

**BIDDING DOCUMENT
PROCUREMENT OF GOODS
ONE STAGE ONE ENVELOPES**

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BIDDING DOCUMENT

PROCUREMENT PACKAGE ID NUMBER:

PROCUREMENT PACKAGE NAME: PURCHASING SOLUTION FOR 5G
RADIO SYSTEM AND SERVICE

UNDER PROJECT: PURCHASING 5G RADIO SYSTEM EQUIPMENT FOR
THE VINAPHONE NETWORK IN CENTRAL PROVINCES FOR THE 2025-
2026 PERIOD – AS PART OF THE 5G IMPLEMENTATION PLAN UNDER
RESOLUTION 57-NQ/TW

ISSUED TOGETHER WITH DECISION: *698/QĐ-VNPT Net-KHĐT-KT dated,
May, 18th 2026 of the General Director of VNPT Net Corporation.*

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SUMMARY

PART I - BIDDING PROCEDURES

Chapter I. Instructions to Bidders (ITB)

This Chapter provides information to help Bidders prepare their bids. Information is also provided on the submission, opening, and evaluation of bids and on the award of Contracts. Chapter I contains provisions that are to be used without modification.

Chapter II. Bid Data Sheet (BDS)

This Chapter includes detailed provisions that are specific to each procurement and supplement Chapter I.

Chapter III. Bid Evaluation Criteria

This Chapter specifies the criteria to be used to evaluate bids and bidders' qualification and experience for performing the contract.

Chapter IV. Bid Forms

This Chapter includes the forms to be completed and submitted by bidders as a constituent part of their bids.

PART II - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS

Chapter V. Scope of Supply and Technical requirements

This Chapter includes the List of Goods and Related Services, the Delivery and Completion Schedules, the Technical Specifications and the Drawings that describe the Goods and Related Services to be procured; the Inspection and Tests (if any).

PART III - CONDITIONS OF CONTRACT AND CONTRACT FORM

Chapter VI. General Conditions of Contract (GCC)

This Chapter includes the general clauses to be applied in all contracts of different procurements. This Chapter contains provisions that are to be used without modification.

Chapter VII. Special Conditions of Contract (SCC)

This Chapter includes contract information and clauses specific to each contract. The Special Conditions of Contract modify or supplement but do not replace General Conditions of Contract.

PART IV - CONTRACT FORMS

This Part includes the forms, which, once completed, are constituent parts of the Contract. The forms for Performance Security and Advance Payment Security (if there is a requirement for advance payment) shall only be completed by the successful Bidder prior to the entry into force of the Contract.

ABBREVIATION

ITB	Instructions to Bidders
BDS	Bidding Data Sheet
BD	Bidding Document
EC	Evaluation Criteria
GCC	General Conditions of Contract
SCC	Special Conditions of Contract
Incoterms	A set of rules which define the responsibilities of sellers and Purchasers for the delivery of goods under sales contracts. They are published by the International Chamber of Commerce (ICC) and are widely used in commercial transactions
CIF, CIP, DAP, DDP...	Trade terms are determined based on the delivery conditions of goods corresponding to their definitions in Incoterms
VND	Vietnam Dong
USD	US dollar
VNPT	VNPT Group
VNPT Net	VNPT Net Corporation
PAC	Provisional Acceptance Certificate
FAC	Final Acceptance Certificate
VNEPS	Vietnam National Electronic Procurement System

