

THE REPUBLIC OF THE UNION OF MYANMAR

National Standard Bidding Document for World Bank Financed Projects

National Competitive Bidding – NCB

***Radio Planning Tools (Software) and Digital
Map(Software)***

(G 1.3.7)

May, 2019

**BIDDING DOCUMENT
(NCB)**

**PROCUREMENT OF
Goods**

Name of Project: Telecommunications Sector Reform Project (TSRP)

*Name of contract: Radio Planning Tools (Software) and Digital Map
(Software)*

No. of Contract: G 1.3.7

*Name of Purchaser: Posts and Telecommunications Department
Ministry of Transport and Communications*

Date: 4th May, 2019

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PART 1 – Bidding Procedures

Section I - Instructions to Bidders

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Section I - Instructions to Bidders

A. General

- 1. Scope of Bid**
- 1.1 In connection with the Specific Procurement Notice - Request for Bids (RFB), specified in the Bid Data Sheet (BDS), the Employer, as specified **in the BDS**, issues this bidding document for the delivery of Non-Consulting Services, as specified in Section VII, Employer's Requirements. The name, identification and number of lots (contracts) of this RFB procurement are specified in the BDS.
- 1.2 Throughout this bidding document:
- (a) the term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including if specified **in the BDS**, distributed or received through the electronic-procurement system used by the Employer) with proof of receipt;
 - (b) if the context so requires, "singular" means "plural" and vice versa; and
 - (c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Borrower. It excludes the Borrower's official public holidays.
- 1.3 The successful Bidder will be expected to complete the performance of the Services by the Intended Completion Date provided **in the BDS**.
- 2. Source of Funds**
- 2.1 The Borrower or Recipient (hereinafter called "Borrower") specified **in the BDS** has applied for or received financing (hereinafter called "funds") from the International Bank for Reconstruction and Development or the International Development Association (hereinafter called "the Bank") in an amount specified **in the BDS**, toward the project named **in the BDS**. The Borrower intends to apply a portion of the funds to eligible payments under the contract for which this bidding document is issued.
- 2.2 Payment by the Bank will be made only at the request of the Borrower and upon approval by the Bank in accordance with the terms and conditions of the Loan (or other financing) Agreement. The Loan (or other financing) Agreement prohibits a withdrawal from the loan account for the purpose of any payment to persons or entities, or for any import of goods, equipment or materials if such payment or import is prohibited by a decision of the United

Nations Security Council taken under Chapter VII of the Charter of the United Nations. No party other than the Borrower shall derive any rights from the Loan (or other financing) Agreement or have any claim to the proceeds of the Loan (or other financing).

3. Fraud and Corruption

3.1 The Bank requires compliance with the Bank's Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework, as set forth in Section VI.

3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents (where declared or not), subcontractors, subconsultants, service providers, suppliers, and their personnel, to permit the Bank to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, bid submission, proposal submission and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

4. Eligible Bidders

4.1 A Bidder may be a firm that is a private entity, a state-owned entity or institution subject to ITB 4.6, or any combination of such entities in the form of a Joint Venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Bidding process and, in the event the JV is awarded the Contract, during contract execution. Unless specified in the BDS, there is no limit on the number of members in a JV.

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

- (a) directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- (b) receives or has received any direct or indirect subsidy from another Bidder; or
- (c) has the same legal representative as another Bidder; or
- (d) has a relationship with another Bidder, directly or through

common third parties, that puts it in a position to influence the Bid of another Bidder, or influence the decisions of the Employer regarding this Bidding process; or

- (e) or any of its affiliates participated as a consultant in the preparation of the Employer's Requirements (including Activities Schedules, Performance Specifications and Drawings) for the Non-Consulting Services that are the subject of the Bid; or
- (f) or any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower for the Contract implementation; or
- (g) would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the BDS ITB 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
- (h) has a close business or family relationship with a professional staff of the Borrower (or of the project implementing agency, or of a recipient of a part of the loan) who: (i) are directly or indirectly involved in the preparation of the bidding document or specifications of the contract, and/or the Bid evaluation process of such contract; or (ii) would be involved in the implementation or supervision of such contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to the Bank throughout the procurement process and execution of the Contract.

4.3 A firm that is a Bidder (either individually or as a JV member) shall not participate in more than one Bid, except for permitted alternative Bids. This includes participation as a subcontractor. Such participation shall result in the disqualification of all Bids in which the firm is involved. A firm that is not a Bidder or a JV member, may participate as a sub-contractor in more than one Bid.

4.4 A Bidder may have the nationality of any country, subject to the restrictions pursuant to ITB 4.8. A Bidder shall be deemed to have the nationality of a country if the Bidder is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or subconsultants for any part of the Contract including

related Services.

- 4.5 A Bidder that has been sanctioned by the Bank, pursuant to the Bank's Anti-Corruption Guidelines, and in accordance with its prevailing sanctions policies and procedures as set forth in the WBG's Sanctions Framework as described in Section VI paragraph 2.2 d., shall be ineligible to be initially selected for, prequalified for, bid for, submit proposal for, or be awarded a Bank-financed contract or benefit from a Bank-financed contract, financially or otherwise, during such period of time as the Bank shall have determined. The list of debarred firms and individuals is available at the electronic address specified in the BDS.
- 4.6 Bidders that are state-owned enterprises or institutions in the Employer's Country may be eligible to compete and be awarded a Contract(s) only if they can establish, in a manner acceptable to the Bank, that they: (i) are legally and financially autonomous; (ii) operate under commercial law; and (iii) are not under supervision of the Employer or under other considerations as indicated in the **BDS**
- 4.7 A Bidder shall not be under suspension from Bidding by the Employer as the result of the operation of a Bid-Securing Declaration.
- 4.8 Firms and individuals may be ineligible if so indicated in Section V and (a) as a matter of law or official regulations, the Borrower's country prohibits commercial relations with that country, provided that the Bank is satisfied that such exclusion does not preclude effective competition for the supply of goods or the contracting of works or services required; or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country.
- 4.9 This Bidding is open for all eligible Bidders, unless otherwise specified in ITB 18.4.
- 4.10 A Bidder shall provide such documentary evidence of eligibility satisfactory to the Employer, as the Employer shall reasonably request.
- 4.11 A firm that is under a sanction of debarment by the Borrower from being awarded a contract is eligible to participate in this procurement, unless the Bank, at the Borrower's request, is satisfied that the debarment; (a) relates to fraud or corruption, and (b) followed a judicial or administrative proceeding that afforded the firm adequate due process.

- 5. Qualification of the Bidder**
- 5.1 All Bidders shall provide in Section IV, Bidding Forms, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.
- 5.2 In the event that prequalification of Bidders has been undertaken as stated in ITB 18.4, the provisions on qualifications of the Section III, Evaluation and Qualification Criteria shall not apply.

B. Contents of Bidding Document

- 6. Sections of Bidding Document**
- 6.1 The bidding document consists of Parts 1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 9.

PART 1: Bidding Procedures

- Section I - Instructions to Bidders (ITB)
- Section II - Bid Data Sheet (BDS)
- Section III - Evaluation and Qualification Criteria
- Section IV - Bidding Forms
- Section V - Eligible Countries
- Section VI - Fraud and Corruption

PART 2: Employer's Requirements

- Section VII - Schedule of Requirements

PART 3: Contract

- Section VIII - General Conditions of Contract (GCC)
- Section IX - Special Conditions of Contract (SCC)
- Section X - Contract Forms

- 6.2 The Specific Procurement Notice - Request for Bids (RFB) or the notice to prequalified Bidders, as the case may be issued by the Employer is not part of this bidding document.
- 6.3 Unless obtained directly from the Employer, the Employer is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Bid meeting (if any), or Addenda to the bidding document in accordance with ITB 9. In case of any contradiction, documents obtained directly from the Employer shall prevail.

- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding document and to furnish with its Bid all information or documentation as is required by the bidding document.
- 7. Site Visit**
- 7.1 The Bidder, at the Bidder's own responsibility and risk, is encouraged to visit and examine the Site of required Services and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into a contract for the Services. The costs of visiting the Site shall be at the Bidder's own expense.
- 8. Clarification of Bidding Document**
- 8.1 A Bidder requiring any clarification of the bidding document shall contact the Employer in writing at the Employer's address specified **in the BDS**. The Employer will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Bids within a period specified **in the BDS**. The Employer shall forward copies of its response to all Bidders who have acquired the bidding document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so specified **in the BDS**, the Employer shall also promptly publish its response at the web page identified **in the BDS**. Should the clarification result in changes to the essential elements of the bidding document, the Employer shall amend the bidding document following the procedure under ITB 9 and ITB 23.2.
- 9. Amendment of Bidding Document**
- 9.1 At any time prior to the deadline for submission of Bids, the Employer may amend the Bidding document by issuing addenda.
- 9.2 Any addendum issued shall be part of the bidding document and shall be communicated in writing to all who have obtained the bidding document from the Employer in accordance with ITB 6.3. The Employer shall also promptly publish the addendum on the Employer's web page in accordance with ITB 8.1.
- 9.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Employer shall extend, as necessary, the deadline for submission of Bids, in accordance with ITB 23.2 below.
- C. Preparation of Bids**
- 10. Cost of Bidding**
- 10.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Employer shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Bidding process.

11. Language of Bid

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

12. Documents Comprising the Bid

12.1 The Bid shall comprise the following:

- (a) **Letter of Bid** prepared in accordance with ITB 13;
- (b) **Schedules:** priced Activity Schedule completed in accordance with ITB 13 and ITB 15;
- (c) **Bid Security or Bid-Securing Declaration** in accordance with ITB 20.1;
- (d) **Alternative Bid:** if permissible in accordance with ITB 14;
- (e) **Authorization:** written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 21.3;
- (f) **Qualifications:** documentary evidence in accordance with ITB 18 establishing the Bidder's qualifications to perform the Contract if its Bid is accepted;
- (g) **Bidder's Eligibility:** documentary evidence in accordance with ITB 18 establishing the Bidder's eligibility to Bid;
- (h) **Conformity:** documentary evidence in accordance with ITB 17, that the Services conform to the bidding document; and
- (i) any other document required **in the BDS**.

12.2 In addition to the requirements under ITB 12.1, Bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed Agreement.

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

- 13. Letter of Bid and Activity Schedule**
- 13.1 The Letter of Bid and priced Activity Schedule shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 21.3. All blank spaces shall be filled in with the information requested.
- 14. Alternative Bids**
- 14.1 Unless otherwise indicated **in the BDS**, alternative Bids shall not be considered. If alternatives are permitted, only the technical alternatives, if any, of the Most Advantageous Bidder shall be considered by the Employer.
- 14.2 When alternative times for completion are explicitly invited, a statement to that effect will be included **in the BDS** and the method of evaluating different time schedules will be described in Section III, Evaluation and Qualification Criteria.
- 14.3 When specified **in the BDS**, Bidders are permitted to submit alternative technical solutions for specified parts of the Services, and such parts will be identified **in the BDS**, as will the method for their evaluating, and described in Section VII, Employer's Requirements.
- 15. Bid Prices and Discounts**
- 15.1 The prices and discounts quoted by the Bidder in the Letter of Bid and in the Price Schedules shall conform to the requirements specified below.
- 15.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.
- 15.3 The price to be quoted in the Letter of Bid in accordance with ITB 13.1 shall be the total price of the bid, excluding any discounts offered.
- 15.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Letter of Bid in accordance with ITB 13.1, or through "modification" or "substitution" in accordance with ITB 25.
- 15.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, **unless otherwise specified in the BDS**. A bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 30. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall not be rejected, but the

price adjustment shall be treated as zero.

15.6 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4 provided the bids for all lots (contracts) are opened at the same time.

15.7 The terms DDP, EXW, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, **as specified in the BDS.**

15.8 Prices shall be quoted as specified in the Price Schedule included in Section IV, Bidding Forms. The dis-aggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible country. Prices shall be entered in the following manner:

(a) For Goods,

the price shall be quoted DDP final destination specified in the BDS including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods as well as sales tax and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and

(b) for Related Services, other than inland transportation and other services required to convey the Goods to their final destination, whenever such Related Services are specified in the Schedule of Requirements:

(i) the price of each item comprising the Related Services (inclusive of any applicable taxes).

- 16 Currencies of Bid and Payment**
- 16.1 The currency(ies) of the Bid and the currency(ies) of payments shall be the same. The Bidder shall quote in the currency of the Employer's Country the portion of the Bid price that corresponds to expenditures incurred in the currency of the Employer's Country, unless otherwise specified **in the BDS**.
- 16.2 The Bidder may express the Bid price in any currency. If the Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three foreign currencies in addition to the currency of the Employer's Country.
- 16.3 Bidders may be required by the Employer to justify their foreign currency requirements and to substantiate that the amounts included in the Lump-sum are reasonable and responsive to ITB 16.1 and 16.2.
- 17 Documents Establishing Conformity of Services**
- 17.1 To establish the conformity of the Non-Consulting Services to the bidding document, the Bidder shall furnish as part of its Bid the documentary evidence that Services provided conform to the technical specifications and standards specified in Section VII, Employer's Requirements.
- 17.2 Standards for provision of the Non-Consulting Services are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality provided that it demonstrates, to the Employer's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Employer's Requirements.
- 18. Documents Establishing the Eligibility and Qualifications of the Bidder**
- 18.1 To establish Bidder's eligibility in accordance with ITB 4, Bidders shall complete the Letter of Bid, included in Section IV, Bidding Forms.
- 18.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:
- (a) that, if **required in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Republic of the Union of Myanmar;
 - (b) that, if **required in the BDS**, in case of a Bidder not doing business within the Republic of the Union of Myanmar, the Bidder is or will be (if awarded the contract) represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking

obligations prescribed in the Conditions of Contract and/or Technical Specifications; and

- (c) that the Bidder meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

19 Period of Validity of Bids

19.1 Bids shall remain valid for the Bid Validity period specified **in the BDS**. The Bid Validity period starts from the date fixed for the Bid submission deadline date (as prescribed by the Employer in accordance with ITB 23.1). A Bid valid for a shorter period shall be rejected by the Employer as nonresponsive.

19.2 In exceptional circumstances, prior to the expiration of the Bid validity period, the Employer may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 20, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid, except as provided in ITB 19.3.

19.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity period, the Contract price shall be determined as follows:

- (a) in the case of fixed price contracts, the Contract price shall be the Bid price adjusted by the factor specified **in the BDS**;
- (b) in the case of adjustable price contracts, no adjustment shall be made; or
- (c) in any case, Bid evaluation shall be based on the Bid price without taking into consideration the applicable correction from those indicated above.

20 Bid Security

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

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

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

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

from a reputable source and an eligible country. If the unconditional guarantee is issued by a non-bank financial institution located outside the Employer's Country, the issuing non-bank financial institution shall have a correspondent financial institution located in the Employer's Country to make it enforceable, unless the Employer has agreed in writing, prior to Bid submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Bid security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Employer prior to Bid submission. The Bid Security shall be valid for twenty-eight (28) days beyond the original validity period of the Bid, or beyond any period of extension if requested under ITB 19.2.

20.4 If a Bid Security is specified pursuant to ITB 20.1, any Bid not accompanied by a substantially responsive Bid Security shall be rejected by the Employer as non-responsive.

20.5 If a Bid Security is specified pursuant to ITB 20.1, the Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security pursuant to ITB 46.

