • affects external systems and/or agencies that interface with the Portal. <p>B) Impact to public at large</p> <ul style="list-style-type: none"> • some public inconvenience. <p>C) Security Breaches of Government System</p> <p><u>Malicious security attacks</u></p> <ul style="list-style-type: none"> • targeted attacks on the the Portal; or • results in some impact on the accessibility of the the Portal; or • incident localized within the the Portal which has no adverse impact to the 	<p>Inform Government Project Manager immediately upon problem detection via phone and SMS.</p> <p>To provide update to all parties on the latest status every 2 hours until problem is resolved.</p> <p>The Supplier shall analyse the cause of problem, and an Incident Report shall be submitted to the Government within 3 working days upon occurrence of the incident.</p>	<p>First 120 minutes: Establish the cause of problem and resolve the problem. Contingency or bypass methods should be used if problem occurs during office hour to quickly resume the normal service.</p> <p>Next 2 hours: The Supplier should report on-site within 2 hours</p> <p>Total problem resolution time shall not exceed 24 hours upon problem detection.</p>

	<p>users(eg. Content author, editor and approving official).</p> <p><u>Virus/Worm/Trojans</u></p> <ul style="list-style-type: none"> • localized attacks disrupting users within the Portal with some impact on the normal functioning of the Portal; or • virus attacks affecting The Portal but resulting in no adverse impact on the normal functioning of The Portal website. 		
3	<p>Type:</p> <p>a) Enquiries (Include user enquiries through phone calls, emails and or SMS)</p> <p>b) Service Requests</p> <p>c) Complaints</p> <p>d) Suggestions</p>	<p>Inform Government Project Manager through email if the problem cannot be resolved within 5 working days.</p>	<p>Respond within 2 working days.</p> <p>Resolve problem within 5 working days.</p>

5.1 Change and Configuration Management

- 5.1.1 The Supplier shall comply fully with information technology infrastructure library (ITIL) change management and release management process for planning and implementing efficient procedures for the distribution and installation of changes to the Portal, and shall log and file all changes made to the Portal centrally for future audit.
- 5.1.2 The Supplier shall ensure that all software introduced to the System operating environment shall conform fully to the System configuration standards approved by the Government, regardless of whether the configurations are performed by the Supplier or other 3rd party vendors.

- 5.1.3 The Supplier shall test all new product releases, patches and /or proposed system changes and assess their impact on existing services/applications before implementation in the production environment.
- 5.1.4 The Supplier shall identify all documentation affected by the proposed changes as part of the impact analysis and update them within two (2) working days after the changes have been applied.
- 5.1.5 The Supplier shall ensure that all software used shall not be more than two (2) generations (major version upgrade) behind the latest version available in the market. The Supplier shall be responsible for securing written approval from the System owner for the use of any software that is older than two (2) generations (major version upgrade).
- 5.1.6 The Supplier shall communicate any scheduled changes to be performed on the Portal, and the impact of the changes to affected parties at least one (1) month in advance. The proposed change schedule shall be postponed to a later date, if necessary, based on feedback given by the affected parties, in consultation with the Government Project Manager.
- 5.1.7 The Supplier shall implement the proposed changes according to the approved change request and within the approved period. The Supplier shall roll back the changes if they cannot be completed in time. The Supplier shall inform the Government Project Manager and affected users within the next one (1) hour after the changes have been successfully implemented or rolled back.
- 5.1.8 All services running on the Portal shall be available on 24 x 7 basis, including Sundays and public holidays.
- 5.1.9 The Supplier shall work out a list of proposed service component(s) to be managed in consultation with the Government within two (2) weeks upon the award of contract for monitoring and reporting purposes.

5.2 Portal Maintenance Plan

- 5.2.1 The Supplier shall propose, as an option, a Portal maintenance plan that covers the Portal maintenance support, after the implementation of the Portal.
- 5.2.2 The Portal maintenance plan shall include a minimum of fifty (50) man-days per year, for the Contract duration, and the tasks performed within this amount of man-days are all inclusive without additional charges to the Government.
- 5.2.3 Any Services that are performed beyond the stipulated man-days limit will then be chargeable to the Government based on the price plan proposed in the Portal maintenance plan.

- 5.2.4 The Portal maintenance plan shall state the effort in man-days required for different types of services such as content update requests, new content creation, graphics creation, and simple/complex eservice development.
- 5.2.5 The Supplier shall submit the proposal for the Portal maintenance plan based on the following criteria:

No.	Classification	Description	Assessment Period*
1.	Minor request	Service request that require less than or equal to <u>three (3)</u> man-days to complete	Within <u>one (1)</u> working day
2.	Major request	Service request that require more than <u>three (3)</u> man-days to complete	Within <u>three (3)</u> working days
3	Urgent request	Service requests that are urgently required	Within <u>one (1)</u> working day

*Assessment Period – the time taken by the Supplier to perform the impact analysis and resource estimation for the service request.

- 5.2.6 The Supplier shall ensure that all approved service requests are completed and implemented based on the following criteria:

No.	Estimated Service Request Man-days Effort	Elapsed Completion Time*
1	Less than or equal to <u>three (3)</u> man-days	Within <u>three (3)</u> working days or based on mutual agreement between the Supplier and the Government
2	Greater than <u>three (3)</u> man-days	Based on mutual agreement between the Supplier and the Government
3	Urgent request	

* Elapsed Completion Time – the time taken from the approval of the service request to the completion and implementation of the service request.

The implemented service requests shall have the following system warranty periods:

Classification	Warranty Period
Service requests that require more than <u>twenty (20)</u> man-days to complete	<u>Three (3)</u> calendar months from Implementation Date of the service request

- 5.2.7 The Supplier may include other criteria, if required, to cover regular minor service requests such as user creation, password reset, minor content update, and minor spelling corrections.
- 5.2.8 The Supplier shall propose an application enhancement plan to the Portal at least once a year. This proposal is subjected to the approval of the Government and may be executed via a service request.
- 5.2.9 The Supplier shall engage the public for feedback on the application enhancement and Portal facelift. The Supplier shall assess the feedback and propose the enhancement for the System to the Government.