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PART I - BIDDING PROCEDURES

CHAPTER I. INSTRUCTIONS TO BIDDERS

1. Scope of bid	1.1. The Investor, as specified in BDS, issues this BD to select the Bidder to execute the contract for supply of the Goods under the single-stage one-envelope bidding procedure. 1.2. The Bid/Project name, identification, reference number and number of lots (contracts) (if a contract (package) is subdivided into multiple individual lots) are provided in the BDS.
2. Explanation of terms in bidding	2.1. Deadline for the submission of Bids is the deadline for receiving Bids and is specified in Invitation to Bids posted on the VNEPS (System). 2.2. Day is calendar day, including weekends, public holidays and New Year holidays in accordance with labor laws. 2.3. Time and date on the System is the time and date displayed on the System (GMT+7).
3. Funding sources	Funding sources of the contracts are specified in BDS.
4. Prohibited acts or practices	4.1. Giving, receiving, brokering bribes 4.2. Abusing power to illegally interfere in bidding activities in any form. 4.3. Collusive practice, including the following acts: a) Colluding, coercing one or more parties to prepare or withdraw their bids, thereby causing one of them will win the bid; b) Making an agreement to refuse the supply goods, not to sign a subcontract, or any other coordinated arrangement intended to restrict competition, so that one party will win the bid; c) The Bidder with appropriate qualifications and experience has participated in bids and meets requirements in the BD but deliberately refuses to provide documents proving their capacity and experience at the Investor's request for clarification of the bid or verification of their submitted documents with the aim of facilitating one party's winning of the bid. 4.4. Fraudulent practice, consists of the following acts:

- a) Forging or falsifying information and/or documents used in bidding;
 - b) Deliberately providing information and documents which are not accurate or objective in the Bid with the aim of falsifying the contractor selection result.
- 4.5. Obstructive practice, consists of the following acts:
- a) Destroying, deceiving, altering or concealing of evidence or making false statements; threatening, harassing or intimidating any party to prevent the verification or investigation into a corrupt, fraudulent or collusive practice made with a supervision, inspection or audit authority;
 - b) Obstructing competent individuals, investors, bidders in the course of contractor selection;
 - c) Obstructing competent authorities having supervision, inspection and audit rights in regard to bidding operations;
 - d) Deliberately making false complaints, denunciations or petitions with the aim of impeding bidding process;
 - dd) Violating cybersecurity and safety laws to obstruct and/or interfere in online bidding.
- 4.6. Failure to ensure fairness and transparency, including the following acts:
- a) Participating as a bidder in the bid in which it is the Investor, or taking on duties assumed by the Investor in a manner violating the Law on Bidding;
 - b) Producing and appraising BD in the same procurement;
 - c) Evaluating Bid and appraising contractor selection results in the same procurement;
 - d) Participating directly as a person controlled by the Investor in the bidding/selection process or in the Expert Panel or the Contract Award Review Panel; or as a Director of the Investor to the bids in which his/her family members sign their name to participate; or as the Bidder's legal representative in a bid;
 - dd) The Bidder participates in the procurement of goods for which it provided the consulting service previously: producing, appraising, inspecting estimates, technical design, technical drawing design, front-end engineering design

(FEED); producing, appraising BD; evaluating Bid; inspecting goods; appraising contractor selection results; supervising contract execution;

e) Being named as a bidder to the procurement under the project implemented by the Investor or the Investor that is the entity or organization where the bidder worked within 12 months after leaving it;

g) Setting out specific requirements concerning brand names and origin of the Goods in BD, except for Point e Clause 3 Article 10, Clause 2 Article 44 and Clause 1 Article 56 of the Law on Bidding;

4.7. Disclosure of documents and information related to the process of selecting contractors, except in cases where information is provided in accordance with Point b Clause 8 and Point g Clause 9 Article 77, Clause 11 Article 78, Clause 4 Article 80, Clause 4 Article 81, and Clause 2 Article 82 of the Law on Bidding, including:

a) Content of BD before the official issuance allowed by law;

b) Content of Bid; content of request for Bid clarification of the Investor and response of bidder during Bid evaluation process; report of the Investor, report of Expert Panel, evaluation report, report of consulting contractor, report of relevant specialized authority in selection process; recording of bid consideration meetings, remarks and assessment of each Bid prior to disclosure allowed by law;

c) Selection results prior to disclosure allowed by law;

d) Other documents existing during the bidding/selection process that are marked confidential in accordance with law.