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

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

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder in the Letter of Bid, or any extension thereto provided by the Bidder; or
- (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 45; or
 - (ii) furnish a performance security in accordance with ITB

46.

20.8 The Bid Security or Bid-Securing Declaration of a JV must be in the name of the JV that submits the Bid. If the JV has not been legally constituted into a legally enforceable JV at the time of Bidding, the Bid security or Bid-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 12.2.

20.9 If a Bid Security is not required in the BDS, pursuant to ITB 20.1, and

- (a) if a Bidder withdraws its Bid during the period of Bid validity specified by the Bidder on the Letter of Bid; or
- (b) if the successful Bidder fails to:
 - (i) sign the Contract in accordance with ITB 45; or
 - (ii) furnish a performance security in accordance with ITB 46;

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

21 Format and Signing of Bid

21.1 The Bidder shall prepare one original of the documents comprising the Bid as described in ITB 12, bound with the volume containing the Form of Bid, and clearly marked “Original.” In addition, the Bidder shall submit copies of the Bid, in the number specified **in the BDS**, and clearly marked as “Copies.” In the event of discrepancy between them, the original shall prevail.

21.2 Bidders shall mark as “CONFIDENTIAL” information in their Bids which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

21.3 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified **in the BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid where entries or amendments have been made shall be signed or initialed by the person signing the Bid.

21.4 In case the Bidder is a JV, the Bid shall be signed by an authorized

representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

21.5 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.

D. Submission and Opening of Bids

22 Sealing and Marking of Bids

22.1 The Bidder shall deliver the Bid in a single, sealed envelope. Within the single envelope the Bidder shall place the following separate, sealed envelopes:

- (a) in an envelope marked "ORIGINAL", all documents comprising the Bid, as described in ITB 12; and
- (b) in an envelope marked "COPIES", all required copies of the Bid; and
- (c) if alternative Bids are permitted in accordance with ITB 14, and if relevant:
 - (i) in an envelope marked " ORIGINAL - ALTERNATIVE BID", the alternative Bid; and
 - (ii) in the envelope marked "COPIES – ALTERNATIVE BID" all required copies of the alternative Bid.

22.2 The inner and outer envelopes shall:

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

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

23 Deadline for Submission of Bids

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

23.2 The Employer may, at its discretion, extend the deadline for the submission of Bids by amending the bidding document in accordance with ITB 9, in which case all rights and obligations of the Employer and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.

24 Late Bids

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

25 Withdrawal, Substitution and Modification of Bids

25.1A Bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 21.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Bid must accompany the respective written notice. All notices must be:

- (a) prepared and submitted in accordance with ITB 21 and ITB 22 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” “SUBSTITUTION,” or “MODIFICATION;” and
- (b) received by the Employer prior to the deadline prescribed for submission of Bids, in accordance with ITB 23.

25.2 Bids requested to be withdrawn in accordance with ITB 25.1 shall be returned unopened to the Bidders.

25.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Letter of Bid or any extension thereof.

26 Bid Opening

26.1 Except as in the cases specified in ITB 23 and ITB 25.2, the Employer shall, at the Bid opening, publicly open and read out all Bids received by the deadline at the date, time and place specified **in the BDS** in the presence of Bidders’ designated representatives and anyone who choose to attend. Any specific electronic Bid opening procedures required if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified **in the BDS**.

26.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding Bid shall not be opened, but returned to the Bidder. If the withdrawal

envelope does not contain a copy of the “power of attorney” confirming the signature as a person duly authorized to sign on behalf of the Bidder, the corresponding Bid will be opened. No Bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Bid opening.

26.3 Next, envelopes marked “SUBSTITUTION” shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Bid opening.

26.4 Next, envelopes marked “MODIFICATION” shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening.

26.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Prices, per lot (contract) if applicable, including any discounts and alternative Bids; the presence or absence of a Bid Security or Bid-Securing Declaration, if required; and any other details as the Employer may consider appropriate.

26.6 Only Bids, alternative Bids and discounts that are opened and read out at Bid opening shall be considered further. The Letter of Bid and the priced Activity Schedule are to be initialed by representatives of the Employer attending Bid opening in the manner specified **in the BDS**.

26.7 The Employer shall neither discuss the merits of any Bid nor reject any Bid (except for late Bids, in accordance with ITB 24.1).

26.8 The Employer shall prepare a record of the Bid opening that shall include, as a minimum:

- (a) the name of the Bidder and whether there is a withdrawal, substitution, or modification;
- (b) the Bid Price, per lot (contract) if applicable, including any discounts; and

- (c) any alternative Bids;
- (d) the presence or absence of a Bid Security or Bid-Securing Declaration, if one was required.

26.9 The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

E. Evaluation and Comparison of Bids

- 27 Confidentiality**
- 27.1 Information relating to the evaluation of Bids and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the Bidding process until information on the Intention to Award the Contract is transmitted to all Bidders in accordance with ITB 41.
- 27.2 Any effort by a Bidder to influence the Employer in the evaluation or contract award decisions may result in the rejection of its Bid.
- 27.3 Notwithstanding ITB 27.2, from the time of Bid opening to the time of Contract Award, if any Bidder wishes to contact the Employer on any matter related to the Bidding process, it should do so in writing.
- 28 Clarification of Bids**
- 28.1 To assist in the examination, evaluation, and comparison of Bids, and qualification of the Bidders, the Employer may, at the Employer's discretion, ask any Bidder for clarification of its Bid including breakdowns of the prices in the Activity Schedule, and other information that the Employer may require. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Employer shall not be considered. The Employer's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Employer in the evaluation of the Bids, in accordance with ITB 32.
- 28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Employer's request for clarification, its Bid may be rejected.
- 29 Deviations, Reservations, and Omissions**
- 29.1 During the evaluation of Bids, the following definitions apply:
- (a) "Deviation" is a departure from the requirements specified

in the bidding document;

- (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the bidding document; and
- (c) “Omission” is the failure to submit part or all of the information or documentation required in the bidding document.

30 Determination of Responsiveness

30.1 The Employer’s determination of a Bid’s responsiveness is to be based on the contents of the Bid itself, as defined in ITB 12.

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

- (a) if accepted, would:
 - (i) affect in any substantial way the scope, quality, or performance of the Non-Consulting Services specified in the Contract; or
 - (ii) limit in any substantial way, inconsistent with the bidding document, the Employer’s rights or the Bidder’s obligations under the Contract; or
- (b) if rectified, would unfairly affect the competitive position of other Bidders presenting substantially responsive Bids.

30.3 The Employer shall examine the technical aspects of the Bid submitted in accordance with ITB 17 and ITB 18, in particular, to confirm that all requirements of Section VII, Employer’s Requirements have been met without any material deviation or reservation, or omission.

30.4 If a Bid is not substantially responsive to the requirements of bidding document, it shall be rejected by the Employer and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

31 Nonconformities Errors and Omissions

31.1 Provided that a Bid is substantially responsive, the *Employer* may waive any non conformities in the Bid.

31.2 Provided that a Bid is substantially responsive, the Employer may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Bid related to

documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

31.3 Provided that a Bid is substantially responsive, the Employer shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified **in the BDS**.

32 Correction of Arithmetical Errors

32.1 Provided that the Bid is substantially responsive, the Employer shall correct arithmetical errors on the following basis:

- (a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Employer there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
- (b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

32.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1, shall result in the rejection of the Bid.

33 Conversion to Single Currency

33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as specified **in the BDS**.

34 Margin of Preference

34.1 A margin of preference shall not apply.

35 Evaluation of Bids

35.1 The Employer shall use the criteria and methodologies listed in this ITB and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be

permitted. By applying the criteria and methodologies, the Employer shall determine the Most Advantageous Bid. This is the Bid of the Bidder that meets the qualification criteria and whose Bid has been determined to be:

- (a) substantially responsive to the bidding document; and
- (b) evaluation will be done for Items or lots (Contracts), as Specified in the BDS; and the bid price as quoted in accordance with clause 15.

35.2 In evaluating the Bids, the Employer will determine for each Bid the evaluated Bid cost by adjusting the Bid price as follows:

- (a) price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
- (b) price adjustment due to discounts offered in accordance with ITB 15.4;
- (c) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITB 33;
- (d) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
- (e) excluding provisional sums and the provision, if any, for contingencies in the Activity Schedule but including Daywork, when requested in the Specifications (or Terms of Reference); and
- (f) the additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.

35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in Bid evaluation.

35.4 If this bidding document allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Letter of Bid, is specified in Section III, Evaluation and Qualification Criteria.

36 Comparison of Bids

36.1 The Employer shall compare the evaluated costs of all substantially responsive Bids established in accordance with ITB 35.2 to determine the Bid that has the lowest evaluated

cost.

37 Abnormally Low Bids

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

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

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

38 Qualification of the Bidder

38.1 The Employer shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated cost and substantially responsive Bid is eligible and meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

38.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 18. The determination shall not take into consideration the qualifications of other firms such as the Bidder's subsidiaries, parent entities, affiliates, subcontractors or any other firm(s) different from the Bidder that submitted the Bid.

38.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the Bid, in which event the Employer shall proceed to the Bidder who offers a substantially responsive Bid with the next lowest evaluated cost to make a similar determination of that Bidder's qualifications to perform satisfactorily.

39 Employer's Right to Accept Any Bid, and to Reject Any or All Bids

39.1 The Employer reserves the right to accept or reject any Bid, and to annul the Bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, Bid securities, shall be promptly returned to the Bidders.

- 40 Standstill Period** 40.1 The Contract shall be awarded not earlier than the expiry of the Standstill Period. The duration of the Standstill Period is specified **in the BDS**. Where only one Bid is submitted, the Standstill Period shall not apply.
- 41 Notice On Intention to Award** 41.1 When a Standstill Period applies, it shall commence when the Employer has transmitted to each Bidder (that has not already been notified that it has been unsuccessful) Notification of Intention to Award the Contract to the successful Bidder. The Notification of Intention to Award shall contain, at a minimum, the following information:
- (a) the name and address of the Bidder submitting the successful Bid;
 - (b) the Contract price of the successful Bid;
 - (c) the names of all Bidders who submitted Bids, and their Bid prices as readout and as evaluated prices;
 - (d) a statement of the reason(s) the Bid (of the unsuccessful Bidder to whom the notice is addressed) was unsuccessful;
 - (e) the expiry date of the Standstill Period; and
 - (f) instructions on how to request a debriefing or submit a complaint during the standstill period.

F. Award of Contract

- 42 Award Criteria** 42.1 Subject to ITB 39, the Employer shall award the Contract to the successful Bidder. This is the Bidder whose Bid has been determined to be the Most Advantageous Bid. This is the Bid of the Bidder that meets the qualification criteria and whose Bid has been determined to be:
- (a) substantially responsive to the bidding document; and
 - (b) the lowest evaluated subsidy proposal per Lot
- 43 Notification of Award** 43.1 Prior to the expiration of the Bid Validity Period and upon expiry of the Standstill Period, specified in BDS ITB 40.1, or any extension thereof, or upon satisfactorily addressing a complaint that has been filed within the Standstill Period, the Employer shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Employer will pay the Supplier in consideration of the

execution of the Contract (hereinafter and in the Conditions of Contract and Contract Forms called “the Contract Price”).

43.2 At the same time, the Employer shall publish the Contract Award Notice which shall contain, at a minimum, the following information:

- (a) name and address of the Employer;
- (b) name and reference number of the contract being awarded, and the selection method used;
- (c) names of all Bidders that submitted Bids, and their Bid prices as read out at Bid opening, and as evaluated;
- (d) name of Bidders whose Bids were rejected and the reasons for their rejection; and
- (e) the name of the successful Bidder, the final total contract price, the contract duration and a summary of its scope.

43.3 The Contract Award Notice shall be published on the Employer’s website with free access if available, or in at least one newspaper of national circulation in the Employer’s Country, or in the official gazette. The Employer shall also publish the contract award notice in UNDB online.

43.4 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.

44 Debriefing by the Employer

44.1 On receipt of the Borrower’s Notification of Intention to Award referred to in ITB 41, an unsuccessful Bidder has three (3) Business Days to make a written request to the Employer for a debriefing. The Employer shall provide a debriefing to all unsuccessful Bidders whose request is received within this deadline.

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

- 44.3 Where a request for debriefing is received by the Employer later than the three (3)-Business Day deadline, the Employer should provide the debriefing as soon as practicable, and normally no later than fifteen (15) Business Days from the date of publication of Public Notice of Award of contract. Requests for debriefing received outside the three (3)-day deadline shall not lead to extension of the standstill period.
- 44.4 Debriefings of unsuccessful Bidders may be done in writing or verbally. The Bidder shall bear their own costs of attending such a debriefing meeting.
- 45 Signing of Contract**
- 45.1 Promptly upon Notification of Award, the Employer shall send the successful Bidder the Contract Agreement.
- 45.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Employer.
- 46 Performance Security**
- 46.1 Within twenty-eight (28) days of the receipt of the Letter of Acceptance from the Employer, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC 3.9, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Employer. If the Performance Security furnished by the successful Bidder is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Bidder to be acceptable to the Employer. A foreign institution providing a bond shall have a correspondent financial institution located in the Employer's Country, unless the Employer has agreed in writing that a correspondent financial institution is not required.
- 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Employer may award the Contract to the Bidder offering the next Most Advantageous Bid.
- 47 Adjudicator**
- 47.1 The Employer proposes the person named **in the BDS** to be appointed as Adjudicator under the Contract, at an hourly fee specified **in the BDS**, plus reimbursable expenses. If the Bidder disagrees with this Bid, the Bidder should so state in the Bid. If, in the Letter of Acceptance, the Employer has not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed by the Appointing Authority designated in

the Special Conditions of Contract at the request of either party.

Section II. Bid Data Sheet (BDS)

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

[Instructions for completing the Bid Data Sheet are provided, as needed, in the notes in italics mentioned for the relevant ITB Clauses.]