G. TRAINING SPECIFICATIONS

6.1 Portal Administration & Management Training for Portal Administrators.

This training is meant for portal administrators who would be doing the maintenance work. The Supplier shall develop the training material and conduct one (1) detailed training session with the portal administrators.

The list of topics for Portal Administrators would include:

- a. Portal CMS Installation and Configuration
- b. Configuration of users, user groups, roles, organisation, communities and using the control panel to add users, make changes to user management, organisation, roles and teams;
- c. Global settings inclusive of security settings, and email notifications;
- d. Content Management and using the page and site templates;
- e. Portal Monitoring Tool
- f. Backing up the installation and understanding the logging system

6.2 Portal Overview and Content Updating for Participating Government Ministries & Municipalities.

The Supplier shall developed the training material and conduct up to twenty (20) full days to educate the participating Government Ministries & Municipalities who are offering content and are heavy users of the Web Portal. This training should focus on giving an overview of the portal's objectives, the key sections of the portal, how to search for content, and a step-by-step walkthrough on how to publish and update the content under their care.

This training session should provide hands-on experience for the Government Ministry officers to login with their given ID/password, understand the user interface, how to perform search, and how to navigate the user interface, publish 30-50 dummy content, edit & delete 30-50 dummy content to gain confidence.

H. DOCUMENT SPECIFICATIONS

- 7.1 The Supplier shall establish a proper document change procedure to keep track of the changes done to the documents. The reasons for the change, the date when the document is last updated and the name of the personnel who has made the last update. Proper versions of the documents have to be kept.
- 7.2 The Supplier shall be responsible for the provision of adequate and suitable documentation in respect of the supplied System. All documentation shall be completed and delivered to the MCIT as a prerequisite to System commissioning.
- 7.3 The Supplier shall provide the following minimum documentation:
- Detailed Project Organization Structure – This section must demonstrate the roles and responsibilities of each of the Bidder’s proposed Key Staff, by name.
 - Project Management Plan including project procedures and regulations, description of potential project risks and issues with proposed methods to overcome them.
 - Portal Design, Development, Cloud enabled architecture design and implementation plan. This section must describe the development methodology to be used by the Bidder. In particular, it must show how the Bidder proposes to assure Beneficiaries management staff and user satisfaction with the final functionality and operation of the system, and how the Bidder proposes to assure the Purchaser’s key users would be involved in the development to assure on-going participation in the process.
 - Detailed Implementation Schedule – This Implementation Schedule must demonstrate all activities under the project and must show all dependencies and critical paths.
 - Training Plan – This must include both the Bidder’s classroom training proposal and the Bidders on-the-job training and technology transfer proposal.
 - Implementation Plan – This plan must demonstrate the detailed steps associated with the required configuration and implementation including the approach proposed to assure compliance with functional and non-functional requirements.
 - Operational Acceptance Testing Plan – This must include a description of the software sub-system testing protocols for Operational Acceptance of the software following the development and testing stages.
 - Warranty Service Plan – This must describe how the Bidder proposes to assure fulfillment of the response time requirements for correcting software failures according to the Contract and the Technical Requirements.

- Task, Time, and Resource Schedules – This section must demonstrate which proposed staff would be assigned to which activities under the project.
- Technical Support Plan – This section must show the proposed method for assuring the support of all Standard and Custom software both during development and implementation and following acceptance throughout the Warranty period.
- Coordination and Turnover Plan – it must describe how the Bidder proposes to assure that the Government Data Centre personnel will become sufficiently experienced and trained to be capable of assuming the full responsibility for the hardware related operation and other support, maintenance and enhancement tasks at the completion of the Supplier's contractual obligations in order to guarantee the long-term sustainability of the supplied solution.
- Operation and Maintenance Documentation - Three (3) sets of comprehensive operation and maintenance manuals shall be clearly set out in typewritten or printed form and submitted to MCIT.

The operation and maintenance manuals shall cover, but not limited to, the following topics:

- (a) General description of the equipment;
- (b) Setting up and operating instructions for all the equipment and accessories installed;
- (c) Start-up and shutdown procedures;
- (d) Logical and physical network diagram;
- (e) Performance monitoring/tuning procedures;
- (f) Failure and recovery procedure;
- (g) Any other information which is relevant to maintaining the hardware
- (h) User manual or web design guidelines document and design and maintenance guidelines for the Portal.

- 7.4 The Supplier shall provide satisfactory answers to any queries raised by the MCIT concerning any information stated in the documentation.
- 7.5 The Supplier shall provide draft versions of the documentation for the MCIT's review before delivering the final version of the documentation to the MCIT for approval. The Supplier shall cater for at least two (2) calendar week for each review by the MCIT.
- 7.6 The Supplier shall provide three (3) hardcopies and one (1) CD copy of all documentations two (2) weeks after the end of PGP.

7.7 Documents

- 7.7.1 All documentation shall be written in good, simple and concise English language using accepted technical terms and symbols. All documents, except for the standard documentation that accompanies the appropriate hardware and system software, shall be made available in hardcopy and softcopy in Microsoft Word format for ready reference and subsequent maintenance. All such documents shall have comprehensive indices to facilitate quick reference.
- 7.7.2 All documentation provided shall be of the same version of the supplied System. The Supplier shall provide any revised editions, supplementary materials or new publication relevant to the supplied System and documentation on enhancements and personnel changes at no cost to the MCIT.
- 7.7.3 All documents produced by the Supplier in fulfilling this Contract, shall become the property of the MCIT. The MCIT reserves the right to reproduce, at no cost whatsoever, any documentation supplied with the supplied System for its own use. Prior approval must be obtained from the MCIT for any reproduction and distribution of documents produced by the Supplier.