4.8. Assignment of Bid or contract in the following cases:

a) The contractor transfers a volume of tasks of the package worth more than the maximum value of tasks to be subcontracted and those tasks to be undertaken by specialist subcontractor(s) under the signed contract;

b) The successful Bidder assigns part of its work under the Contract to subcontractors mentioned in the contract that extends beyond the scope proposed under Bid without approval of Investor, supervisor, counselor;

c) The Investor or the Supervision Consultant allows the

	Bidder to assign the work under Point a of this Clause; d) The Investor or the Supervision Consultant allows the Bidder to assign the work under Point b of this Clause that exceeds maximum work value for subcontractor under the contract.
5. Eligibility of Bidders	5.1. The Bidders that are organizations meet all requirements below: a) The Bidders must be an organization with independent financial accounting; b) The Bidders shall not be going through the business dissolution or termination process; their business registration certificate or registration certificate for cooperative, joint cooperative, cooperative group shall not be revoked; they shall not become insolvent in accordance with bankruptcy laws; c) Competition in the bidding process as stated in BDS shall be ensured; d) The Bidders shall not be under debarment from participation in procurement activities under Law on Bidding; dd) The Bidders shall not be criminally prosecuted; e) Having its name listed on the National Electronic Procurement System before the approval of the contractor selection result. 5.2. The Bidders that are household businesses meet all requirements below: a) The Bidders shall obtain business household registration certificate as per the law; b) The Bidders shall not be going through the business dissolution or termination process or shall not have their business household registration certificate revoked; owners of household businesses shall not be criminally prosecuted; c) The Bidders shall meet requirements under Points c, d, and e Section 5.1 of the ITB. 5.3. Contractors are individuals or groups of individuals who bid for their innovative products that meet the provisions of clause 4, Article 6 of Decree No. 214/2025/ND-CP dated

	August 04, 2025 of the Government detailing a number of articles and measures to implement the Bidding Law on selecting contractors can participate in bidding when fully meeting the following conditions: a) Have full civil act capacity according to the laws of the country of which the individual is a citizen; b) Meet the conditions specified in points c, d and dd Section 5.1 ITB. 5.4. For bidding packages with a bidding price less than 500 million VND in the procurement estimate, the application of purchasing goods from contractors with 50% or more of employees who are disabled, war invalids, and ethnic minorities have labor contracts with a contract implementation period of 03 months or more and at the bid closing time, the contract is still valid and can participate in bidding as prescribed in Clause 1, Article 8 of Decree No. 214/2025/ND-CP, implemented according to BDS.
6. Contents of Bidding Documents	6.1. The Bidding Documents consist of Parts 1, 2, 3 and 4 in conjunction with any Addendum issued in accordance with ITB-Section 7 (if any), which include all the Chapters indicated below: Part I. Bidding Procedures: - Chapter I. Instructions to Bidders (ITB); - Chapter II. Bid Data Sheet (BDS); - Chapter III. Bid Evaluation Criteria; - Chapter IV. Bidding Forms. Part II. Scope of Supply and Technical requirements: - Chapter V. Scope of Supply and Technical requirements. Part III. Conditions of the Contract and Contract Forms: - Chapter VI. General Conditions of Contract (GCC); - Chapter VII. Special Conditions of Contract (SCC); Part IV. Contract Forms. 6.2. The Investor is not responsible for the accuracy and completeness of BD and its addenda as provided in ITB-Section 7, if they were not furnished by the Investor on the System. Based on BD released by the Investor on the System, considerations and evaluations are to be conducted.