ITB Clause Reference	A. General
ITB 1.1	The reference number of the Invitation for Bids is : G.1.3.7
ITB 1.1	The Purchaser is: Posts and Telecommunications Department, Ministry of Transport and Communications
ITB 1.1	The name of the contract is: Radio Planning Tools (Software) and Digital Map (Software) The identification number of the contract is: G.1.3.7 The number and identification of lots (contracts)comprising this procurement is: Not Available
ITB 1.2(a)	Electronic Procurement System is not applicable and will not be used .
ITB 2.1	The Borrower is: The Republic of the Union of Myanmar
ITB 2.1	Loan or Financing Agreement amount: USD31.5 Millions
ITB 2.1	The name of the Project is: Telecommunications Sector Reform Project (TSRP)
ITB 4.1	Maximum number of members in the JV shall be: N/A
IITB 4.5	A list of debarred firms and individuals is available on the Bank's external website: http://www.worldbank.org/debarr .
B. Contents of Bidding Documents	
ITB 8.1	For <u>Clarification of bid purposes</u> only, the Purchaser's address is: Attention: U Soe Naing, Deputy Director General Address: Posts and Telecommunications Department Office Building No. 2 Naypyidaw, Zip Code : 15011 The Republic of the Union of Myanmar

ITB 8.1	<p>Telephone: +95 67 3407 226</p> <p>Facsimile number: +95 67 3407 216</p> <p>Electronic mail address: soenine69@gmail.com</p> <p>Web page: www.ptd.gov.mm</p> <p>Requests or questions for clarification should be received by the Purchaser no later than: 10 (ten) days before the deadline for bid submission.</p>
C. Preparation of Bids	
ITB 11.1	<p>The language of the bid is : English</p> <p>All correspondence exchange shall be in English language.</p>
ITB 12.1 (i)	<p>The Bidder shall submit the following additional documents in its bid: Equipment delivery plan</p>
ITB 14.1	<p>Alternative time for Completion: shall not be permitted.</p>
ITB 14.2	<p>Alternative Bid shall not be considered.</p>
ITB 14.3	<p>Alternative technical solutions shall be permitted for the following parts of the Services : None</p>
ITB 14.5	<p>The prices quoted by the Bidder shall not be subject to adjustment during the performance of the Contract.</p>
ITB 15.7	<p>The Incoterms edition is: Incoterm 2010</p>
ITB 15.8 (a)	<p>Place of Destination: DDP Naypyidaw</p>
ITB 16.1	<p>The currency(ies) of the bid and payments is: USD</p>
ITB 17.1	<p>Period of time the Goods are expected to be functioning (for the purpose of spare parts): Warranty of Software/Goods offered should be covered for at least 12 months for goods and 24 month for software.</p>
ITB 18.2(a)	<p>Manufacturer's Authorization Letter (MAL) is: required</p>
ITB 18.2 (b)	<p>After sales service is: required (Please, specify in the proposal how you will provide)</p>
ITB 19.1	<p>The bid validity period shall be 120days.</p>
ITB 20.1	<p>A Bid Security shall not be required. A Bid-Securing Declaration shall be required.</p>

ITB 21.1	<p>In addition to the original of the bid, the number of copies is: Two (2) hardcopies labeled COPY 1 to COPY 2 and 2 searchable softcopies Bidders shall provide the soft copy of the bid for all documents in both PDF and Word/Excel format using memory stick. In case of a conflict original copy of the bid will prevail.(1 Original hard copy+2 hard copies+ 2 searchable soft copies).</p> <p>If there is any conflict between the hardcopies and the softcopies, the hardcopies will take precedence.</p>
ITB 21.3	<p>The written confirmation of authorization to sign on behalf of the Bidder shall consist of: Power of Attorney for the authority of the signatory to sign the bid. If the bid is signed by MD or Chairperson Power of Attorney is not required.</p>
	<p>D. Submission and Opening of Bids</p>
ITB 23.1	<p>For <u>bid submission purposes</u> only, the Purchaser's address is: Attention: Director General Address: Posts and Telecommunications Department Office Building No. 2 Naypyidaw, Zip Code : 15011 The Republic of the Union of Myanmar</p> <p>The deadline for bid submission is: Date: 4th <i>June</i> , 2019 Time: 10:30 a.m</p>
ITB 26.1	<p>The bid opening will take place at: Address: Meeting Room Posts and Telecommunications Department Office Building No. 2 Naypyidaw, Zip Code : 15011 The Republic of the Union of Myanmar</p> <p>Date: 4th <i>June</i> , 2019 Time: 10:30 a.m</p>
ITB 26.6	<p>The Letter of Bid and Price Schedules shall be initialed at least by three (3) representatives of the Purchaser conducting Bid opening. Each Bid shall be numbered, any modification to the unit or total bid price shall be initialed by the Representatives of the Purchaser. All pages of Bid proposal shall be properly signed or initialed by the Bidder or authorized representative of Bidder.</p>

E. Evaluation and Comparison of Bids	
ITB 31.3	Not applicable .Substantially responsive bids shall be evaluated on the basis of price alone.
ITB 33.1	<p>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: USD</p> <p>The source of exchange rate shall be: Central Bank of Myanmar, http://forex.cbm.gov.mm</p> <p>The date for the exchange rate shall be: 14 (fourteen) days prior to the date of the deadline for submission of the bids (selling rate shall be applicable).</p>
ITB 35.1(b)	<p>Evaluation will be done for the whole package. Price schedule include items that are optional .The evaluation of bids will take into account only for all mandatory equipment /service/component. Bidders will provide price for optional equipment which the client may take into account at his discretion</p> <p>Note:</p> <p><i>If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. An item not listed in the Price Schedule shall be assumed to be not included in the bid, and provided that the bid is substantially responsive, the average price of the item quoted by substantially responsive bidders will be added to the bid price and the equivalent total cost of the bid so determined will be used for price comparison.</i></p>
ITB 35.2	<p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria:</p> <ul style="list-style-type: none"> (a) Deviation in Delivery schedule: <i>No</i> (b) Deviation in payment schedule: <i>No</i> (c) the cost of major replacement components, mandatory spare parts, and service: <i>No</i> (d) the availability in the Purchaser’s Country of spare parts and after-sales services for the equipment offered in the bid : <i>No</i> (e) the projected operating and maintenance costs during the life of the equipment : <i>No</i>

	(f) the performance and productivity of the equipment offered; <i>No</i>
ITB .40 Standstill Period	The Standstill Period is Ten (10) Business Days from the date the Employer has transmitted to all Bidders that submitted Bids, the Notification of its Intention to Award the Contract to the successful Bidder.
	F. Award of Contract
ITB .47	The Adjudicator proposed by the Employer is _____. The hourly fee for this proposed Adjudicator shall be _____. The biographical data of the proposed Adjudicator is as follows: _____. “To be finalized during contract negotiation”
ITB .48	<p>Additional new clause:</p> <p>Complaints Procedure</p> <ul style="list-style-type: none"> • A complaint may be made by any party at any stage of the procurement process. No complaint will be responded to during the evaluation period. Complaints received during the evaluation period will be reviewed by the Purchaser and a response issued only after the evaluation is completed. • Complaints shall be addressed to the Purchaser as named in the BDS (ITB 8.1). The Purchaser will investigate the 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 • 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>1. Director General</p> <p>Posts and Telecommunications Department</p> <p>Office Building No. 2</p> <p>Naypyidaw, Zip Code : 15011</p> <p>The Republic of the Union of Myanmar</p> <p>Telephone: +95 67 3407225 ; +959 67 3407226</p> <p>Facsimile number: +95 67 3407216</p> <p>Electronic mail address: dg.ptd@mptmail.net.mm and Cc to: soenine69@gmail.com; mswe67@gmail.com; htunaung.than@gmail.com</p>

	<p>2. Rajendra Singh, Task Team Leader Senior Regulatory Specialist, Transport and Digital Development Global Practice World Bank, Washington DC Tel : +1202473190 Email: rsingh6@worldbank.org</p>
ITB .49	<p>Foreign firms will be required to be registered in Myanmar as a Myanmar registered company prior submitting Bid proposal. But, the company registration period shall be not less than one (1) year on the day of submitting Bid proposal.</p>

Section III. Evaluation and Qualification Criteria

This Section contains all the criteria that the Purchaser shall use to evaluate a bid and qualify the Bidders. In accordance with ITB 35 and ITB 38, no other factors, methods or criteria shall be used.

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1. Evaluation (ITB 35)

1.1. Evaluation Criteria (ITB 33.6)

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 15, one or more of the following factors as specified in ITB35.2 (f) and in BDS referring to ITB 35, using the following criteria and methodologies.

- (a) Delivery schedule. (Incoterms specified-DDP Naypyidaw)

The Goods specified in the List of Goods are required to be delivered within the acceptable time range (after the earliest and before the final date, both dates inclusive) specified in Section VI, Schedule of Requirements. No credit will be given to deliveries before the earliest date, and bids offering delivery after the final date shall be treated as nonresponsive. **No changes in the delivery schedule will be allowed**

- (b) Deviation in payment schedule.

Bidders shall state their bid price for the payment schedule outlined in the SCC. Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The Purchaser may consider the alternative payment schedule and the reduced bid price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the SCC.

- (c) Cost of major replacement components, mandatory spare parts, and service: **not applicable**
- (d) Availability in the Republic of the Union of Myanmar of spare parts and after sales services for equipment offered in the bid: **not applicable**
- (e) Projected operating and maintenance costs: **not applicable**
- (f) Performance and productivity of the equipment. **not applicable**
- (g) Specific additional criteria: **none**

2.2. Multiple Contracts (ITB 35.4) N/A

2.3 Alternative Bids (ITB 14.1) Not Allowed

3. Qualification (ITB 38)

3.1 Postqualification Requirements (ITB 38.1)

After determining the lowest-evaluated bid in accordance with ITB 36.1, the Purchaser shall carry out the postqualification of the Bidder in accordance with ITB 38, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

(a) If Bidder is Manufacturer:

(i) Financial Capability

The Bidder shall furnish documentary evidence that it meets the following financial requirement(s):

- (a) The average annual turnover of the last three years should not be less than the bid amount.
- (b) A form of credit line from a commercial bank or a bank-account statement to demonstrate that the Bidder has following amounts available for the respective contract(s) if awarded to the bidder: USD 500,000.

(ii) Experience and Technical Capacity

(a) The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):

The Bidder must have supplied **Radio Planning Tools (Software) and Digital Map (Software)** that have been field proven in actual service. To meet this criteria, the Bidder must demonstrate that the proposed softwares have been in satisfactory service with at least two (2) telecommunications organizations for a minimum period of three (3) years on the date of bid opening and the value of such contracts are greater than 50% of the value of the Bid.

(b) The Bidder's office or Branch office must be present in Myanmar to provide technical support for the proposed **Radio Planning Tools (Software) and Digital Map (Software)** of the kind being tendered as after-sale service. The Bidder will submit with its bid organizational, staffing and equipment plan necessary for the maintenance of the system.

(iii) Documentary Evidence

The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement:

The Bidder shall submit with his bid the names, addresses, telephone/fax numbers and e-mail addresses of the two (2) telecommunications organizations as well as appropriate certificates from them in respect of the performance of the offered Softwares. The Purchaser reserves the right to verify with the two organizations the quality of Softwares and its satisfactory performance in actual service.

(b) If Bidder is not manufacturer:

If a Bidder is not a manufacturer, the bidder can be a firm or a consortium, but is offering the software on behalf of the Manufacturer under **Manufacturer's Authorization Form** (the Manufacturer Authorization Form can be accepted for member of that consortium also), and

shall demonstrate the above qualifications (a)(i) and (a)(iii). The Bidder shall demonstrate that it has successfully completed at least two (2) Radio Planning Tools (Software) and Digital Map (Software) of similar goods in the past three (3) years. The Bidder shall also submit a Manufacturer Authorization form in the format provided in Section IV of the Bidding documents for the items specified in **ITB Data Sheet 18.2(a)**.

Section IV. Bidding Forms

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Letter of Bid

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

Note: All italicized text is for use in preparing these form and shall be deleted from the final products.

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

NCB No.: **G.1.3.7 Radio Planning Tools (Software) and Digital Map (Software)**

Invitation for Bid No.: **[insert identification]**

To: **Posts and Telecommunications Department, Ministry of Transport and Communications**

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 9)___;
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We havenot been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration in the Purchaser's country in accordance with **ITB 4.7**.
- (d) We offer to supplyin conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: **[insert a brief description of the Goods and Related Services]**;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is:

In case of only one lot, total price of the Bid **[insert the total price of the bid in words and figures in USD]**;

In case of multiple lots, total price of each lot [insert the total price of each lot in words and figures in USD];

In case of multiple lots, total price of all lots (sum of all lots) [insert the total price of all lots in words and figures in USD];

- (f) The discounts offered and the methodology for their application are:

- (i) The discounts offered are: [Specify in detail each discount offered.]

- (ii) The exact method of calculations to determine the net price after application of discounts is shown below:**[Specify in detail the method that shall be used to apply the discounts];**
- (g) Our bid shall be valid for a period as specified in ITB19 of the Instructions to Bidders , and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (h) If our bid is accepted, we commit to obtain a performance security in accordance with the Bidding Documents;
- (i) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with **ITB 4.3;**
- (j) We, including any of our subcontractors or suppliers for any part of the contract, have not been declared ineligible by the Bank, under the Purchaser's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council;
- (k) We are not a government owned entity/ We are a government owned entity but meet the requirements of **ITB 4.6;**
- (l) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: **[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity]**

Name of Recipient	Address	Reason	Amount

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

- (m) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and
- (n) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (o) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption

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

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

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

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

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

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

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

Bidder Information Form

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

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

NCB No.: *[insert number of bidding process]*

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

Page _____ of _____ pages

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

Bidder's JV Members Information Form

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

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

NCB No.: *[insert number of bidding process]*

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

Page _____ of _____ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above., in accordance with ITB 4.4. <input type="checkbox"/> In case of a Government-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and absence of dependent status, in accordance with ITB 4.6.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements.]*

Price Schedule

All Prices Are in USD						
Date: _____						
NCB No: _____						
Page N° _____ of _____						
1	2	3	4	5	6	7
Line Item N°	Description of Goods	Country of Origin	Delivery Date as defined by Incoterms	Quantity and physical unit	Unit price DDP(including all kinds of taxes) in accordance with ITB 14.8	DDP Price per line item (Col. 5x6) (including all kinds of taxes)
<i>[insert number of the item]</i>	<i>[insert name of Goods]</i>	<i>[insert country of origin of the Good]</i>	<i>[insert quoted Delivery Date]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert unit price DDP per unit]</i>	<i>[insert total DDP price per line item]</i>
1	Planning Tools					
1.1	Radio Planning Tool - GSM/UMTS/LTE			3License		
1.2	Backhaul Planning Tool			3 License		
1.3	Propagation Model			3 License		
2	Hardware					
2.1	One Server/Client Hardware			1 Lump Sum		

2.2	Three high quality laptop (Note: Bidders must propose the real high quality laptop that must be able to run RF planning tool and high resolution digital map software with high speed smoothly.)			3 Lump sum		
2.3	3rd party software for server and three laptops (O.S etc.)			1 Lump sum		
3	Geo Map data					
3.1	Map data for whole of Myanmar – DTM, Clutter, Road/Rail/waterway vectors @ 20m resolution			1 License		
3.2	Map data for Mandalay Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution			1 License		
3.3	Map data Yangon Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution			1 License		
3.4	Map data for Naypyitaw Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution			1 License		
Total Price for Goods + Softwares (Tax(Commercial Tax + Withholding Tax) Included in the Bid Price)						

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[Insert Date]*

Price and Completion Schedule – Related Services

Prices are in USD						Date: _____
						NCB No: _____
						Page N° _____ of _____
1	2	3	4	5	6	7
Service N°	Description of Services (excludes inland transportation and other services required in Myanmar to convey the goods to their final destination)	Country of Origin	Delivery Date at place of Final destination	Quantity and physical unit	Unit price (including all kinds of taxes)	Total Price per Service (Col. 5x6) (including all kinds of taxes)
<i>[insert number of the Service]</i>	<i>[insert name of Services]</i>	<i>[insert country of origin of the Services]</i>	<i>[insert delivery date at place of final destination per Service]</i>	<i>[insert number of units to be supplied and name of the physical unit]</i>	<i>[insert unit price per item]</i>	<i>[insert total price per item]</i>
4	Related Services					
4.1	Installation Services			1 Service(Lump sum)		
4.2	Technical Support Services			12 months (Lump sum)		
4.3	On Job Training months			2 months (Lump sum)		
4.4	Tool user training including Radio Planning tool, Backhaul Planning Tool , Propagation model (tool) and map data			2 weeks (Lump sum)		
Total Bid Price (Tax(Commercial Tax + Withholding Tax) Included in the Bid Price)						

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*

Grand Total Summary Price

Prices are in USD				Date: _____		
				NCB No: _____		
				Page N° _____ of _____		
1	2			3		
Service N°	Description of Goods & Services			Quantity and unit		
				Total Price per Component		
<i>[insert number of the Goods & Service]</i>	<i>[insert name of Goods & Services]</i>			<i>[insert unit price per item]</i>		
1-3	Goods + Softwares					
4	Related Services			1 Set of Services		
Total Bid Price (Tax(Commercial Tax + Withholding Tax) Included in the Bid Price)						
				<table border="1" style="width: 100%; height: 20px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>		

Name of Bidder *[insert complete name of Bidder]* Signature of Bidder *[signature of person signing the Bid]* Date *[insert date]*

Form of Bid Security

Bank Guarantee

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

[Guarantor letterhead or SWIFT identifier code]

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

IFB No.: *[Purchaser to insert reference number for the Invitation for Bids]*

Date:*[Insert date of issue]*

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

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

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

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

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

- i. Has withdrawn its Bid during the period of bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant;

or

- ii. having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the performance security, in

accordance with the Instructions to Bidders (“ITB”) of the Beneficiary’s bidding document.