I. IMPLEMENTATION SCHEDULE

Implementation Schedule Table

Line Item No.	Subsystem / Item	Configuration Table No.	Site / Site Code	Delivery (Bidder to specify in the Preliminary Project Plan)	Completion (weeks from Effective Date)	Acceptance (weeks from Effective Date)	Liquidated Damages Milestone
0	Project Plan	--	--		W02	W03	N
1	Requirements Validation				W08	W10	N
2	System Design				W10	W12	N
3	Cloud Virtualization Environment, Hardware installation and configuration in the Data Centre				W15	W16	Y

Line Item No.	Subsystem / Item	Configuration Table No.	Site / Site Code	Delivery (Bidder to specify in the Preliminary Project Plan)	Completion (weeks from Effective Date)	Acceptance (weeks from Effective Date)	Liquidated Damages Milestone
4	Portal Development and Installation				--	--	-
4.1	Platform Development				W16	--	Y
4.2	Platform Installation and Configuration in Data Centre				W17	--	Y
4.3	e-Services Integration Design & Development				W20	--	Y
5	Testing (inclusive of Systems & UAT)				W22	W24	Y
6	System Acceptance				W24	W25	Y

Line Item No.	Subsystem / Item	Configuration Table No.	Site / Site Code	Delivery (Bidder to specify in the Preliminary Project Plan)	Completion (weeks from Effective Date)	Acceptance (weeks from Effective Date)	Liquidated Damages Milestone
7	PGP				W26	W27	Y
8	System Commissioning				W28	--	
9	Training				W29	--	
10	Operation and Maintenance (3 Years)				W177	--	

Site Table(s)

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

[specify: **the detailed information regarding the site(s) at which the System is to be operated**]

Site Code	Site	City / Town / Region	Site Information (e.g., building , floor, department, etc)	Quantity
1	Hardware	Nay Pyi Taw	Data Center e-Government Department, Information Technology and Cyber Security Department (ITCSD), Ministry of Communications and Information Technology S12, Exchange Building, Zabu Kyatthayay Road, Zabuthiri Township, Nay Pyi Taw, Myanmar.	-
1.1	Rack Server			3
1.2	Fabric Switch			2
1.3	Cloud Enabled Firewall			2
1.4	SAN Storage			1
1.5	Operation System (OS)			-
1.6	Web Server Software			-
1.7	Database Software			-

Site Code	Site	City / Town / Region	Site Information (e.g., building , floor, department, etc)	Quantity
1.8	Storage management and backup system software			-
1.9	Cloud Platform			-
1.10	Cloud Network Infrastructure			-
1.11	Cloud Security			-
1.12	Cloud Management			-

J. REQUIRED FORMAT OF TECHNICAL BIDS

- 1 Description of Information Technologies, Materials, Other Goods, and Services**
 - 1.1 The Bidder must provide detailed descriptions of the essential technical, performance, or other relevant characteristics of all key Information Technologies, Materials, other Goods, and Services offered in the bid (e.g., version, release, and model numbers). Without providing sufficient clear detail, Bidders run the risk of their bids being declared non-responsive.
 - 1.2 To assist in the bid evaluation, the detailed descriptions should be organized and cross referenced in the same manner as the Bidder's item-by-item commentary on the Technical Requirements described in Section 2 below. All information provided by cross-reference must, at a minimum, include clear titles and page numbers.
- 2 Item-by-Item Commentary on the Technical Requirements**
 - 2.1 The Bidder must provide an item-by-item commentary on the Purchaser's Technical Requirements, demonstrating the substantial responsiveness of the overall design of the System and the individual Information Technologies, Goods, and Services offered to those Requirements, see ITB Clause 16.2 (b) (ITB Clause 14.2 (b) in the two-stage SBD).
 - 2.2 In demonstrating the responsiveness of its bid, the Bidder is strongly urged to use the Technical Responsiveness Checklist provided in Section J of the Technical Requirements. Failure to do so, increases significantly the risk that the Bidder's Technical Bid will be declared technically non-responsive. Among other things, the checklist should contain explicit cross-references to the relevant pages in the Bidder's Technical Bid.
- 3 Preliminary Project Plan**
 - 3.1 The Bidder must prepare a Preliminary Project Plan describing, among other things, the methods and human and material resources that the Bidder proposes to employ in the design, management, coordination, and execution of all its responsibilities, if awarded the Contract, as well as the estimated duration and completion date for each major activity. The Preliminary Project Plan must also address the topics and points of emphasis specified in *[state: "SCC Clause 19" including any additional items stated in the Bid Data Sheet for ITB Clause 16.2 (c) (ITB Clause 14.2 (c) in the two-stage SBD)]*. The Preliminary Project Plan should also state the Bidder's assessment of the major responsibilities of the Purchaser and any other involved third parties in System supply and installation, as well as the Bidder's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.

4 Confirmation of Responsibility for Integration and Interoperability of Information Technologies

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

K. TECHNICAL RESPONSIVENESS CHECKLIST

Technical Responsiveness Checklist

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

Tech. Require. No. 1	Technical Requirement: The Supplier shall propose a portal design that is sensitive towards the Myanmar culture The Supplier shall propose the information architecture, and user-friendly navigation features for key sections in the Portal, namely the Government-to-Citizens, Government-to-Business, and Government-to-Visitors.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 2	Technical Requirement: The Portal shall be developed based on prevailing World Wide Web Consortium (W3C) standards and industry web design best practices.	Mandatory
Bidder's technical reasons supporting compliance:		