	6.3. Bidder is expected to examine all information in the BD, including Clarification and Amendment of BD, the Minutes of the pre-Bid meeting (if any) to prepare the Bids follow the BD's requirement accordingly.
7. Modification or amendment and clarification of Bidding Documents	7.1. Where the modification or amendment of BD is needed, the Investor shall publish the Modification or Amendment Decision, enclosing addenda and adapted BD (including attached and files). Modification of the BD shall be implemented at least 10 days prior to bid submission; in respect of contract whose value does not exceed 10 billion VND, modification of the BD shall be implemented at least 03 working days prior to bid submission and allow the Bidder to finalize the Bid; if there is not enough time for the Bidder to finalize Bid, bid submission deadline shall be extended. 7.2. A Bidder requiring any clarification of BD shall send any request for such clarification to the Investor through the System within the minimum period of 03 working days ahead of the deadline for submission of bids in order for it to be considered and handled. The Investor will receive its enquiries and respond to any request for clarification from the Bidder acquiring bidding documents, and proceed to take required clarification action on the System within 02 working days prior to the deadline for submission of bids. Such response shall include a description of the inquiry but without identifying the requesting Bidder's name. Should the Investor deem it necessary to modify or amend BD as a result of a request for clarification, it shall do so following the procedure under Section 7.1 - ITB. 7.3. The Investor shall, on its own responsibility, keep track of feedback, enquiries or questions raised on the System to promptly clarify BD in response to any request from Bidders. 7.4. The prospective Bidder shall be responsible for keeping itself updated with any addendum to BD or change in the bid closing date and time (if any) on the System to help in preparing its Bid. Where error occurs as a result of failure to monitor and update information on the System thereby causing disadvantages to the Bidder during bid participation including: modification or amendment to BD, bid closing date, contract negotiation, and other details, the Bidder is responsible and subject to the disadvantages in bid participation. 7.5. In case of necessity, the Investor shall organize a pre-tender conference to clarify contents in the BD that are

	unclear to the bidders according to the provisions of the BDS. The Investor shall publish a notice of organization of a pre-tender conference on the System; All interested bidders may attend the pre-tender conference without prior notice to the Investor. The content exchanged between the Investor, the Investor and the Bidders must be recorded in minutes and documented as a clarification of the BD, which shall be published on the System within a maximum of 02 working days from the date of the conclusion of the pre-tender conference. 7.6. In case the BD needs to be amended after holding a pre-tender conference, the Investor shall amend the BD as prescribed in Section 7.1 ITB. Minutes of the pre-tender conference shall not be considered an amendment to the BD. 7.7. The fact that the bidder does not attend the pre-tender conference or does not have a confirmation of having attended the pre-tender conference is not a reason for disqualifying the bidder's BD.
8. Cost of Bidding	The Bidder shall bear all costs associated with the preparation and submission of its bid. Fees for submitting Bidding as prescribed in BDS. The Investor shall not be responsible or liable for any cost related to the Bidder's participation in the bidding process.
9. Language of Bid	Bid as well as all documents relating to the bid exchanged between the Bidder and the Investor shall be written in English. Supporting documents in the bid may be in another language and enclosed with the translation into English or Vietnamese. In case of lack of translation, the Investor may request the Bidder to supplement such translation if necessary.
10. Constituent elements of the Bid	The Bid shall include: 10.1. Letter of Bid Submission in accordance with ITB Section 11; 10.2. Joint venture agreement (for any Bidder in a joint venture) using Form No. 03 Chapter IV. Bidding Forms; 10.3. Bid Security, in accordance with ITB Section 18; 10.4. Documentary evidence of bidder eligibility in accordance with ITB Section 16; 10.5. The technical proposal and the documents as required in accordance with ITB Section 15;

	10.6. The Financial Proposal and Tables/schedules are fully completed in accordance with the provisions of ITB Sections 11 and 13. 10.7. The proposed alternative technical solution in the BID as required in accordance with ITB Section 12 (if any); 10.8. Any other document specified in the BDS
11. Letter of Bid and Tables	The Bidder shall submit the Letter of Bid and all the relevant schedules using the forms furnished in Chapter IV. Bidding Forms.
12. Proposal of Alternative Technical Solution	12.1. Only if the BDS of the Bidding Documents explicitly allows the bidder to propose an alternative technical solution, the alternative proposal is considered. 12.2. The Alternative Technical Solution shall only be considered when the main solution is evaluated as responsive to the requirements and the Bidder is ranked the first. In this case, the Bidder must provide all necessary information so that the Investor can evaluate the alternative technical solution, including: explanations, drawings, technical specifications, delivery schedule, costs and other relevant information. The evaluation of the alternative technical solution in the Bidding shall be conducted in accordance with the provisions of Section 5 Chapter III.
13. Bid Price and Discount	13.1. The bid price stated in the Letter of Bid and price lists together with discounts must meet the provisions of this Section: a) Bid price means the price to be quoted in the Letter of Bid, inclusive of all costs for executing the procurement package (excluding any discounts offered), in accordance with PART II - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS. b) The Bidder shall submit the Bid for the whole work specified in BD and state the bid unit price and amount of all items listed in the columns "List of Goods" and "Description of services", using the forms prescribed in Chapter IV. Bidding forms. Where an item is not priced (leave blank or insert "0") in the columns "Unit Price" and "Total Price", its price shall be

deemed to have been allocated to other goods or services of the procurement, the Supplier is obligated to provide such item as required by the BD without any payment by the Purchaser in the course of contract performing. In each Price Schedule, the bidder shall quote as specified in the **BDS**.