This guarantee will expire: (a) if the Applicant is the successful bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such contract agreement; or (b) if the Applicant is not the successful bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary’s notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

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

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

[Signature(s)]

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

Form of Bid-Securing Declaration

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

Date: *[date (as day, month and year)]*
Bid No.: *[number of bidding process]*

To: *[complete name of Purchaser]*

We, the undersigned, declare that:

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

We accept that we will automatically be suspended from being eligible for bidding in any contract with the Purchaser for the period of time of two years starting on *[date]*, if we are in breach of our obligation(s) under the bid conditions, because we:

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

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

Name of the Bidder* _____

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

Title of the person signing the Bid _____

Signature of the person named above _____

Date signed _____ day of _____, _____

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

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

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

Manufacturer's Authorization

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

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

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Section V-1. Eligible Countries

Eligibility for the Provision of Goods, Works and Non Consulting Services in
Bank-Financed Procurement

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

Under ITB 4.8(a) : None.

Under ITB 4.8(b) : None

Section V-2. Bank Policy - Corrupt and Fraudulent Practices

1. Purpose

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

2. Requirements

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

2.2 To this end, the Bank:

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

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
 - (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.

b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants,

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

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

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

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

PART 2 – Supply Requirements

Section VI. Schedule of Requirements

Contents

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Notes for Preparing the Schedule of Requirements

The Schedule of Requirements shall be included in the bidding documents by the Purchaser, and shall cover, at a minimum, a description of the goods and services to be supplied and the delivery schedule.

The objective of the Schedule of Requirements is to provide sufficient information to enable bidders to prepare their bids efficiently and accurately, in particular, the Price Schedule, for which a form is provided in Section IV. In addition, the Schedule of Requirements, together with the Price Schedule, should serve as a basis in the event of quantity variation at the time of award of contract pursuant to ITB 40.

The date or period for delivery should be carefully specified, taking into account (a) the implications of delivery terms stipulated in the Instructions to Bidders pursuant to the *Incoterms* rules (i.e., DDP that “delivery” takes place when goods are delivered **to the destination**), and (b) the date prescribed herein from which the Purchaser’s delivery obligations start (i.e., notice of award, contract signature, opening or confirmation of the letter of credit).

1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column “Bidder’s offered Delivery date” to be filled by the Bidder]

Line Item N°	Description of Goods	Quantity	Physical unit	Final (Project Site) Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date	Latest Delivery Date	Bidder’s offered Delivery date <i>[to be provided by the bidder]</i>
<i>[insert item No]</i>	<i>[insert description of Goods]</i>	<i>[insert quantity of item to be supplied]</i>	<i>[insert physical unit for the quantity]</i>	<i>[insert place of Delivery]</i>	<i>[insert the number of days following the date of effectiveness the Contract]</i>	<i>[insert the number of days following the date of effectiveness the Contract]</i>	<i>[insert the number of days following the date of effectiveness the Contract]</i>
1	Planning Tools						
1.1	Radio Planning Tool - GSM/UMTS/LTE/5G	3	License	Naypyitaw	25	50	
1.2	Backhaul Planning Tool	3	License		25	50	
1.3	Propagation Model	2	License		25	50	
2	Hardware						
2.1	One Server/Client Hardware	1	Lump sum		25	50	

2.2	Three high quality laptop (Note: Bidders need to propose the real high quality laptop that must be able to run RF planning tool and high resolution map software with high speed smoothly.)	3	Lump sum		25	50	
2.3	3rd party software for server and three laptops (O.S etc.)	1	Lump sum		25	50	
3	Geo Map data						
3.1	Map data for whole of Myanmar – DTM, Clutter, Road/Rail/waterway vectors @ 20m resolution	1	License		25	50	
3.2	Map data for Mandalay Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution	1	License		25	50	
3.3	Map data Yangon Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution	1	License		25	50	
3.4	Map data for Naypyitaw Area – 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution	1	License		25	50	

2. List of Related Services and Completion Schedule

[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic, and consistent with the required Goods Delivery Dates (as per Incoterms)]

Service	Description of Service	Quantity¹	Physical Unit	Place where Services shall be performed	Final Completion Date(s) of Services
<i>[insert Service No]</i>	<i>[insert description of Related Services]</i>	<i>[insert quantity of items to be supplied]</i>	<i>[insert physical unit for the items]</i>	<i>[insert name of the Place]</i>	<i>[insert required Completion Date(s)]</i>
4	Related Services				
4.1	Installation Services	1	Service (Lump sum)	Naypyitaw	
4.2	Technical Support Services	1	Service (Lump sum)	Naypyitaw	
4.3	On Job Training months	1	Service (Lump sum)	Naypyitaw	
4.4	Tool user training including Radio Planning tool, Backhaul Planning Tool , Propagation model (tool) and map data	1	Service (Lump sum)	Naypyitaw	

1. If applicable

3. Technical Specifications

Country: MYANMAR

Project Name: TELECOMMUNICATIONS SECTOR REFORM PROJECT

Name of Item: **Radio Planning Tools (Software) and Digital Map (Software)**

Quantity: Each system is required to fully comply of all quantities with below requirement.

Explanation & purpose for the project
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1. Executive Summary

The main objective of purchasing these sets of software and hardware is to feed the coverage and QoS data made available by four mobile operators and ISPs that providing Broadband Data services using 2600 MHz frequency band. The software should be run to check if there is any deficiency in coverage and QoS parameters. These planning tools and map should identify deficiency areas and where PTD should do drive test. So, it must be to ensure that

the coverage and QoS data made available by operators is compatible with the hardware and software that proposed.

The wider objectives of the Radio & Transmission Planning Tool are to:

1. Ensure nationwide access to basic telecommunications service
2. Foster competitive markets to promote:
 - a. Efficient supply of telecommunications service
 - b. Good quality of service
 - c. Advanced services
 - d. Competitive prices
3. Promote increased connectivity for all users through efficient interconnection arrangements
4. Optimize use of scarce resources, such as radio spectrum, and to ensure no illegal utilization
5. Perform audits to ensure operators are meeting site planning requirements

The tool should be capable to cater to current and future wireless networks such as:

Radio Planning:

- GSM, UMTS, LTE, Wi-Fi, 5G, Small cells and IoT.

Transmission Planning:

- SDH, PDH, Ethernet / IP and Hybrid radios, both TDD and FDD
- Support transmission for multiple technologies including LTE.

The following chapters provide full details of service requirements.

2. Background

Posts & Telecommunications Department (PTD), a department under the purview of The Government of the Republic of the Union of Myanmar has undertaken telecommunications sector reforms in order to:

- i. increase by tenfold access to quality telecommunication services;
- ii. make services affordable for its citizens; and
- iii. develop the required ICT infrastructure in Myanmar that will facilitate inclusive growth and poverty reduction

With the reform process undertaken in the Telecom Sector, Myanmar Post and Telecommunications (MPT)'s long lasting monopoly is being replaced by a competitive market structure consisting of multiple operators. Telenor Myanmar Limited, Ooredoo Myanmar Limited and Telecom International Myanmar co., Ltd (MyTel) were awarded Nationwide Telecommunications Services Licenses. The Nationwide Telecommunications Services License holder shall fulfill the Minimum Geographic Coverage Commitments and Minimum Population Coverage Commitments for mobile Voice and mobile Data as well as the Quality of Service (QoS) Commitment. On top of that, in 2016, PTD auctioned 2600 MHz frequency band to NFS(I) licensees to be able to provide Broadband Data Services(LTE). They also have some population coverage commitments to Government. Given that the regulator, PTD needs to ensure that the Licensees (four operators) and Broadband Data Services providers have fulfilled the commitments of their licenses, there is a need for the procurement of tools for radio frequency and transmission planning that will cover all above. This will bring PTD one step closer to fulfilling its commitment to the citizens of Myanmar in terms of service availability and quality assurance. As such, PTD has prepared a Request for Proposal (RFP) document to procure these solutions via capable bidders to meet our service demands.

3. Planning Solution

The Planning solution should be based on but not limited to the following criteria:

- The proposed planning tool can be used as a centralised database repository for site and equipment inventory
- The proposed planning tool can be used as a site location management and visualisation tool
- The proposed planning tool can be used as a link location management and visualisation tool
- The proposed planning tool can be used to perform site sharing and co-location management activities between operators
- The proposed planning tool can be used to audit nationwide coverage of multiple operators

- The proposed planning tool can be used for Emergency and Disaster planning by aggregating coverage across all operators
- The proposed planning tool can be used to correlate with population demographic data and identify regulatory coverage requirements
- The firm with the help of the results of this planning tool should help in identifying areas where drive test should be conducted so as to ensure the compliance of license agreements of four mobile operators and ISPs that are providing Broadband Data services using 2600 MHz frequency band.

4. Planning Tool Architecture

The Planning Tool architecture should be based on but not limited to the following criteria:

- The solution shall allow for the creation and persistence of multiple different projects
- The solution shall allow multiple users to access and edit the same project simultaneously with all conflicts gracefully handled
- Each user shall have a username and password
- The solution shall persist the data in a Single Integrated Database
- The solution shall allow users to be working in an offline mode without continuous connection to a database or server
- The solution shall allow the users to work on and edit a multi-user project without affecting the other users
- The solution shall allow users to synchronise their local version of a multi-user project with the centralised version
- The solution shall allow users to be accessing and using it remotely using a terminal service
- Solution must be compliant in supporting and parsing Network Configuration Management Data, Performance Management Data, Population Information, Map Data, Drive Test, Walk Test Data and Marketing Information.

5. Radio Planning Tool

The required Radio Planning Tool should be based on but not limited to the following criteria:

5.1. Operating System & GUI

- The proposed radio planning tool should support 64-bit operating system
- The proposed radio planning tool should support a central database repository for Radio Planning activities
- The proposed radio planning tool should support a central GIS solution allowing different views and statuses of site progress to be visualised
- The proposed radio planning tool should support display of web maps (Bing Maps, MapQuest etc.) without additional licensing as a background layer
- The proposed radio planning tool should support a strong project and security functionality to allow disparate groups to work separately on their own data from a single location
- The proposed planning tool should be able to visualise the desired network parameters of the neighbouring cells on the map view and appropriately assign key parameters such as TX power, antenna tilt, BSIC, Scrambling code, etc. to the newly integrated site.

5.2. Tool Features

- The proposed radio planning tool should support multi-technology radio planning, which allows coverage, capacity, cell parameter and neighbour planning of GSM, UMTS, LTE, 5G, small cells and other technologies in a single project
- The proposed radio planning tool should support a Multi-Technology Vendor and Operator platform
- The proposed radio planning tool should support the design needs of IoT, 4G Advanced Pro and 5G technologies, including C-RAN, CoMP massive MIMO and beamforming
- The proposed radio planning should consist of a range of productivity packs that can add additional functionality to further improve the efficiency of engineers in their everyday planning needs

- The proposed radio planning tool should support generation of coverage layer for 2G, 3G, LTE and 5G, and also able to merge multi-system/frequency band to one layer i.e. merge 3G 850 + 2100 MHz or LTE 1800 + 2100 MHz without any data loss
- The proposed radio planning tool can perform Coverage, Interference/Quality, Failure, Capacity/Throughput, Neighbour, Code and Frequency analysis, planning and optimisation through the range of supplied and supported (third-party) Propagation Models available
- The proposed radio planning tool should support calculation of path loss prediction and create coverage array for the entire country at one time with good efficiency
- The proposed radio planning tool should be able to run Coverage Plots with no limitation of number of sites
- The proposed radio planning tool should be able to generate coverage prediction, measurement reports and simulation for the following:
 - 2G: Voice /GPRS/EGPRS
 - 3G: UMTS, HSPA, HSPA+
 - 4G: LTE FDD, LTE TDD
 - 5G: FDD & TDD NR up to mmWave
- The proposed radio planning tool should support the required prediction features:
 - Best signalling and data coverage (i.e. for 2G Rx level / 3G RSCP / 4G RSRP)
 - DL/UL Throughput coverage
 - Best DL/UL cell area coverage (Dominant coverage area of cell)
 - Interference prediction
 - DL / UL Loss
- The proposed radio planning tool should be able to export coverage array file to Shapefile, MapInfo and KML formats
- The proposed radio planning tool should be able to create traffic forecasts through the definition of terminal types and support multi-technology terminal type for combined technology planning

- The proposed radio planning tool should support live network traffic statistics in order to define the spread traffic distribution over the network
- The proposed radio planning tool should support generation of interference tables for individual cells using coverage and traffic arrays. Interference tables can be viewed using a detailed analysis report which also interacts with the 2D View to visualise victim and interfering cells in the report
- The proposed radio planning tool should support loading of third-party interference tables (e.g. Ericsson's ICDM and Huawei ICDM formats) and optionally merge them with existing tables. Support can be easily extended to other third-party interference table formats
- The proposed radio planning tool should support the option of calculating the network traffic using user-definable uplink and downlink loads on per cell basis
- The proposed radio planning tool should support the capability to generate new arrays which are the result of performing mathematical operations between several arrays
- The proposed radio planning tool should support a pixel analyser that can be placed alongside a map view in order to see detailed array information that has been accumulated during simulations
- The proposed radio planning tool should support carried traffic analysis feature understand the characteristics of traffic served by the wireless network's air interface to help them dimension the transmission and core networks
- The proposed radio planning tool should support automatic planning of neighbour relationships for GSM, UMTS (intra- and inter-carrier), CDMA (intra- and inter-carrier), Mobile WiMAX, LTE (intra- and inter-carrier), and GSM-UMTS, LTE-GSM, LTE-UMTS and LTE-CDMA.
- The proposed radio planning tool should include a feature that can help to assess the transmission viability of existing or candidate small cells and provide a report that ranks from lowest to highest cost value
- The proposed radio planning tool should support automatic calculation of maximum cell range based on chosen filters, carriers and arrays and stores this in

the site database. Users should also be able to manually specify the maximum cell range value

- The proposed radio planning tool should support automatic BSIC planning for new and existing GSM cells
- The proposed radio planning tool should support automatic scrambling code planning for new and existing UMTS cells
- The proposed radio planning tool should support automatic LTE PCI planning.
- The proposed radio planning tool should support automatic LTE RACH RSI planning.
- The proposed radio planning tool should support 5G NR Beam Switching simulations.
- The proposed radio planning tool should support 5G NR Beam Forming simulations.
- The proposed radio planning tool should support 5G NR Massive MIMO deterministic modeling.
- The proposed radio planning tool should support 5G NR PCI planning.
- The proposed radio planning tool should support 5G NR RACH planning.
- The proposed radio planning tool should support 5G NR carrier sharing with LTE simulations.
- The proposed radio planning tool should support 5G NR 3D traffic modeling.