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 3	<p>Technical Requirement:</p> <p>The Supplier shall develop a complementary sub-site design template and style guide for the Portal. The sub-site design template shall be easily adopted into different designs for different sub-sites of the Portal, but still retaining the visual or sub-site linkages to the main Portal design.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 4	<p>Technical Requirement:</p> <p>The Supplier shall develop the portal to available in two languages (Myanmar, English) and these languages can be switched on the fly. The Supplier shall work closely with Natural Language Processing (NLP) to utilise Myanmar Unicode font. such as onscreen keyboard, and CSS font embedded technology.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 5	<p>Technical Requirement:</p> <p>The Supplier shall design a site map that is comprehensive and easy-to-understand. The site map shall enable users to locate content in the web site in a simple and logical manner.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 6	<p>Technical Requirement:</p> <p>The navigation structure and menus shall be designed to be intuitive and user-friendly. The navigation menu must be easy to maintain and modify, and is able to handle at least <u>three (3)</u> levels (depth) of content structure. Where appropriate, other navigational features such as breadcrumbs and visual pointers (e.g. page pointers) should be incorporated to allow users to easily traverse through the various pages in the website.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 7	<p>Technical Requirement:</p> <p>The Portal should adopt different forms of media e.g. videos, audio, pictures, in the presentation of information, in order to create an interesting, dynamic and vibrant website.</p>	Mandatory
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Bidder's technical reasons supporting compliance:
Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 8	Technical Requirement: The Portal shall be responsive designed for best viewing on common desktop web and mobile browsers, such as Internet Explorer, Firefox, Opera, Chrome, and Safari for both Windows-based and Mac OS based personal computer. The web page design shall appear consistent on these different web browsers.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 9	<p>Technical Requirement:</p> <p>The Portal shall be accessible to the public who has internet connection via mobile devices such as mobile text-based phones, smartphones and tablets. The Portal shall have the capability to re-purpose its web pages for optimal viewing according to the form factor for the various mobile devices.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 10.	<p>Technical Requirement:</p> <p>For users without internet connection, the Supplier shall propose an optional approach where hot content can be accessed using mobile text-based phones with SMS and USSD.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 11	<p>Technical Requirement:</p> <p>The Portal shall be accessible to people with disabilities, and it has to conform minimally to W3C Web Content Accessibility Guidelines.</p>	Optional
Bidder's technical reasons supporting compliance:		

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No.	Technical Requirement:	Mandatory
12	<p>The portal design shall take into consideration the principle of good user interface practices to improve the user experience for Myanmar users. The design will be professional yet simple, with limited graphics, so that those with slow internet connectivity can still access the information in a reasonable speed.</p>	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No.	Technical Requirement:	Mandatory
13	<p>The homepage of the portal at minimum shall contain the following content/features in its design layout:</p> <p><u>Responsive web design</u> (mobile compactable) feature should be included to access the web portal from any device.</p> <p><u>Site search</u>, feedback and Ministry directory should be included in national we portal as features.</p> <p><u>Feedback</u> feature, where users could provide feedback and suggestions on</p>	

	<p>citizen and business related regulations, policies, processes and transactions.</p> <p><u>Back crump links</u> should be included for users to know where they are and to easily go back to previous visited pages.</p> <p><u>Searchable FAQs.</u> A searchable Frequently Asked Question database for citizen and businesses to find answers to their questions.</p> <p><u>News RSS feed</u> feature, which can capture the information from other web portal, should include. The list of news and speeches may be made available via RSS feed from an external system.</p> <p><u>Social Media</u> share feature which can be used to share on other third party website & can also be printed.</p> <p><u>Single sign-on</u> features will let user to authenticate and permits a user to enter one name and password in order to access multiple applications of Web Portal.</p> <p><u>Multilingual</u> feature, the portal information and features i.e. search, should be provided in both Myanmar and English.</p> <p><u>Highlights</u> of national campaigns/event, news and media releases, which will be the main content centrepiece for the homepage. The Supplier shall develop this feature based on data provided by the Government.</p> <p><u>Government Directory</u> feature where contacts for government ministries and department offices can be listed.</p> <p><u>Calendar of Events</u> feature that display selected upcoming key Government events and campaigns, and has a link to the whole-of-government calendar of events system provided by a collaborator</p>	
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	<p>agency. The list of events may be made available via RSS feed from an external system.</p> <p><u>Banners</u> feature that display promotional banners for Governments' campaigns, events or content. The banners may be graphics created by the Supplier or external parties from other government agencies;</p> <p><u>Links to existing Government websites and pages</u> that are economic and business related. Details of the websites and pages are listed on paragraph 1.2.14.</p>	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 14	<p>Technical Requirement:</p> <p>The Portal should provide hyperlinks to existing information and services from the Government websites, as listed on clause 1.2.14.</p>	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 15	<p>Technical Requirement:</p> <p>The Portal shall introduce profiling services and eAdvisor services as new online services for citizens, business and visitors. The supplier shall validate the</p>	Mandatory
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	requirements clause 1.2.15.1 to 1.2.15.2.1	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 16	Technical Requirement: The Supplier shall work with the client to populate up to 80 web pages content for the Portal in two languages (Myanmar and English). The Supplier shall translate the content available in Myanmar language to English and vice versa.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 17	Technical Requirement: The Portal shall have a polling feature for the Government to conduct quick poll surveys to gather public feedback and sentiments. The feature shall allow the public to view the result after they have submitted their responses. The polling feature shall have an administration module for the government to create the survey questions, push out via SMS, view the results online, and export the results in Word or Excel file formats.	Mandatory
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Bidder's technical reasons supporting compliance:
Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 18	Technical Requirement: The Portal shall have a subscription feature for public users to subscribe to its publicity, news and announcements e-mailers.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 19	Technical Requirement: The Supplier shall deliver the source files (e.g. Photoshop, Illustrator files) of all graphics created and source codes (e.g. CSS style sheet) for the Portal.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 20	Technical Requirement: Portal Management Tools – Content Management System, clauses from 1.2.20 to 1.2.20.2	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

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Tech. Require. No.	Technical Requirement:	Mandatory
21	Portal Information, Content View, clauses from 1.2.21 to 1.2.21.1	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No.	Technical Requirement:	Mandatory
22	Portal Features – Integration, clauses from 1.2.22 to 1.2.22.1	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No.	Technical Requirement:	Mandatory
23	Portal Features - Notification Features clauses 1.2.23 to 1.2.23.1	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 24	Technical Requirement: Portal Features – Workflow, from clauses 1.2.24 to 1.2.24.1	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 25	Technical Requirement: Portal Features - Collaboration, clause 1.2.25 to 1.2.25.1	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 26	Technical Requirement: Portal Features – Social, from clauses 1.2.26 to 1.2.26.5	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 27	Technical Requirement: Portal Management Tools – Online Form Tool, from clauses 1.2.27 to 1.2.27.1	Mandatory
Bidder's technical reasons supporting compliance:		