c) If the Bidder detects any inaccuracy in quantity of the items mentioned in columns “List of Goods” and “Description of Services” in comparison with the design or requirements prescribed in Section 1 of PART II, CHAPTER V – SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS, the Bidder may notify the PE and make a separate Price Schedule for the quantity deviation for the PE to consider. The Bidder may not include the price of such quantity deviation in the Bid Price.

13.2. In case of discount, the discount(s) offered by the Bidder shall be proposed either directly in the Letter of Bid or in a separate Letter of Discount. The Bidder shall specify the discounting method and discounted items mentioned in Columns “List of Goods” and “Description of Services”. If discounting method is not specified, it shall be understood that all items mentioned in the columns “List of Goods” and “Description of Services” receive equal discounts. The Letter of Discount may be submitted separately or together with the Bid as long as it is received by the PE before the bid closing time. Any Letter of Discount separately submitted shall be preserved as part of the Bid and opened together with the Bid.

13.3. The Bidder shall bear responsibility for the Bid Price for execution and completion of the Works required in BD. Where the Bidder submits an abnormally low bid, affecting the quality of the contract for supply of goods, the Investor may require the Bidder to justify the feasibility of such abnormally low bid in accordance with Clause 11 Article 140 of Decree No. 214/2025/ND-CP.

13.4. The Bid Price quoted by the Bidder shall include all taxes, fees and charges (if any) determined at 28 days prior to the bid closing time. In case the Bid Price is not inclusive of taxes, fees and charges (if any), the Bidding document of the Bidder shall be rejected.

	13.5. Any other document specified in the BDS .
14. Bid currency and payment currency	The Bid currency and payment currency shall be: Vietnamese Dong (VND) and/or United State Dollar (USD). Other currency will not be accepted. All of equipment and related services supplied from inside Vietnam territory must be quoted by Vietnamese Dong (VND). For evaluation and comparison purposes, the currency(ies) of Bid used to convert all various currencies into a single currency (equivalent currency), which is VND at Vietcombank's selling exchange rate on the day which is 07 days prior to the bid closing date.
15. Documents Establishing the Conformity of the Goods and Related Services	15.1. To establish the eligibility or conformity of the goods and related services to BD requirements, the Bidder shall furnish as part of its Bid the documentary evidence that the goods it supplies conform to the technical specifications and requirements specified in Chapter V - Scope of Supply and Technical requirements. 15.2. The term "goods" is understood to include machinery, equipment, raw materials, fuel, materials, supplies, and spare parts; product; vehicle; consumer goods; chemicals, testing supplies, medical equipment; commercial software.. 15.3. The term "origin" is understood as the country or territory where the goods are exploited, raised, grown, produced, manufactured or processed in that country or territory, through manufacturing, processing or assembly to form a commercially recognized product and have significant differences in essential characteristics compared to the original constituent elements. 15.4. The term "related services" includes services such as insurance, installation, maintenance, initial repair, or provision of other after-sales services such as training, technology transfer, etc... 15.5. The Bidder must declare the origin of the goods in Form No. 11 - Chapter IV. In case the Bidder offers multiple origins for a unit of goods (one piece, ...) but the same manufacturer and has the same unit price, the Investor requests the

contractor to clarify to specifically determine the origin of these goods.

15.6. The requirements for the origin of goods shall comply with Form No. 11 of Chapter IV. In case the Investor requests requests the origin based on a group of countries or territories as stipulated in Clause 2, Article 44 of the Bidding Law, the bidder must offer goods in accordance with the requirements on origin or Vietnamese origin, even if Vietnam is not included in the specified group of countries or territories. Any bidder offering goods that do not comply with the origin requirements stated in the Bidding Documents or that are not of Vietnamese origin shall be disqualified.