5.3. Integration

- The proposed radio planning tool should support the enhancement of radio planning through the use of live measurements such as configuration management, drive test, etc. and support a large range of proprietary formats
- The proposed radio planning tool should be able to load Performance Measurements and Configuration Measurements from OSS.
- The proposed radio planning tool should be able to support following measurement file formats:
 - TEMS (*.fmt)
 - Nemo Outdoor (*.dt?)

- Signia (*.hd, *.dat) or WGS84 Signia
- TMR (*.tmr)
- Rohde Schwarz (*.pro)
- DingLi (*.txt)
- Microsoft Office Access Database (*.mdb)
- Custom format (open API)

5.4. Reporting

- The proposed radio planning tool shall include the ability to generate the following reports:
 - Statistical report to produce area and percentage statistics for arrays which can be broken down by clutter type, cell, vector, etc.
 - Simulation report to analyse network performance in the area simulated as a whole, as well as the performance of individual cells
 - Database report to extract and summarise the contents of the database from e.g. site/node report, cell information report, FCC report, frequency plan report
 - Delta report, which provides an updated list of any changes made to the project which have not yet been committed by the user.

6. Transmission Planning Tool

The required Transmission Planning Tool should be based on but not limited to the following criteria:

6.1. Operating System & GUI

- The proposed transmission tool shall run on the “Microsoft Windows 64bit Operating System
- The proposed transmission tool shall run on the latest “INTEL/AMD” spec multi-core processors and permit access to more than 4 gigabytes of on-board memory
- The proposed transmission tool shall feature a common GUI interface as standard

- The proposed transmission tool shall use “Oracle” back-end infrastructure for network database storage and data processing, permitting secure real-time network planning data handling.

6.2. Security & Administration

- The proposed transmission tool shall permit the creation, “Modification” and “Deletion” of multiple transmission groups, users and passwords
- The proposed transmission tool shall include an “Administrative” module in order to permit the tools’ Administrator to perform specific Oracle-based tasks from within the tools platform independently
- The proposed transmission tool shall include the ability to permit the use of “Multiple Passwords” for all individual users, and users defined within specified engineering groups, across a planning, optimisation and post processing multi-project environment.

6.3. Tool Features

- The proposed transmission tool shall permit the use of a fully integrated “Oracle-based” common database for the real-time transaction and storage of network element data
- The proposed transmission tool shall include the ability to “APPLY” data, “COMMIT” data and “RESTORE” data stored within the database
- The proposed transmission tool shall include the ability to define the “Mapping Coordinate System”, the Mapping and User Data Directories, Auto Calculation of the Map Data Extents and Region Load Zoning and Polygon-based Exclusions
- The proposed transmission tool shall include the ability to click on and highlight transmission links interactively within the GIS map view
- The proposed transmission tool shall include the ability to set the MTTR (Mean Time To Repair), and disable auto Terrain Roughness Factor calculation function
- The proposed transmission tool shall include comprehensive “Import” and “Export” functionality for the importation and exportation of User Settings, XML, 3GPP and Planet/EET formatted data

- The proposed transmission tool shall include the ability to define, create and apply “Height”, “Clutter” and “Building” vectors from within the transmission tool
- The proposed transmission tool shall include the ability to change a users’ password whilst “In-Session” in real-time without having to use the platform’s Oracle-based Administrative utility
- The proposed transmission tool shall include the ability “Import/Export” MapInfo data and specific MapInfo project layers directly into the common platform
- The proposed transmission tool shall include the ability to store “Element Data” such as Microwave Antennas, Feeders and Masts equipment definitions from within the transmission tool
- The proposed transmission tool shall permit the editing of “Identifier Tags” for all link elements stored within the oracle database
- The proposed transmission tool shall include a common interactive “GIS” [Graphical Information System] for the display of DTM, Clutter, Vector/Polygon and Link element data
- The proposed transmission tool shall include a common interactive multi-resolution “Height Profiler” permitting the evaluation of geo-graphical topological profiling visually and interactively, including the ability to evaluate LOS [Line of Site] between two link-end elements [or two generic points] and view clutter information above or below the profile line
- The proposed transmission tool shall include a common interactive “Master View” interface
- The proposed transmission tool shall include a common MESSAGE Log for tracking action validation in real-time
- The proposed transmission tool shall include comprehensive “Help” documentation for the platform and associated installed engineering modules
- The proposed transmission tool shall include a “License Administrator” to enable direct administration of licenses for the integrated platform and associated engineering modules.

6.4. Tool GIS Map View Functionality

- The proposed transmission tool shall support a common “GIS” [Graphical Information System] viewer to display network and link-based elements such as:-
 - Property {and Site} element data, and
 - Link {and link-end} data
- The proposed transmission tool shall support the following GIS functionality such as:-
 - the addition and removal of network elements [properties]
 - the moving and re-positioning [drag & drop] of network elements [properties] across the map view
 - the addition and removal of link elements
- The proposed transmission tool shall support the following “property-based” GIS functionality, including:-
 - make property candidate
 - break property candidate
 - show search rings
 - show candidates
 - set search area, and
 - cancel search area
- The proposed transmission tool shall support the following GIS functionality such as:-
 - interactively view and validate “Site Visibility” and/or “LOS” {map line of site} probability directly within the map view window
- The proposed transmission tool shall support the following GIS functionality such as:-
 - zoom, pan, and
 - interactive search [from within the GIS map view]
- The proposed transmission tool shall support the following GIS functionality such as the ability to create and display vectors directly from within the GIS map view
- The proposed transmission tool shall permit the ability to launch a detailed GIS map view “Legend” GUI

- The proposed transmission tool shall permit the ability to create and select GIS map view “Short Cuts” of the various map data and transmission network {link topology} views as defined
- The proposed transmission tool shall include a comprehensive interactive legend to visualize and manipulate the available GIS “Map Layers”; please list the layers available as standard
- The proposed transmission tool shall include a comprehensive GIS “Properties Preference” GUI; please elaborate on how colour, font, polygon, network/link element symbol and array properties can be changed and displayed interactively.

6.5. Transmission Tool Configuration Functionality

- The transmission planning tool shall include the ability to define LINK TYPES. Please list ALL definable link types available within your tool:-
- Within LINK TYPES the transmission planning tool shall include the following selections/inputs;
 - ID
 - Link Bearer Type
 - Installation Cost
 - Annual Maintenance Cost
 - Annual Rental Cost
- The transmission planning tool shall include the ability to define and edit T/I OBJECTIVES
- Within T/I OBJECTIVES the transmission planning tool shall include the ability to add, define and select the following parameters and settings, including;
 - T/I Objective ID
 - Victim Radio Setting [Radio Equipment, Carrier BW, Modulation Type]
 - Interferer Radio Setting [Radio Equipment, Carrier BW, Modulation Type]
 - Ability to define Frequency separation; and
 - Ability to define corresponding T/I Objective in (dB)
- The transmission planning tool shall include the ability to define and edit MODULATION TYPES

- Within MODULATION TYPES the transmission planning tool shall include the ability to add and define the following parameters and settings, including;
 - Modulation Type
 - Default Kn
 - Bits Per Symbol
- The transmission planning tool shall include the ability to define and edit BANDS AND CHANNELS
- Within BANDS AND CHANNELS the transmission planning tool shall include the ability to add and define the following parameters and settings, including;
 - Band ID
 - Bandwidth (MHz)
 - Channel Name (ID)
 - Lo Freq (MHz)
 - Hi Freq (MHz)
- The transmission planning tool shall include a comprehensive interactive LINK DATABASE
- Within LINK DATABASE the transmission planning tool shall include the ability to view the following link element types;
 - Point to Point Links
 - Point to Multi-Point Hubs
 - Back to Back Passive Repeaters
 - Reflector Passive Repeaters
 - Multi Radio Links
 - Dual Polar Links
- Within LINK DATABASE the transmission planning tool shall include the ability to define the following link element templates;
 - Point to Point Link Templates
 - Point to Multi-Point Templates
 - Hub Templates
 - Back to Back Passive Templates
 - Reflector Templates

- Multi Radio Link Templates
- Dual Polar Link Templates
- Within the LINK DATABASE the transmission planning tool shall include the ability to view and define the following link information across all link element types;
 - General {must include}
 - Link Information
 - Link Type
 - Link Status [Groups & Flags]
 - Attachments
 - Link End Settings {must include}
 - Radio A definitions
 - Radio B definitions
 - Frequency definitions
 - Antenna A definitions
 - Antenna B definitions
 - Feeder definitions
 - Calculation settings {must include}
 - Propagation prediction definitions [ITU models]
 - Rainfall definitions
 - Outage Period definitions
 - Objective Settings
 - Performance calculations {must include}
 - Link Budget calculations
 - Fade Margin calculations
 - Outage calculations
 - Reliability calculations
 - Objectives calculation
 - Mapping definitions
 - Filter & Admin definitions

- From within the LINK DATABASE list the definable and calculative parameters included within your tool for:-
 - Link End Settings
 - Radio A | Radio B | Frequency | Antenna A | Antenna B | Feeder
 - Calculation settings
 - Propagation prediction [ITU models] | Rainfall | Outage Period | Objectives
 - Performance calculation parameters
 - Link Budget | Fade Margin | Outage | Reliability | Objectives
- The transmission planning tool shall include a comprehensive MW Antenna database
- The transmission planning tool shall include the ability to add and define Microwave Radio equipment
- Within the Microwave RADIO EQUIPMENT GUI the transmission planning tool shall include the ability to add, define and view the following radio-based information;
 - General equipment ID & parts information
 - Costing information
 - Specific Radio information
 - Specific Radio Configuration information
 - Specific Radio Loss information
 - Specific Radio Signature information [vendor specific]
 - TX Spectrum information
 - RS Selectivity information
- From within the Microwave RADIO EQUIPMENT GUI list the definable and vendor specific parameters included within your tool for:-
 - Specific Radio information
 - Specific Radio Configuration information
 - Specific Radio Loss information
 - Specific Radio Signature information [vendor specific]
 - TX Spectrum information

- RS Selectivity information
- The transmission planning tool shall include a LINE OF SITE [LOS] Wizard, permitting automatic calculation and definition of possible links with map LOS
- From within the LINE OF SITE [LOS] Wizard please list the definable parameters available for use during analysis by this wizard in your tool
- From within the LINE OF SITE [LOS] Wizard please list the resulting parameter fields [values] and/or reports available after calculation is completed
- The transmission planning tool shall include an INTERFERENCE ANALYSIS Wizard, permitting automatic calculation of interference generated by the link topology
- From within the INTERFERENCE ANALYSIS Wizard please list the definable parameters available for use during analysis by this wizard in your tool
- The transmission planning tool shall include a HIGH/LOW CONFLICT Wizard, permitting automatic calculation of high/low frequency conflicts at the link-ends
- From within the HIGH/LOW CONFLICT Wizard please list the definable parameters available for use during analysis by this wizard in your tool
- The transmission planning tool shall include a CHAIN AVAILABILITY Wizard, permitting automatic calculation of high/low frequency conflicts at the link-ends
- From within the CHAIN AVAILABILITY Wizard please list the definable parameters available for use during analysis by this wizard in your tool
- The transmission planning tool shall include a comprehensive LINK PROFILE viewer
- From within the LINK PROFILE the following features and functionality must be included;
 - The ability to “Save”, “Print Preview” & “Print Link Profiles” [from within the Link Profile viewer]
 - The ability to interactively “Select” a link from the GIS view whilst in working within the “Link Profile” module
 - The ability to toggle between and plot links from “Property to Point”, “Point to Point” & “Property to Property” [from within the Link Profile viewer]

- The ability to display “Fresnel Zones” visually [from within the Link Profile viewer]
- The ability to toggle display of Basic Reflection visually [from within the Link Profile viewer]
- The ability to toggle display of “Specular Reflections” visually [from within the Link Profile viewer]
- The ability to toggle display and analyse “Specular Reflections” [from within the Link Profile viewer]
- The ability for automatic “Antenna Minimisation” calculation [from within the Link Profile viewer]
- The ability to calculate “Tile Angle” [from within the Link Profile viewer]
- The ability to toggle between “Map data Profiles” and “Clutter/Height” information [from within the Link Profile viewer]
- The ability to display User Defined Data Profile information visually [from within the Link Profile viewer]
- The ability to generate User Defined Data Profiles using the Profile Generator [from within the Link Profile viewer]
- From within the LINK PROFILE list the analysis features and parameters available in the SPECULAR REFLECTION GUI
- The transmission planning tool shall include a PTMP Coverage Wizard and the following arrays:
 - Rx Level
 - Best Server
 - Fade Margin
 - Interference

6.6. Integration

- The proposed transmission tool shall be fully compatible with Microsoft’s “Office” suite of tools, in order to generate reports and graphs within a common interoperable standard

- The proposed transmission tool shall integrate seamlessly with an Oracle-backend infrastructure in order to perform fast and efficient real-time data transactions and permit for mass storage of network element data reliably
- The proposed transmission tool shall be fully compatible with the “XML” standard for importation and exportation of network-based element and/or reporting data.

6.7. Additional Functionality & Integration

- The transmission network planning tool shall include an interactive “WASTEBASKET” for the removal and deletion of redundant network-based link element data. A “RESTORE” option must be included should a planner want to restore a deleted network element from the project database
- The transmission network planning tool shall include an interactive “FILTER MANAGER” to enable planners/engineers to add/define “filter” link element data into individual groups. Please describe how this is achieved in your tool
- The transmission network planning tool shall include a “GLOBAL EDIT” function to enable planners/engineers to globally edit and manipulate all network/link element data simultaneously
- The transmission network planning tool shall include a “GLOBAL COMMIT ALL” function to enable planners/engineers to globally commit all recent changes made to network/link element data within the project database
- The transmission network planning tool shall include a “DELTA REPORT” function to enable planners/engineers to globally review recent changes made to network/link elements within the project database.

6.8. Reporting

- The transmission network planning tool shall include the ability to generate the following reports [in detail];
 - Link Profile/Budget Reporter
 - Must be detailed, with all calculations taken from the link database
 - Intermodulation Reporter
 - Must be interactive, with the ability to solve intermodulation interference in “real-time”

- Link Reporter
- Hub Reporter
- Cost Reporter
- Traffic Reporter
- From within the REPORT modules the tool shall include visual examples of the following reports and highlight definable parameters available, if any;
 - Link Profile/Budget Report
 - Intermodulation Report
 - Link Report

7. Training

This section describes the training requirements which should cover technology and product related trainings.

7.1. Product Training

7.1.1. Radio Planning Tool Training

The solution provider should be able to deliver classroom training covering GSM, UMTS, LTE & 5G NR technology product functionalities. The training should include:

- End user and administrator classroom training which comprises of deliverables from section 7.2 of this document
- Training material for end users and administrator
- User guide and reference manuals
- On-line help

7.1.2. Transmission Planning Tool Training

The solution provider should be able to deliver classroom training to cover transmission planning product functionalities. The training should include:

- End user and administrator classroom training which comprises of deliverables from section 7.2 of this document
- Training material for end users and administrator
- User guide and reference manuals
- On-line help

7.2. Training Capability

- The Supplier shall provide CVs of trainers including domain and product experience.