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 28	Technical Requirement: Portal Feature – Security, from clauses 1.2.28 to 1.2.28.3	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 29	Technical Requirement: Portal Feature – Delivery Channel, from clauses 1.2.29 to 1.2.29.1	Optional
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 30	Technical Requirement: Portal Performance – from clauses 1.3 to 1.3.4	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 31	Technical Requirement: General technical requirements, from clauses 2.0.1 to 2.0.3	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 32	Technical Requirement: The Supplier shall provide components required to supply, install, develop and maintenance clause 2.1	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 33	Technical Requirement: Security Specifications, from clauses 2.2.1 to 2.2.9	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 34	Technical Requirement: Analytical Reporting Tool, from clauses 2.3.1	Mandatory
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Bidder's technical reasons supporting compliance:

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 35	Technical Requirement: General hardware requirements, from clauses 3.0.1 to 3.0.8	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 36	Technical Requirement: The supplier shall provide cloud enable environment from clause 3.1.1 to 3.1.6	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 37	Technical Requirement: General technical requirements, from clauses 3.2.1 to 3.2.5	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 38	Technical Requirement: Service requirements, from clauses 3.3.1 to 3.3.12	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 39	Technical Requirement: Testing and QA Assurance requirements, from clauses 3.4.1 to 3.4.4	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 40	Technical Requirement: Faulty Hardware Replacement, from clauses 3.5.1 to 3.5.10	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 41	Technical Requirement: Responsibility Matrix, from clauses	Mandatory
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	3.6.1 to 3.6.2	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 42	Technical Requirement: Implementation Plan, from clauses 4.0.1 to 4.0.2	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 43	Technical Requirement: Performance Guarantee Period (PGP), from clauses 4.1.1 to 4.1.6	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 44	Technical Requirement: System Acceptance, from clause 4.2.1 to 4.2.5	Mandatory
Bidder's technical reasons supporting compliance:		

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No. 45	Technical Requirement: System Integration Testing, from clauses 4.2.6.1 to 4.2.6.4	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 46	Technical Requirement: User Acceptance Testing (UAT), from clauses 4.2.7.1 to 4.2.7.9	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 47	Technical Requirement: System Performance Testing, from clauses 4.2.8.1 to 4.2.8.7	Mandatory
Bidder's technical reasons supporting compliance:		

Bidder's cross references to supporting information in Technical Bid:

Tech. Require. No.	Technical Requirement:	Mandatory
48	System Commission, from clauses 4.3.1 to 4.3.3	
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 49	Technical Requirement: Warranty for System and Software, from clauses 4.4.1 to 4.4.5	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 50	Technical Requirement: Exit plan, from clauses 4.5.1 to 4.5.10	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 51	Technical Requirement: Incident and Maintenance, from clause 5.0 to 5.2.9.	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 52	Technical Requirement: Change and Configuration Management, from clauses 5.1.1 to 5.1.9	Mandatory
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Bidder's technical reasons supporting compliance:

Bidder's cross references to supporting information in Technical Bid:

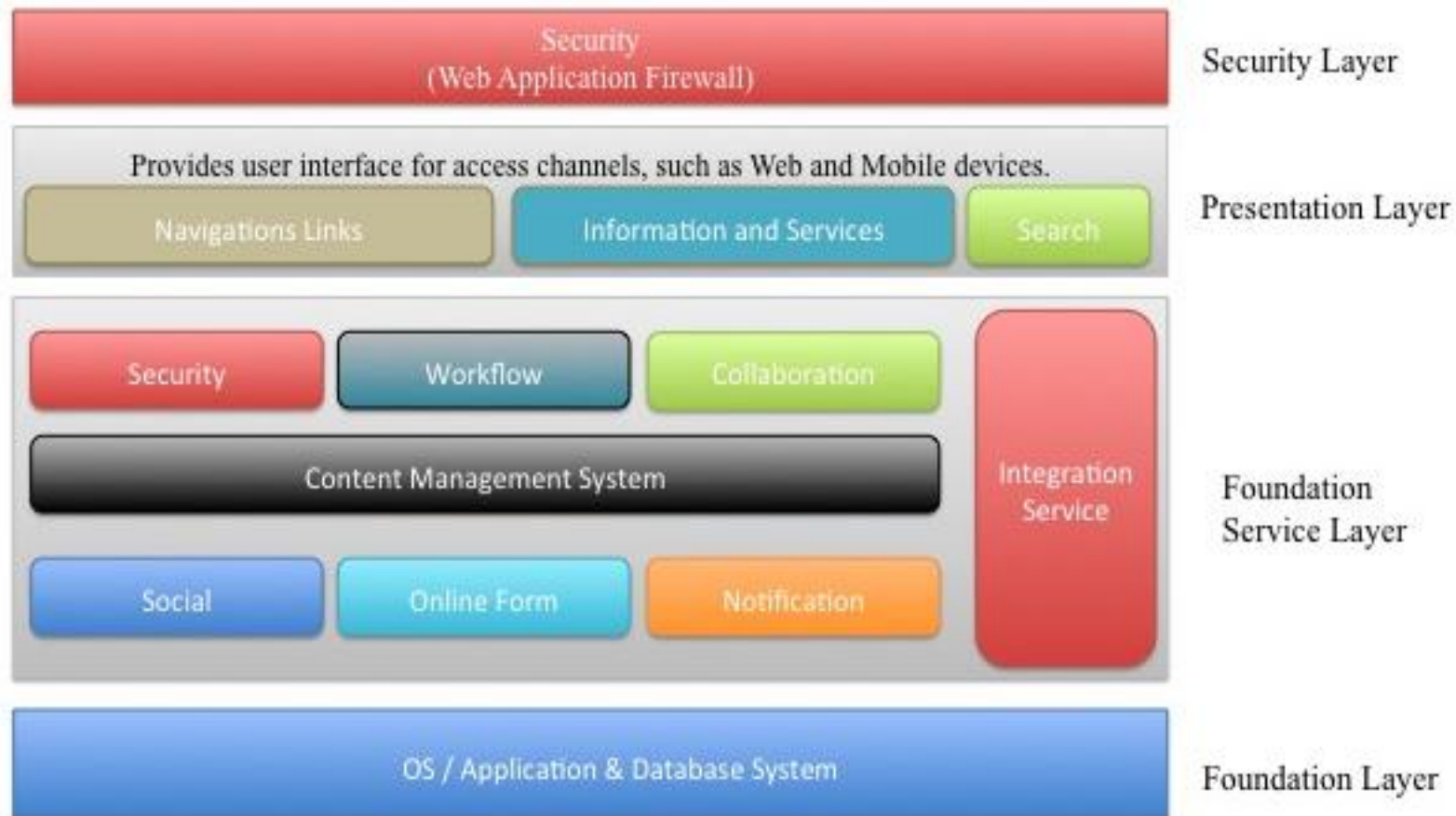
Tech. Require. No. 53	Technical Requirement: Portal Maintenance Plan, from clauses 5.2.1 to 5.2.9	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 54	Technical Requirement: Training specifications, from clauses 6.1 to 6.2	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