8. Map Data (Digital Map)

This section describes the Digital Map Data requirements for the proposed planning tools. Note the vintage (year of production) must be provided for each map data set.

1. Map data for whole of Myanmar - DTM, Clutter, Road/Rail/waterway vectors @ 20m resolution
2. Map data for Mandalay Area - 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution
3. Map data Yangon Area - 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution
4. Map data for Naypyitaw Area - 3D Building Vectors, DTM, Clutter, Road/Rail/waterway vectors@ 5m resolution

9. Professional Services

This section describes the Professional Services requirements for the proposed planning tools. Services must include but not limited to the following criteria:

5. Installation and configuration of planning tools
6. Provisioning and configuration of hardware
7. Installation and configuration of 3rd party software
8. Hardware dimensioning and responsibility matrix for installation and configuration
9. Data migration for site data, microwave data, and configuration and equipment data import
10. Map data validation and testing
11. Creation of population demographic map based upon census data inputs to be provided by PTD.
12. Technical support service for a duration of 12 months upon deployment of tools.

The Supplier shall provide details of their Global Delivery Centre including expertise, capacity, availability and how they will assist with this project scope.

Additionally the CVs for professional services resources are to be provided by the Supplier.

10. License Requirements

This section describes the license requirements for the proposed planning tools.

1. 3 units of Radio Planning tool licenses with support for GSM, UMTS & LTE technologies
2. 3 units of Transmission Planning tool licenses
3. 3 units of Propagation Model licenses

The required licenses should be made available to PTD at no additional cost for a minimum duration of 2 years. **The comply/non comply tables are provided in excel format and provided separately in this ToR. If you cannot find it, contact to addresses mentioned above.**

11. Supplier Experience

11.1. Local Experience

The supplier shall provide details of previous RAN and Backhaul planning services projects conducted in Myanmar, such as Model Tuning and Nominal Planning. Customer references are expected.

11.2. International Experience

The supplier shall provide their RAN and Backhaul planning services experience for projects conducted outside of Myanmar, such as Model Tuning and Nominal Planning. Customer references are expected.

Planning Architecture

S.No	Description	Compliance (Fully Comply/No Comply)	Remarks/Explanation
1	The solution shall allow for the creation and persistence of multiple different projects		
2	The solution shall allow multiple users to access and edit the same project simultaneously with all conflicts gracefully handled		
3	Each user shall have a username and password		
4	The solution shall persist the data in a Single Integrated Database		
5	The solution shall allow users to be working in an offline mode without continuous connection to a database or server		
6	The solution shall allow the users to work on and edit a multi-user project without affecting the other users		
7	The solution shall allow users to synchronise their local version of a multi-user project with the centralised version		
8	The solution shall allow users to be accessing and using it remotely using a terminal service		
9	Solution must be compliant in supporting and parsing Network Configuration Management Data, Call Trace Data, Performance Management Data, Population Information, Map Data, Drive Test, Walk Test Data and Marketing Information.		

Radio Planning Tool

S.No	Description	Compliance (Fully Comply/ Non Comply)	Remarks/Explanation
1	OPERATING SYSTEM & GUI		
1.1	The proposed radio planning tool should support 64-bit operating system		
1.2	The proposed radio planning tool should support a central database repository for Radio Planning activities		
1.3	The proposed radio planning tool should support a central GIS solution allowing different views and statuses of site progress to be visualized		
1.4	The proposed radio planning tool should support display of web maps (Bing Maps, MapQuest etc) without additional licensing as a background layer		
1.5	The proposed radio planning tool should support a strong project and security functionality to allow disparate groups to work separately on their own data from a single location		
1.6	The proposed planning tool should be able to visualise the desired network parameters of the neighbouring cells on the map view and appropriately assign key parameters such as TX power, antenna tilt, BSIC, Scrambling code, etc to the newly integrated site.		
1.7	The proposed radio planning tool must be a kind of planning tool currently used by mobile network operators in Myanmar. Otherwise, the proposal will not be considered.		
2	TOOL FEATURES		
2.1	The proposed radio planning tool should support multi-technology radio planning, which allows coverage, capacity, cell parameter and neighbour planning of GSM, UMTS, LTE, 5G, small cells and other technologies in a single project.		

2.2	The proposed radio planning tool should support a Multi-Technology Vendor and Operator platform		
2.3	The proposed radio planning tool should support the design needs of IoT, 4G Advanced Pro and 5G technologies, including C-RAN, CoMP massive MIMO and beamforming		
2.4	The proposed radio planning should consists of a range of productivity packs that can add additional functionality to further improve the efficiency of engineers in their everyday planning needs		
2.5	The proposed radio planning tool should support generation of coverage layer for 2G, 3G, LTE and 5G, and also able to merge multi-system/frequency band to one layer i.e. merge 3G 850 + 2100 MHz or LTE 1800 + 2100 MHz without any data loss		
2.6	The proposed radio planning tool can perform Coverage, Interference/Quality, Failure, Capacity/Throughput, Neighbour, Code and Frequency analysis, planning and optimisation through the range of supplied and supported (third-party) Propagation Models available		
2.7	The proposed radio planning tool should support calculation of path loss prediction and create coverage array for the entire country at one time with good efficiency		
2.8	The proposed radio planning tool should be able to run Coverage Plots with no limitation of number of sites		
2.9	The proposed radio planning tool should be able to generate coverage prediction, measurement reports and simulation for the following:		
	· 2G: Voice /GPRS/EGPRS		
	· 3G: UMTS, HSPA, HSPA+		
	· 4G: LTE FDD, LTE TDD		
	· 5G: FDD & TDD NR up to mmWave		
2.10	The proposed radio planning tool should support the required prediction features:		
	· Best signalling and data coverage (i.e. for 2G Rx level / 3G RSCP / 4G RSRP)		
	· DL/UL Throughput coverage		
	· Best DL/UL cell area coverage (Dominant coverage area of cell)		
	· Interference prediction		
	· DL / UL Loss		

2.11	The proposed radio planning tool should be able to export coverage array file to Shapefile, Mapinfo and KML formats		
2.12	The proposed radio planning tool should be able to create traffic forecasts through the definition of terminal types and support multi-technology terminal type for combined technology planning		
2.13	The proposed radio planning tool should support live network traffic statistics in order to define the spread traffic distribution over the network		
2.14	The proposed radio planning tool should support generation of interference tables for individual cells using coverage and traffic arrays. Interference tables can be viewed using a detailed analysis report which also interacts with the 2D View to visualise victim and interfering cells in the report		
2.15	The proposed radio planning tool should support loading of third-party interference tables (e.g. Ericsson's ICDM and Huawei ICDM formats) and optionally merge them with existing tables. Support can be easily extended to other third-party interference table formats		
2.16	The proposed radio planning tool should support the option of calculating the network traffic using user-definable uplink and downlink loads on per cell basis		
2.17	The proposed radio planning tool should support the capability to generate new arrays which are the result of performing mathematical operations between several arrays		
2.18	The proposed radio planning tool should support a pixel analyser that can be placed alongside a map view in order to see detailed array information that has been accumulated during simulations		
2.19	The proposed radio planning tool should support carried traffic analysis feature understand the characteristics of traffic served by the wireless network's air interface to help them dimension the backhaul and core networks		
2.20	The proposed radio planning tool should support automatic planning of neighbour relationships for GSM, UMTS (intra- and inter-carrier), CDMA (intra- and inter-carrier), Mobile WiMAX, LTE (intra- and inter-carrier), and GSM-UMTS, LTE-GSM, LTE-UMTS and LTE-CDMA.		

2.21	The proposed radio planning tool should include a feature that can help to assess the backhaul viability of existing or candidate small cells and provide a report that ranks from lowest to highest cost value		
2.22	The proposed radio planning tool should support automatic calculation of maximum cell range based on chosen filters, carriers and arrays and stores this in the site database. Users should also be able to manually specify the maximum cell range value		
2.23	The proposed radio planning tool should support automatic BSIC planning for new and existing GSM cells		
2.24	The proposed radio planning tool should support automatic scrambling code planning for new and existing UMTS cells		
2.25	The proposed radio planning tool should support automatic LTE PCI planning		
2.26	The proposed radio planning tool should support automatic LTE RACH RSI planning		
2.27	The proposed radio planning tool should support 5G NR Beam Switching simulations		
2.28	The proposed radio planning tool should support 5G NR Beam Forming simulations		
2.29	The proposed radio planning tool should support 5G NR Massive MIMO deterministic modeling		
2.30	The proposed radio planning tool should support 5G NR PCI planning		
2.31	The proposed radio planning tool should support 5G NR RACH planning		
2.32	The proposed radio planning tool should support 5G NR carrier sharing with LTE simulations		
2.33	The proposed radio planning tool should support 5G NR 3D traffic modeling		
3	INTEGRATION		
3.1	The proposed radio planning tool should support the enhancement of radio planning through the use of live measurements such as configuration management, drive test, call trace etc. and support a large range of proprietary formats		
3.2	The proposed radio planning tool should be able to load Performance Measurements and Configuration Measurements from OSS.		

3.3	The proposed radio planning tool should be able to support following measurement file formats:		
	· TEMS (*.fmt)		
	· Nemo Outdoor (*.dt?)		
	· Signia (*.hd, *.dat) or WGS84 Signia		
	· TMR (*.tmr)		
	· Rohde Schwarz (*.pro)		
	· DingLi (*.txt)		
	· Microsoft Office Access Database (*.mdb)		
	· Custom format (open API)		

4	REPORTING		
4.1	The proposed radio planning tool shall include the ability to generate the following reports:		
	· Statistical report to produce area and percentage statistics for arrays which can be broken down by clutter type, cell, vector, etc.		
	· Simulation report to analyse network performance in the area simulated as a whole, as well as the performance of individual cells		
	· Database report to extract and summarise the contents of the database from e.g. site/node report, cell information report, FCC report, frequency plan report		
	· Delta report, which provides an updated list of any changes made to the project which have not yet been committed by the user.		

Backhaul Planning Tool

S.No	Description	Compliance (Fully Comply/ Non Comply)	Remarks/Explanation
1	OPERATING SYSTEM & GUI		
1.1	The proposed transmission tool shall run on the "Microsoft Windows 64bit Operating System		
1.2	The proposed transmission tool shall run on the latest "INTEL/AMD" spec multi-core processors and permit access to more than 4 gigabytes of on-board memory		
1.3	The proposed transmission tool shall feature a common GUI interface as standard		
1.4	The proposed transmission tool shall use "Oracle" back-end infrastructure for network database storage and data processing, permitting secure real-time network planning data handling		
2	SECURITY & ADMINISTRATION		
2.1	The proposed transmission tool shall permit the creation, "Modification" and "Deletion" of multiple transmission groups, users and passwords		
2.2	The proposed transmission tool shall include an "Administrative" module in order to permit the tools' Administrator to perform specific Oracle-based tasks from within the tools platform independently		
2.3	The proposed transmission tool shall include the ability to permit the use of "Multiple Passwords" for all individual users, and users defined within specified engineering groups, across a planning, optimisation and post processing multi-project environment		
3	INTEGRATION		

3.1	The proposed transmission tool shall be fully compatible with Microsoft's "Office" suite of tools, in order to generate reports and graphs within a common interoperable standard		
3.2	The proposed transmission tool shall integrate seamlessly with an Oracle-backend infrastructure in order to perform fast and efficient real-time data transactions and permit for mass storage of network element data reliably		
3.3	The proposed transmission tool shall be fully compatible with the "XML" standard for importation and exportation of network-based element and/or reporting data		
4	COMMON TOOL FEATURES		
4.1	The proposed transmission tool shall permit the use of a fully integrated "Oracle-based" common database for the real-time transaction and storage of network element data		
4.2	The proposed transmission tool shall include the ability to "APPLY" data, "COMMIT" data and "RESTORE" data stored within the database		
4.3	The proposed transmission tool shall include the ability to define the "Mapping Coordinate System", the Mapping and User Data Directories, Auto Calculation of the Map Data Extents and Region Load Zoning and Polygon-based Exclusions		
4.4	The proposed transmission tool shall include the ability to click on and highlight transmission links interactively within the GIS map view		
4.5	The proposed transmission tool shall include the ability to set the MTTR (Mean Time To Repair), and disable auto Terrain Roughness Factor calculation function		
4.6	The proposed transmission tool shall include comprehensive "Import" and "Export" functionality for the importation and exportation of User Settings, XML, 3GPP and Planet/EET formatted data		
4.7	The proposed transmission tool shall include the ability to define, create and apply "Height", "Clutter" and "Building" vectors from within the transmission tool		
4.8	The proposed transmission tool shall include the ability to change a users' password whilst "In-Session" in real-time without having to use the platform's Oracle-based Administrative utility		

4.9	The proposed transmission tool shall include the ability “Import/Export” MapInfo data and specific MapInfo project layers directly into the common platform		
4.10	The proposed transmission tool shall include the ability to store “Element Data” such as Microwave Antennas, Feeders and Masts equipment definitions from within the transmission tool		
4.11	The proposed transmission tool shall permit the editing of “Identifier Tags” for all link elements stored within the oracle database		
4.12	The proposed transmission tool shall include a common interactive “GIS” [Graphical Information System] for the display of DTM, Clutter, Vector/Polygon and Link element data		
4.13	The proposed transmission tool shall include a common interactive multi-resolution “Height Profiler” permitting the evaluation of geo-graphical topological profiling visually and interactively, including the ability to evaluate LOS [Line of Site] between two link-end elements [or two generic points] and view clutter information above or below the profile line		
4.14	The proposed transmission tool shall include a common interactive “Master View” interface		
4.15	The proposed transmission tool shall include a common MESSAGE Log for tracking action validation in real-time		
4.16	The proposed transmission tool shall include comprehensive “Help” documentation for the platform and associated installed engineering modules		
4.17	The proposed transmission tool shall include a “License Administrator” to enable direct administration of licenses for the integrated platform and associated engineering modules		
5	COMMON TOOL GIS MAP VIEW FUNCTIONALITY		
5.1	The proposed transmission tool shall support a common “GIS” [Graphical Information System] viewer to display network and link-based elements such as:-		
	<ul style="list-style-type: none"> Property {and Site} element data, and 		

	<ul style="list-style-type: none"> • Link {and link-end} data 		
5.2	The proposed transmission tool shall support the following GIS functionality such as:-		
	<ul style="list-style-type: none"> • the addition and removal of network elements [properties] 		
	<ul style="list-style-type: none"> • the moving and re-positioning [drag & drop] of network elements [properties] across the map view 		
	<ul style="list-style-type: none"> • the addition and removal of link elements 		
5.3	The proposed transmission tool shall support the following “property-based” GIS functionality, including:-		
	<ul style="list-style-type: none"> • make property candidate 		
	<ul style="list-style-type: none"> • break property candidate 		
	<ul style="list-style-type: none"> • show search rings 		
	<ul style="list-style-type: none"> • show candidates 		
	<ul style="list-style-type: none"> • set search area, and 		
	<ul style="list-style-type: none"> • cancel search area 		
5.4	The proposed transmission tool shall support the following GIS functionality such as:-		
	<ul style="list-style-type: none"> • interactively view and validate “Site Visibility” and/or “LOS” {map line of site} probability directly within the map view window 		
5.5	The proposed transmission tool shall support the following GIS functionality such as:-		
	<ul style="list-style-type: none"> • zoom, pan, and 		
	<ul style="list-style-type: none"> • interactive search [from within the GIS map view] 		
5.6	The proposed transmission tool shall support the following GIS functionality such as the ability to create and display vectors directly from within the GIS map view		
5.7	The proposed transmission tool shall permit the ability to launch a detailed GIS map view “Legend” GUI		
5.8	The proposed transmission tool shall permit the ability to create and select GIS map view “Short Cuts” of the various map data and transmission network {link topology} views as defined		