Tech. Require. No. 55	Technical Requirement: Documentation specifications, from clauses 7.1 to 7.7.3	Mandatory
Bidder's technical reasons supporting compliance:		
Bidder's cross references to supporting information in Technical Bid:		

L. ANNEX

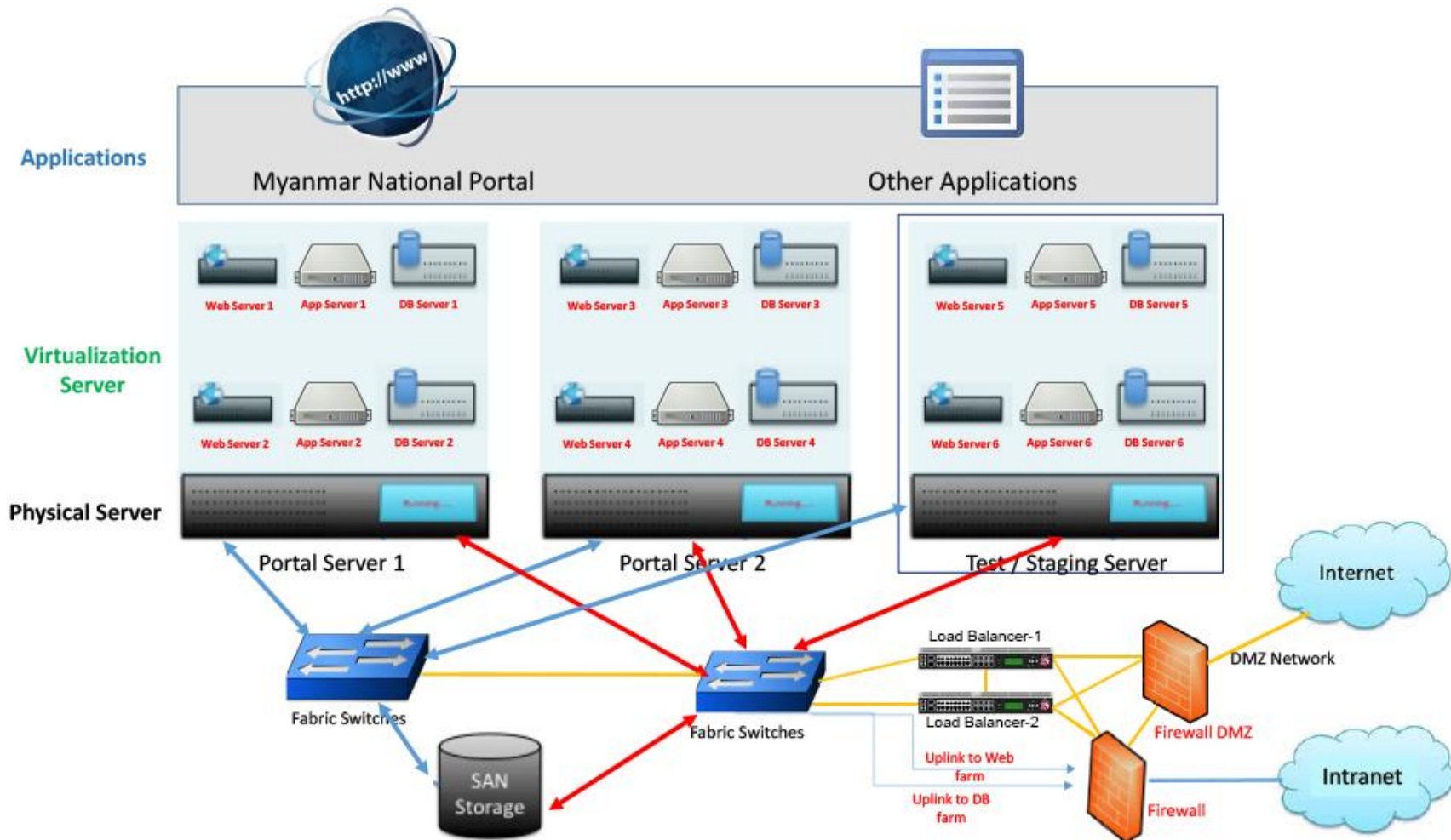
Annex 1 – National Portal Logical Architecture



For these more details on portal logical architecture characteristics, please refer to the following table for additional references:

Characteristics	Reference
Content Management System	Functional Requirements (clause 1.2.20.1 to 1.2.20.2)
Integration Features	Functional Requirements (clause 1.2.22)
Notification Features	Functional Requirements (clause 1.2.23)
Workflow Features	Functional Requirements (clause 1.2.24)
Collaboration Features	Functional Requirements (clause 1.2.25)
Social Features	Functional Requirements (clause 1.2.26)
Online Form Tool	Functional Requirements (clause 1.2.27)
Security Features	Functional Requirements (clause 1.2.28)

Annex 2 – National Portal Cloud Architecture and Required Hardware List



Logic behind the Architecture

High Availability

Redundancy of critical network components.(firewall, switch, load balancers)

Virtualization with HA and V-Motion.

Optimized Performance

Portal Server Ethernet: 10G Ethernet card for better performance and uplink to switch.