5.9	The proposed transmission tool shall include a comprehensive interactive legend to visualize and manipulate the available GIS “Map Layers”; please list the layers available as standard		
5.10	The proposed transmission tool shall include a comprehensive GIS “Properties Preference” GUI; please elaborate on how colour, font, polygon, network/link element symbol and array properties can be changed and displayed interactively		
6 TRANSMISSION TOOL CONFIGURATION FUNCTIONALITY			
6.1	The transmission planning tool shall include the ability to define LINK TYPES. Please list ALL definable link types available within your tool:-		
6.2	Within LINK TYPES the transmission planning tool shall include the following selections/inputs;		
	<ul style="list-style-type: none"> • ID 		
	<ul style="list-style-type: none"> • Link Bearer Type 		
	<ul style="list-style-type: none"> • Installation Cost 		
	<ul style="list-style-type: none"> • Annual Maintenance Cost 		
	<ul style="list-style-type: none"> • Annual Rental Cost 		
6.3	The transmission planning tool shall include the ability to define and edit T/I OBJECTIVES		
6.4	Within T/I OBJECTIVES the transmission planning tool shall include the ability to add, define and select the following parameters and settings, including;		
	<ul style="list-style-type: none"> • T/I Objective ID 		
	<ul style="list-style-type: none"> • Victim Radio Setting [Radio Equipment, Carrier BW, Modulation Type] 		
	<ul style="list-style-type: none"> • Interferer Radio Setting [Radio Equipment, Carrier BW, Modulation Type] 		
	<ul style="list-style-type: none"> • Ability to define Frequency separation; and 		
	<ul style="list-style-type: none"> • Ability to define corresponding T/I Objective in (dB) 		
6.5	The transmission planning tool shall include the ability to define and edit MODULATION TYPES		

6.6	Within MODULATION TYPES the transmission planning tool shall include the ability to add and define the following parameters and settings, including;		
	<ul style="list-style-type: none"> • Modulation Type 		
	<ul style="list-style-type: none"> • Default Kn 		
	<ul style="list-style-type: none"> • Bits Per Symbol 		
6.7	The transmission planning tool shall include the ability to define and edit BANDS AND CHANNELS		
6.8	Within BANDS AND CHANNELS the transmission planning tool shall include the ability to add and define the following parameters and settings, including;		
	<ul style="list-style-type: none"> • Band ID 		
	<ul style="list-style-type: none"> • Bandwidth (MHz) 		
	<ul style="list-style-type: none"> • Channel Name (ID) 		
	<ul style="list-style-type: none"> • Lo Freq (MHz) 		
	<ul style="list-style-type: none"> • Hi Freq (MHz) 		
6.9	The transmission planning tool shall include a comprehensive interactive LINK DATABASE		
6.10	Within LINK DATABASE the transmission planning tool shall include the ability to view the following link element types;		
	<ul style="list-style-type: none"> • Point to Point Links 		
	<ul style="list-style-type: none"> • Point to Multi-Point Hubs 		
	<ul style="list-style-type: none"> • Back to Back Passive Repeaters 		
	<ul style="list-style-type: none"> • Reflector Passive Repeaters 		
	<ul style="list-style-type: none"> • Multi Radio Links 		
	<ul style="list-style-type: none"> • Dual Polar Links 		
6.11	Within LINK DATABASE the transmission planning tool shall include the ability to define the following link element templates;		
	<ul style="list-style-type: none"> • Point to Point Link Templates 		
	<ul style="list-style-type: none"> • Point to Multi-Point Templates 		
	<ul style="list-style-type: none"> • Hub Templates 		

	<ul style="list-style-type: none"> • Back to Back Passive Templates 		
	<ul style="list-style-type: none"> • Reflector Templates 		
	<ul style="list-style-type: none"> • Multi Radio Link Templates 		
	<ul style="list-style-type: none"> • Dual Polar Link Templates 		
6.12	<p>Within the LINK DATABASE the transmission planning tool shall include the ability to view and define the following link information across all link element types [as noted/referred in 6.11];</p>		
	<ul style="list-style-type: none"> • General {must include} 		
	<ul style="list-style-type: none"> • Link Information 		
	<ul style="list-style-type: none"> • Link Type 		
	<ul style="list-style-type: none"> • Link Status [Groups & Flags] 		
	<ul style="list-style-type: none"> • Attachments 		
	<ul style="list-style-type: none"> • Link End Settings {must include} 		
	<ul style="list-style-type: none"> • Radio A definitions 		
	<ul style="list-style-type: none"> • Radio B definitions 		
	<ul style="list-style-type: none"> • Frequency definitions 		
	<ul style="list-style-type: none"> • Antenna A definitions 		
	<ul style="list-style-type: none"> • Antenna B definitions 		
	<ul style="list-style-type: none"> • Feeder definitions 		
	<ul style="list-style-type: none"> • Calculation settings {must include} 		
	<ul style="list-style-type: none"> • Propagation prediction definitions [ITU models] 		
	<ul style="list-style-type: none"> • Rainfall definitions 		
	<ul style="list-style-type: none"> • Outage Period definitions 		
	<ul style="list-style-type: none"> • Objective Settings 		
	<ul style="list-style-type: none"> • Performance calculations {must include} 		
	<ul style="list-style-type: none"> • Link Budget calculations 		
	<ul style="list-style-type: none"> • Fade Margin calculations 		
	<ul style="list-style-type: none"> • Outage calculations 		
	<ul style="list-style-type: none"> • Reliability calculations 		

	<ul style="list-style-type: none"> Objectives calculation 		
	<ul style="list-style-type: none"> Mapping definitions 		
	<ul style="list-style-type: none"> Filter & Admin definitions 		
6.13	From within the LINK DATABASE list the definable and calculative parameters included within your tool for:-		
	<ul style="list-style-type: none"> Link End Settings 		
	<ul style="list-style-type: none"> Radio A Radio B Frequency Antenna A Antenna B Feeder 		
	<ul style="list-style-type: none"> Calculation settings 		
	<ul style="list-style-type: none"> Propagation prediction [ITU models] Rainfall Outage Period Objectives 		
	<ul style="list-style-type: none"> Performance calculation parameters 		
	<ul style="list-style-type: none"> Link Budget Fade Margin Outage Reliability Objectives 		
6.14	The transmission planning tool shall include a comprehensive MW Antenna database		
6.15	The transmission planning tool shall include the ability to add and define Microwave Radio equipment		
6.16	Within the Microwave RADIO EQUIPMENT GUI the transmission planning tool shall include the ability to add, define and view the following radio-based information;		
	<ul style="list-style-type: none"> General equipment ID & parts information 		
	<ul style="list-style-type: none"> Costing information 		
	<ul style="list-style-type: none"> Specific Radio information 		
	<ul style="list-style-type: none"> Specific Radio Configuration information 		
	<ul style="list-style-type: none"> Specific Radio Loss information 		
	<ul style="list-style-type: none"> Specific Radio Signature information [vendor specific] 		
	<ul style="list-style-type: none"> TX Spectrum information 		
	<ul style="list-style-type: none"> RS Selectivity information 		
6.17	From within the Microwave RADIO EQUIPMENT GUI list the definable and vendor specific parameters included within your tool for:-		
	<ul style="list-style-type: none"> Specific Radio information 		
	<ul style="list-style-type: none"> Specific Radio Configuration information 		
	<ul style="list-style-type: none"> Specific Radio Loss information 		

	<ul style="list-style-type: none"> • Specific Radio Signature information [vendor specific] 		
	<ul style="list-style-type: none"> • TX Spectrum information 		
	<ul style="list-style-type: none"> • RS Selectivity information 		
6.18	The transmission planning tool shall include a LINE OF SITE [LOS] Wizard, permitting automatic calculation and definition of possible links with map LOS		
6.19	From within the LINE OF SITE [LOS] Wizard please list the definable parameters available for use during analysis by this wizard in your tool		
6.20	From within the LINE OF SITE [LOS] Wizard please list the resulting parameter fields [values] and/or reports available after calculation is completed		
6.21	The transmission planning tool shall include an INTERFERENCE ANALYSIS Wizard, permitting automatic calculation of interference generated by the link topology		
6.22	From within the INTERFERENCE ANALYSIS Wizard please list the definable parameters available for use during analysis by this wizard in your tool		
6.23	The transmission planning tool shall include a HIGH/LOW CONFLICT Wizard, permitting automatic calculation of high/low frequency conflicts at the link-ends		
6.24	From within the HIGH/LOW CONFLICT Wizard please list the definable parameters available for use during analysis by this wizard in your tool		
6.25	The transmission planning tool shall include a CHAIN AVAILABILITY Wizard, permitting automatic calculation of high/low frequency conflicts at the link-ends		
6.26	From within the CHAIN AVAILABILITY Wizard please list the definable parameters available for use during analysis by this wizard in your tool		
6.27	The transmission planning tool shall include a comprehensive LINK PROFILE viewer		
6.28	From within the LINK PROFILE the following features and functionality must be included;		
	<ul style="list-style-type: none"> • The ability to “Save”, “Print Preview” & “Print Link Profiles” [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to interactively “Select” a link from the GIS view whilst in working within the “Link Profile” module 		

	<ul style="list-style-type: none"> • The ability to toggle between and plot links from “Property to Point”, “Point to Point” & “Property to Property” [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to display “Fresnel Zones” visually [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to toggle display of Basic Reflection visually [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to toggle display of “Specular Reflections” visually [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to toggle display and analyse “Specular Reflections” [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability for automatic “Antenna Minimisation” calculation [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to calculate “Tile Angle” [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to toggle between “Map data Profiles” and “Clutter/Height” information [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to display User Defined Data Profile information visually [from within the Link Profile viewer] 		
	<ul style="list-style-type: none"> • The ability to generate User Defined Data Profiles using the Profile Generator [from within the Link Profile viewer] 		
6.29	From within the LINK PROFILE list the analysis features and parameters available in the SPECULAR REFLECTION GUI		
6.30	The transmission planning tool shall include a PTMP Coverage Wizard and the following arrays:		
	- Rx Level		
	- Best Server		
	- Fade Margin		
	- Interference		
7	ADDITIONAL FUNCTIONALITY & INTEGRATION		

7.1	The transmission network planning tool shall include an interactive “WASTEBASKET” for the removal and deletion of redundant network-based link element data. A “RESTORE” option must be included should a planner want to restore a deleted network element from the project database		
7.2	The transmission network planning tool shall include an interactive “FILTER MANAGER” to enable planners/engineers to add/define “filter” link element data into individual groups. Please describe how this is achieved in your tool		
7.3	The transmission network planning tool shall include a “GLOBAL EDIT” function to enable planners/engineers to globally edit and manipulate all network/link element data simultaneously		
7.4	The transmission network planning tool shall include a “GLOBAL COMMIT ALL” function to enable planners/engineers to globally commit all recent changes made to network/link element data within the project database		
7.5	The transmission network planning tool shall include a “DELTA REPORT” function to enable planners/engineers to globally review recent changes made to network/link elements within the project database		
8	REPORTING [LINKS]		
8.1	The transmission network planning tool shall include the ability to generate the following reports [in detail];		
	<ul style="list-style-type: none"> • Link Profile/Budget Reporter <ul style="list-style-type: none"> o [must be detailed, with all calculations taken from the link database] 		
	<ul style="list-style-type: none"> • Intermodulation Reporter <ul style="list-style-type: none"> o [must be interactive, with the ability to solve intermodulation interference in “real-time”] 		
	<ul style="list-style-type: none"> • Link Reporter 		
	<ul style="list-style-type: none"> • Hub Reporter 		
	<ul style="list-style-type: none"> • Cost Reporter 		
	<ul style="list-style-type: none"> • Traffic Reporter 		

8.2	From within the REPORT modules the tool shall include visual examples of the following reports and highlight definable parameters available, if any;		
	<ul style="list-style-type: none"> • Link Profile/Budget Report 		
	<ul style="list-style-type: none"> • Intermodulation Report 		
	<ul style="list-style-type: none"> • Link Report 		

Planning Solutions

S.No	Description	Compliance (Fully Comply/ Non Comply)	Remarks/Explanation
1	The proposed planning tool can be used as a centralised database repository for site and equipment inventory		
2	The proposed planning tool can be used as a site location management and visualisation tool		
3	The proposed planning tool can be used as a link location management and visualisation tool		
4	The proposed planning tool can be used to perform site sharing and co-location management activities between operators		
5	The proposed planning tool can be used to audit nationwide coverage of multiple operators		
6	The proposed planning tool can be used for Emergency and Disaster planning by aggregating coverage across all operators		
7	The proposed planning tool can be used to correlate with population demographic data and identify regulatory coverage requirements		
8	The proposed radio planning tool must be a kind of planning tool currently used by mobile network operators in Myanmar. Otherwise, the proposal will not be considered.		

Training

S.No	Description	Compliance (Fully Comply/ Non Comply)	Remarks/Explanation
PRODUCT TRAINING			
11	TRAINING - RADIO PLANNING TOOL		
11.1	The solution provider should be able to deliver classroom training covering GSM, UMTS, LTE & 5G technology product functionalities		
11.2	The training should include:		
	· End user and administrator classroom training for 5 days		
	· Training material for end users and administrator		
	· User guide and reference manuals		
	· On-line help		
12	TRAINING - BACKHAUL PLANNING TOOL		
12.1	The solution provider should be able to deliver classroom training to cover backhaul planning product functionalities		
12.2	The training should include:		
	· End user and administrator classroom training for 3 days		
	· Training material for end users and administrator		
	· User guide and reference manuals		
	· On-line help		
13	TRAINING CAPABILITY		
13.1	The Supplier shall provide CVs of trainers including domain and product experience.		

4. Inspections and Tests

The Quality Control Committee of PTD will inspect and test the system in accordance with the requirements as specified in this NCB document.

PART 3 - Contract

Section VII. General Conditions of Contract

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Section VII. General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

- (a) “Bank” means the World Bank and refers to the International Bank for Reconstruction and Development (IBRD) or the International Development Association (IDA).
- (b) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (c) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto.
- (d) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (e) “Day” means calendar day.
- (f) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (g) “GCC” means the General Conditions of Contract.
- (h) “Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
- (i) “Purchaser’s Country” is the Republic of the Union of Myanmar.
- (j) “Purchaser” means the entity purchasing the Goods and Related Services, as specified in the **SCC**.
- (k) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
- (l) “SCC” means the Special Conditions of Contract.

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- (m) “Subcontractor” means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
 - (n) “Supplier” means the person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
 - (o) “The Project Site,” where applicable, means the place named in the **SCC**.
- 2. Contract Documents**
- 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.
- 3. Corrupt and Fraudulent Practices**
- 3.1 The Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix to the GCC.
- 3.2 The Purchaser requires the Supplier to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.
- 4. Interpretation**
- 4.1 If the context so requires it, singular means plural and vice versa.
- 4.2 Incoterms
- (a) 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 Incoterms.
 - (b) The terms EXW, DDP and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms specified in the **SCC** and published by the International Chamber of Commerce in Paris, France.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Nonwaiver

- (a) Subject to GCC Sub-Clause 4.5(b) 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, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, 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.