Load balancers are required for optimized performance

Security

IPS for enhanced security and prevention from any external intrusion. (intrusions, spyware, Malware)

Application access through DMZ(configure DMZ access for access to web servers over internet)

Storage

Raid level for SAN for better data redundancy and optimized calculation of storage capacity. (Raid 5 or 6)

Data retention: Backup devices like Tape library for offsite backup.

Minimum requirements hardware and system software list according to the performance requirement clause 1.3

Portal Server (3 Units)

Components	Specifications
Processor	Each blade server should be configured with a minimum 8 core 3.2 GHz CPU or higher available in latest series
Memory	Each blade server should be configured with at least 256 GB of memory. The server should have at least 24 DIMM slots and a maximum scalability of up to 700 GB of DDR3 memory with all CPU configurations
HDD	The server should support a minimum of 2 hot plug SAS, SATA and SSD hard disk drives & be supplied with 2x600GB 10K RPM HDD
Interface ports	The server should be configured to provide for port and card level redundancy
IO Bandwidth	The server should provide minimum 2 x 10Gb for Ethernet and 2x8 Gb for FC. (Or) The server should provide minimum 4 x 10Gb CNA (Converged Network Adaptor) ports.
HBA	4Gb F Single-Port PCIe HBA
Management	It should support remote/virtual KVM capability from an external keyboard; video monitor and mouse to all blades installed in the chassis through the management controllers and should also support virtual media for DVD access.
Power	Hot-swap, power supplies in N+1 Redundancy.
FAN	Hot-swap, N+1 Redundancy fan modules.

Fabric Switch (2 Units)

Specifications

- Processors up to 2.2 GHz, up to 1600 MHz memory access, 14 cores per processor
- Up to 6 TB, 96 DIMM slots supporting 64 GB LRDIMMs
- Integrated 4 x10 GbE per compute node (up to 8 ports total), optional 1/10/40 GbE,
- Fibre Channel and Infiniband adapters
- Up to 8 PCIe Gen 3; up to 4 x16 slots; up to 4 x8 slots

Load Balancer Specification (2 Units)

Feature	Minimum Specification
Memory	The appliance should be a high performance purpose built hardware load balancer with minimum 4 GB RAM for support for multiple load balancing functions
Ports	The appliance should have minimum 4 triple speed 10/100/1000 Mbps gigabit copper port
Throughput	The appliance should have 1 Gbps of throughput from day one and scalable to 2 Gbps
Concurrent connection	Should have minimum 2.5 lakh concurrent connection scalable to 5 lakh concurrent connections
IPv6 Support	The appliance should provide full ipv6 support from day 1 and OEM should be IPv6 gold-certified
Load Balancing	The appliance should support layer 2 to layer 7 load balancing
Load Balancing Algorithm Support	The appliance should support server load balancing algorithms i.e. round robin, weighted round robin, least connection, Persistent IP, Hash IP, Hash Cookie, consistent hash IP, shortest response, proximity, snmp, SIP session ID, hash header etc
Proxy Mode	Should support one arm, reverse and transparent proxy mode deployment scenarios and should support nested layer7 and layer4 policies.
Server Persistency	Should maintain server persistency based on source ip and destination ip, http header, url, cookie and SSL ID
Content Verification	The appliance should support multi-port, scripted and custom health check with content verification
Server health checks	Should provide application & server health checks for well-known protocols i.e. ARP, ICMP, TCP, DNS, RADIUS, HTTP/HTTPS, RTSP etc. D.5.15 The appliance should have and/or relationship to check various dependencies for the application delivery
Support for Load	should support layer4 and layer 7 load balancing for HTTP/HTTPS, FTP/FTPS, SIP, RTSP , RDP, TCP, TCPS and UDP protocols

balancing	
Clustering	Should provide comprehensive and reliable support for high availability based on Per Virtual IP based Active-active & active standby unit redundancy mode and stateful session failover with Connection mirroring support
Connection Mirroring	Appliance should not have any limitations for connection mirroring
Configuration	Should support USB based FFO link to synchronize configuration at boot time of HA
Redundancy	Should have support for secondary communication link for backup purpose
Real time configuration synchronizations	Support for multiple communication links for real time configuration synchronizations including HA group, gateway health check, decision rules, SSF sessions etc. and heartbeat information
Stateful failover support	Should support floating IP address and group for stateful failover support. Appliance should have support for minimum 256 floating IP address for a floating group
Support built in failover decision conditions	Should support built in failover decision conditions including unit failover, group failover and reboot
Customized rules	Should also have option to define customized rules for gateway health check - the administrator
Link Status	Should able to define a rule to inspect the status of the link between the unit and a gateway
Configuration synchronization	Configuration synchronization at boot time and during run time to keep consistence configuration on both units.
Global load balancing	The appliance should have software based site selection feature to provide global load balancing features on same appliance
Global load balancing algorithms	Should support global load balancing algorithms like global round robin (grr), VIP based weighted global round robin, global connection overflow, global least connections, IP overflow, Proximity etc.,
Online application delivery	Should provide Secure online application delivery using hardware-based high performance SSL acceleration with minimum 700 Mbps of SSL throughput scalable to 1 Gbps and 5,000 ssl TPS scalable to 7,500
Certificate format	The appliance should support Certificate format as "OpenSSL/Apache, *.PEM", "MS IIS, *.PFX", and "Netscape, *.DB"

Firewall (2 Units)

Features	Specifications
Maximum Firewall Throughput (max)	1.2 GB
Maximum Firewall Throughput (multi-protocol)	400 Mbps
Maximum concurrent sessions	200,000
Maximum Connection Per Second	10,000
VPN Throughput	200 Mbps
Maximum VPN Tunnels	750

SAN Storage (1 Unit)

Specifications
Host Interface: 1 Gbps iSCSI and 6 Gbps SAS (optional 8 Gbps Fibre Channel, 1 Gbps iSCSI, 6 Gbps SAS or 10 Gbps iSCSI/Fibre Channel over Ethernet)
Controller: Dual controller
Cache per Controller: 4 GB upgradable to 8 GB
Drive type: Dual-port, hot-swappable 6 Gb SAS disk drives
Supported drives: 2 TB, 3 TB, 4 TB, 6 TB and 8 TB at 7.2k rpm
Total Capacity: 32 TB

Storage Management FeaturesAsset and Facilities Management

Improve efficiency and reduce the cost and risk of your assets.