4.6 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.

5. Language

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

5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for

documents provided by the Supplier.

- 6. Joint Venture, Consortium or Association**
- 6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.
- 7. Eligibility**
- 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.
- 7.2 All Goods and Related Services to be supplied under the Contract and financed by the Bank shall have their origin in Eligible Countries. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
- 8. Notices**
- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC**. The term “in writing” means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice’s effective date, whichever is later.
- 9. Governing Law**
- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Republic of the Union of Myanmar.
- 9.2 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in the Republic of the Union of Myanmar when
- (a) as a matter of law or official regulations, the Republic of the Union of Myanmar prohibits commercial relations with that country; or
- (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower’s Country prohibits any import of goods from that country or any payments to any country, person, or entity in that

country.

10 Settlement of Disputes

10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC**.

10.3 Notwithstanding any reference to arbitration herein,

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

11. Inspections and Audit by the Bank

11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.

11.2 The Supplier shall permit, and shall cause its Subcontractors to permit, the Bank and/or persons appointed by the Bank to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Bank if requested by the Bank. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 3 [Fraud and Corruption], which provides, inter alia, that acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under this Sub-Clause 11.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Bank's prevailing sanctions procedures)

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- 12. Scope of Supply** 12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
- 13. Delivery and Documents** 13.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the **SCC**.
- 14. Supplier's Responsibilities** 14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
- 15 Contract Price** 15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the **SCC**.
- 16. Terms of Payment** 16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the **SCC**.
- 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.
- 16.4 The currency in which payments shall be made to the Supplier under this Contract shall be USD.
- 16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period set forth in the **SCC**, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the **SCC**, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.
- 17. Taxes and Duties** 17.1 The Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed, as well as all taxes, duties, license fees, etc., incurred until delivery of the

contracted Goods to the Purchaser.

17.2 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Republic of the Union of Myanmar, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

18. Performance Security

18.1 If required as specified in the SCC, the Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC**.

18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 As specified in the SCC, the Performance Security, if required, shall be denominated in USD; and shall be in one of the format stipulated by the Purchaser in the **SCC**, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the **SCC**.

19. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

20. Confidential Information

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the

Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier need to share with the Bank or other institutions participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;
- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
- (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

21. Subcontracting

21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications and Standards

22.1 Technical Specifications and Drawings

- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and

standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.

- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

23. Packing and Documents

- 23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the **SCC**, and in any other instructions ordered by the Purchaser.

24. Insurance

- 24.1 Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be fully insured—in a freely convertible currency from an eligible country—against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.

25. Transportation and Incidental Services

- 25.1 Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.

25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, **specified in SCC:**

- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

25.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services

26. Inspections and Tests

26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the **SCC**.

26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the **SCC**. Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including

the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

- 26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
- 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 26.4.
- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.

27. Liquidated Damages

- 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC**. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

28. Warranty

- 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 28.2 Subject to GCC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
- 28.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 28.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

**29. Patent
Indemnity**

- 29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

- (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
- (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, 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.
- 29.3 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.
- 29.4 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.
- 29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

30 Limitation of Liability

- 30.1 Except in cases of criminal negligence or willful misconduct,
 - (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 the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement

31. Change in Laws and Regulations

- 31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of *The Republic of the Union of Myanmar* where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

32. Force Majeure

- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the

Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

33. Change Orders and Contract Amendments

33.1 The Purchaser may at any time order the Supplier through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) the method of shipment or packing;
- (c) the place of delivery; and
- (d) the Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

34. Extensions of Time

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by

amendment of the Contract.

34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
 - (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;
 - (ii) if the Supplier fails to perform any other obligation under the Contract; or
 - (iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

35.3 Termination for Convenience.

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

36. Assignment

- 36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

37. Export Restriction

- 37.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser and of the Bank that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 35.3.

APPENDIX TO GENERAL CONDITIONS

Bank Policy - Corrupt and Fraudulent Practices

1. Purpose

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

2. Requirements

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

2.2 To this end, the Bank:

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

- i. "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
- ii. "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
- iii. "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
- iv. "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
- v. "obstructive practice" is:
 - (a) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

- (b) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 2.2 e. below.
- b. Rejects a proposal for award if the Bank determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
 - c. In addition to the legal remedies set out in the relevant Legal Agreement, may take other appropriate actions, including declaring misprocurement, if the Bank determines at any time that representatives of the Borrower or of a recipient of any part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement process, selection and/or execution of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;
 - d. Pursuant to the Bank's Anti- Corruption Guidelines and in accordance with the Bank's prevailing sanctions policies and procedures, may sanction a firm or individual, either indefinitely or for a stated period of time, including by publicly declaring such firm or individual ineligible (i) to be awarded or otherwise benefit from a Bank-financed contract, financially or in any other manner;¹(ii) to be a nominated² sub-contractor, consultant, manufacturer or supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract; and (iii) to receive the proceeds of any loan made by the Bank or otherwise to participate further in the preparation or implementation of any Bank-financed project;
 - e. Requires that a clause be included in bidding/request for proposals documents and in contracts financed by a Bank loan, requiring (i) bidders, consultants, contractors, and suppliers, and their sub-contractors, sub-consultants, service providers, suppliers, agents personnel, permit the Bank to inspect³ all accounts, records and other documents relating to the

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

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

³ Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Bank or persons appointed by the Bank to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and

submission of bids and contract performance, and to have them audited by
auditors appointed by the Bank.

information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies thereof as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

Section VIII. Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

[The Purchaser shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics]

GCC 1.1(j)	The Purchaser is: Posts and Telecommunications Department, Ministry of Transport and Communications
GCC 1.1 (o)	The Project Site(s)/Final Destination(s) is/are: Posts and Telecommunications Department, Office No.(2), NayPyi Taw, Myanmar
GCC 4.2 (a)	The meaning of the trade terms shall be as prescribed by Incoterms. DDP to final destination
GCC 4.2 (a)	The version edition of Incoterms shall be 2010
GCC 5.1	The language shall be English
GCC 8.1	For notices , the Purchaser's address shall be: Attention: Director General Address: Posts and Telecommunications Department Office Building No. 2 Naypyitaw, Zip Code : 15011 The Republic of the Union of Myanmar Telephone: +95 67 3407226 Facsimile number: +95 67 3407216 Electronic mail address: dg.ptd@mptmail.net.mm ; cc to mswe67@gmail.com ; soenine69@gmail.com
GCC 10.2	The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows: The dispute shall be referred to adjudication or arbitration in accordance with the laws of The Republic of the Union of Myanmar
GCC 13.1	Details of Shipping and other Documents to be furnished by the Supplier are :

Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by fax or e-mail the full details of the shipment, including contract name, description of goods, quantity, the vessel, bill of lading number and date, port of loading, date of shipment, port of discharge for transportation from abroad and for inland transportation. The Supplier shall mail the following documents to the Purchaser, with a copy to the Insurance Company:

- (i) copies of the Supplier's invoice showing the description of the goods, the quantities, and the total amount; in agreement with the Price Schedules.
- (ii) original and two copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and one copy of the nonnegotiable bill of lading;
- (iii) copies of the packing list identifying contents of each package;
- (iv) insurance certificate;
- (v) Manufacturer's or Supplier's warranty certificate;
- (vi) inspection certificate, issued by the nominated inspection agency if applicable, and the Supplier's factory inspection and test report; and
- (vii) certificate of origin.

The above documents shall be received by the Purchaser at least two weeks before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

Note: the Supplier is wholly responsible for the delivery of the goods to their final destinations at each site and of its subsequent handling until delivery of the installed and tested system takes place. Therefore, the above documentary requirements shall not be construed as any relief of such Supplier's responsibilities.

The above documents shall be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

For Goods offered from within the Purchaser's country

The same requirements as for goods from abroad, with the proviso that the shipping documents shall be the appropriate for the transportation of the goods to the sites internally within the country, and that there will be no need for any custom clearance procedures

GCC 15.1	The prices charged for the Goods supplied and the related Services performed shall not be adjustable.
GCC 16.1	<p><i>Sample provision</i></p> <p>GCC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p>Payment for Goods and Services supplied from within the Purchaser's country shall be made in USD as follows:</p> <ul style="list-style-type: none"> (i) Advance Payment: Ten (10) percent of the Contract Price shall be paid within thirty (30) days of signing of the Contract against a simple receipt and a bank guarantee for the equivalent amount and in the form provided in the bidding documents or another form acceptable to the Purchaser. (ii) On Delivery: Eighty (80) percent of the Contract Price shall be paid on receipt of the Goods and upon submission of the documents specified in GCC Clause 13. (iii) On Acceptance: The remaining ten (10) percent of the Contract Price shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate for the respective delivery issued by the Purchaser.
GCC 16.5	<p>The payment-delay period after which the Purchaser shall pay interest to the supplier shall be 60 days.</p> <p>The interest rate that shall be applied is 0.25 % per month of unpaid portion of the invoice value.</p>
GCC 18.1	<p>A Performance Security shall be required.</p> <p>The amount of Performance Security shall be ten percent (10%) of the Contract Price.</p>
GCC 18.3	The Performance Security shall be in the form of :an unconditional Bank Guarantee acceptable to the Purchaser. The Performance security shall be denominated in the currencies of payment of the Contract, in accordance with their portions of the Contract Price.
GCC 18.4	Discharge of the Performance Security shall take place: as foreseen in sub clause GCC18.4.

GCC 23.2	<p>The packing, marking and documentation within and outside the packages shall be:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Documents listed in GCC 13.1 <input type="checkbox"/> Airway Bill (Original and two copies) <input type="checkbox"/> Certificate of Origin(Original and two copies) <input type="checkbox"/> Insurance Certificate (Original and two copies) <input type="checkbox"/> Packing List (Original and two copies) <input type="checkbox"/> Commercial Invoice (Original and two copies) <input type="checkbox"/> Manufacturer’s Warranty Certificate (Original and two copies)
GCC 24.1	The insurance coverage shall be as specified in the Incoterms, include marine and local insurance.
GCC 25.1	Responsibility for transportation of the Goods shall be as specified in the Incoterms.
GCC 25.2	<p>Incidental services to be provided are:</p> <p>Incidentals to be provided under this contract are defined in the BDS, including:</p> <ol style="list-style-type: none"> 1. Training 2. Installation and integration of supplied components and items 3. Warranty and service 4. Documentations and Manuals 5. Licensing of the equipment 6. Custom clearance, loading and unloading of equipment
GCC 26.1	The inspections and tests shall be: Physical inspection (conformity of goods delivered, quantity and quality) at the delivery time and delivery destination.
GCC 26.2	The Inspections and tests shall be conducted at NayPyiTaw.
GCC 27.1	The liquidated damage shall be: 0.1% of the contract per week
GCC 27.1	The maximum amount of liquidated damages shall be:10% of the Contract Price.
GCC 28.3	The period of validity of the Warranty shall be: 1 year after final acceptance.
GCC 28.5	The period for repair or replacement shall be: 30 days.

Section IX. Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

Table of Forms

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3. Advance Payment Security	14747

Letter of Acceptance

[letterhead paper of the Purchaser]

[date]

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

Subject: **Notification of Award Contract No.**

This is to notify you that your Bid dated *[insert date]* for execution of the
.*[insert name of the contract and identification number, as given in the SCC]*. .
. for the Accepted Contract Amount of*[insert amount in numbers
and words and name of currency]*, as corrected and modified in accordance with the
Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance
with the Conditions of Contract, using for that purpose the of the Performance Security
Form included in Section IX, Contract Forms, of the Bidding Document.

Authorized Signature: _____
Name and Title of Signatory: _____
Name of Agency: _____

Attachment: Contract Agreement

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made

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

BETWEEN

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

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
 - (a) the Letter of Acceptance
 - (b) the Letter of Bid
 - (c) the Addenda Nos. _____ (if any)
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) the Specification (including Schedule of Requirements and Technical Specifications)

- (g) the completed Schedules (including Price Schedules)
 - (h) any other document listed in GCC as forming part of the Contract
3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
 4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*

Performance Security

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

[Guarantor letterhead or SWIFT identifier code]

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

Date: *_ [Insert date of issue]*

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

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

We have been informed that *_ [insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of *_ [insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

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

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

¹ *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, and denominated either in the currency(ies) of the Contract or a freely convertible currency acceptable to the Beneficiary.*

² *Insert the date twenty-eight days after the expected completion date as described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed*

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

[signature(s)]

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

[six months][one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Advance Payment Security

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:*[Insert name and Address of Purchaser]*

Date: *[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

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

We have been informed that *[insert name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the execution of *[insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum *[insert amount in figures]* () *[insert amount in words]* is to be made against an advance payment guarantee.

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

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

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

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

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

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

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[signature(s)]

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

Invitation for Bids

The Republic of the Union of Myanmar
Telecommunications Sector Reform Project (TSRP)
Loan No./Credit No./ Grant No.: **5353-MM**

Contract Title: Radio Planning Tools (Software) and Digital Map (Software)
Reference No. (as per Procurement Plan): G.1.3.7

1. The Republic of the Union of Myanmar has received financing from the International Development Association (IDA) of the World Bank Group toward the cost of the Telecommunications Sector Reform Project (TSRP), and intends to apply part of the proceeds toward payments under the contracts for G.1.3.7..
2. Posts and Telecommunications Department, Ministry of Transport and Communications, Office No. 2, Nay Pyi Taw, Myanmar now invites sealed bids from eligible bidders for the supply of **Radio Planning Tools (Software) and Digital Map (Software)** for **delivery within 45 days after the contract effective date.**
3. Bidding will be conducted through the National Competitive Bidding procedures as specified in the World Bank's *"The World Bank Procurement Regulations for IPF Borrowers"* procurement in IPF, Goods, Works, Non-consulting and Consulting Services, dated on July 2016, revised November 2017 (*"Procurement Regulations"*) and is open to all eligible bidders as defined in the Procurement Guidelines. In addition, please refer to paragraphs 1.6 and 1.7 setting forth the World Bank's policy on conflict of interest.
4. Interested eligible bidders may obtain further information from the address below and inspect the bidding documents during office hours, i.e. 0930 to 1600 hours Myanmar time at the address given below.
5. A complete set of bidding documents in English can be downloaded from MOTC and PTD Website.
6. Bids must be delivered to the address below by 10:30 a.m. local time on 4th June, 2019. Electronic bidding will not be permitted. Late bids will be rejected. Bids will be publicly opened in the presence of the bidders' designated representatives and anyone who choose to attend at the address below at 10:30 a.m. on 4th June, 2019.
7. All bids must be accompanied by a Bid Securing Declaration (in accordance with the format provided in the Bidding Documents).
8. The address(es) referred to above is(are):

Attention: **Director General**

Address: **Posts and Telecommunications Department**

Office Building No. 2

Naypyitaw, Zip Code : 15011

The Republic of the Union of Myanmar

Telephone: +95 67 3407225; +95 67 3407 226

Facsimile number: +95 67 3407216

Electronic mail address: dg.ptd@mptmail.net.mm; and cc: soenine69@gmail.com;
mswe67@gmail.com; htunaung.than@gmail.com