Business Service Management

Improve customer satisfaction with increased availability of critical business services.

Cloud and IT Transformation

Lower the cost of your IT infrastructure and speed the delivery of innovative products and services.

Data Protection and Storage Management

Create a more responsive and resilient storage infrastructure.

Enterprise Mobility Management

Manage physical and virtual endpoints in real time and ensure compliance.

Security

Improve security, risk & compliance posture with automated threat protection & security controls.

System Software	<i>Functional Requirement</i>
<i>Server Operation System (OS)</i>	<p>Guest Operation System that runs for the host platform.</p> <p>A server operation system, also called a server OS, is an operating system specifically designed to run on servers in a client/server network architecture.</p>
<i>Web Server Software</i>	<p>A Web Server is a program that serves content using the HTTP Protocol.</p> <ul style="list-style-type: none"> • Centralized Web Farm Management. • HTTP-based load balancing and intelligent request routing. • High-speed dynamic caching and compression. • Support diagnostic tools. • Automatic application isolation. • Configure and manage using command-line, UI and programmatic APIs. • Develop and deploy applications on the same server. • Delegate site configuration management and publishing remote users.
<i>Database Software</i>	<p>Architecture Multi-threaded, Pluggable Storage-Engine Architecture InnoDB, MyISAM, Merge, Memory, Archive, Cluster</p> <p>Replication & High-Availability Built-in Replication Engine, Master/Slave, Ring, Tree, Row-based Replication, Semi-synchronous Replication, Time-delayed Replication, Cluster HA, Global Transaction IDs, Slave Failover, Recovery, Multi-threaded slaves, 99.999% Availability, Distributed architecture</p> <p>High-Performance Performance Schema, Optimized for high concurrency, Optimized for Read Only, Optimized for use with SSD, Multiple Index Type (B-tree, R-tree, Hash, etc.), High-speed Query Optimizer, Subquery optimizations, Diagnostics, and SQL Tracing, Optimizer Tracing</p> <p>Web Application Optimized Server-side Thread Pool, Connection Thread Caching, Query Results Caching, Load Balancing, Prepared Statements, Full Text Search, Multiple Character Sets, Geospatial Support, Multi-Terabyte Scalability</p>

	<p>Data Warehouse Optimized Fast Data Load Utility</p> <p>Backup Hot Backup for InnoDB, Parallel backup, recovery operations, Compressed Backup, Full, Incremental, Partial Backups, Full, Partial Restore, Point in Time Recovery, Auto-Restart/Recovery, Scriptable, command line interface</p> <p>Database Monitor Visual Dashboard, Query Analyzer, Rules & Advisors, Trends & Analysis, Health monitoring, Performance monitoring, InnoDB monitoring, Replication monitoring, Security administration</p> <p>Storage Management Storage Administration, Automatic Space Expansion, Built-in Space Reclamation, Auto Undo/Rollback Management, Customizable Storage Assignments, Compressed and Archive Tables, Packed Index Storage, Works with NAS or SAN storage</p> <p>Security SSL Support, Built-in Data Encryption/Decryption, Password management, and Explicit querying by partition</p>
<p><i>Storage Management and backup system software</i></p>	<p>To create a more responsive and resilient storage infrastructure.</p> <ul style="list-style-type: none"> ▪ Internal SATA drives, Direct Attached Storage (DAS), Network Attached Storage (NAS) and both fibre channel SAN and iSCSI SAN. ▪ Support shared storage with SAN multipathing for Fibre Channel or iSCSI SAN. <p>Support Storage I/O traffic prioritization.</p>
<p><i>Cloud Platform</i></p>	<ul style="list-style-type: none"> ▪ 64-bit architecture ▪ Up to eight-way virtual SMP (symmetric multiprocessing), enabling the virtualization of multiprocessor workloads ▪ OS support of any hypervisor, enabling IT to virtualize numerous versions of operating systems. ▪ Built-in high availability through NIC teaming and HBA multipathing to protect against hardware component failures ▪ Up to 64 logical processing cores, 256 virtual CPUs, and 1TB RAM per host, enabling higher consolidation ratios ▪ Virtual machines with memory up to 255GB RAM. ▪ Virtual machine disk (VMDK) files to provide virtual machines access to their own private datastores

	<ul style="list-style-type: none"> ▪ Support Virtual Machine File System (“VMFS”), a cluster file system that allows multiple hosts to access a single VMDK file concurrently. ▪ Support GUI (Graphical User Interface) as well as Command Line Interface to manage hosts. ▪ Secured management connection using SSL Encryption to hosts. ▪ Support Microsoft Clustering services. ▪ Compatible with industry-leading rack, tower and blade servers ▪ Support 10Gb Ethernet network cards and storage arrays and Infiniband technology.
<i>Cloud Network Infrastructure</i>	<ul style="list-style-type: none"> ▪ Virtual networking capabilities allow customers to build complex networks between virtual machines residing on a single host or across multiple installations of hosts for production deployments or development and testing purposes. ▪ Ethernet layer security enforcement for virtual machines. Disallow promiscuous mode sniffing of network traffic, MAC address changes and forged source MAC transmits. ▪ Support NIC Teaming: give each networked virtual machine built-in NIC failover and load balancing enabling greater hardware availability and fault tolerance.
<i>Cloud Security</i>	<ul style="list-style-type: none"> ▪ Off-loading anti-threat agent processing inside guest virtual machines to dedicated and secure virtual appliances. ▪ Automated anti-virus and anti-malware deployment and monitoring. ▪ Compliance and audit requirements with anti-virus and anti-malware activity logs. ▪ Compatible with EMC/RSA, Trend Micro Deep Security Antivirus, and others
<i>Cloud Management</i>	<ul style="list-style-type: none"> ▪ Enable centralized management for hosts and their virtual machines. ▪ Shall support live migration, automatic load balancing, protection against hardware failures, and virtual machine backup and restore capabilities.