In case the investor requires the bidder to offer goods of Vietnamese origin as stipulated in Point e, Clause 3, Article 10 of the Bidding Law, any bidder offering goods that are not of Vietnamese origin shall be disqualified.

15.7. The bidder must declare the manufacturer of the goods in Form No. 11, Chapter IV. If the bidder offers multiple manufacturers for more than one unit of the goods (e.g., two items, two pieces), the Investor shall request the bidder to clarify the corresponding quantity for each manufacturer. In case the bidder offers multiple manufacturers for a single unit of the goods (e.g., one item, one piece), the bidder's Bidding document shall not be considered or evaluated.

15.8. The bidder must specifically propose the model code (if applicable), brand, origin, and manufacturer. In case the bidder fails to provide specific details on the model code (if applicable), brand, origin, and manufacturer, the bidder's Bidding document shall not be considered or evaluated (the bidder is not allowed to refer to other contents in the Bidding document but must specify these details in Form No. 11, Chapter IV). In case there is a difference between the information declared in Form No. 11, Chapter IV, and the attached documents, the information in Form No. 11, Chapter IV shall be used as the basis for consideration and evaluation, except when the model code (if applicable), brand, or manufacturer stated in Form No. 11, Chapter IV does not exist in the market.

	15.9. The documentary evidence may be in the form of documents, papers, drawings or data, and shall consist of a detailed, item-by-item description of the basic technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the requirements set forth in the BD and a statement of deviations and exceptions (if any) as compared against the provisions of Chapter V - Scope of Supply and Technical requirements. 15.10. The bidder must provide a complete list of materials, prices, and suppliers of spare parts, specialized tools, and consumables (hereinafter referred to as "materials and spare parts") necessary to ensure the proper and continuous operation of the goods within the period specified in the BDS. 15.11. Standards for manufacture, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Investor in Chapter V - Scope of Supply and Technical requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, catalogue numbers, provided that it demonstrates, to the Investor's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in Chapter V - Scope of Supply and Technical requirements.
16. Documents Establishing the Qualifications and Experience of the Bidder	16.1. The Bidder shall fill all the required information in the forms mentioned in Chapter IV - Bidding forms to establish the Bidder's qualifications and experience to perform the contract in accordance with Chapter III. Bid Evaluation Criteria. The Bidder shall prepare original documents for verification as the request of the PE. 16.2. Documentary evidence of the Bidder's capability to perform the contract, if awarded, shall comply with the BDS 16.3. Where pre-qualification has taken place, upon submission of bid, the bidder shall have to update its qualifications and experience if these have changed as compared to the information declared in its submitted pre-qualification documents; if there is no change in qualifications and experience, the bidder shall undertake in writing about its

	responsiveness to requirements for performing the procurement package.
17. Effective period of Bids	17.1. The effective period of Bidder's Bidding document shall not be shorter than the period specified in the BDS. 17.2. In case of necessity, before the expiry of the validity period of the Bidder's Bidding document, the Investor may request bidders to extend the validity of the Bidding document, and at the same time request the bidder to correspondingly extend the validity period of the bid security (equal to the validity period of the Bid after extension plus 30 days). If a Bidder rejects such request, its Bidding document shall not be further considered and its Bid Security shall be returned. A Bidder accepting the request shall not change any other content of its Bidding document. The request for extension and responses thereto shall be made in writing.
18. Bid Security	18.1. When taking part in a bidding process, the Bidder shall furnish a Bid Security before the bid closing time either in the form of a Bank Guarantee issued by a bank or credit institution lawfully operating in Vietnam or by depositing a cheque as prescribed in ITB Section 18.2. Where a Bank Guarantee is used, it shall comply with Form No. 04(a) or Form No. 04 (b) of Chapter IV. Bid forms or follow other forms provided that it contains all the essential contents of a bid security. In the event that the effective period of the Bidding document is extended as prescribed in ITB Section 17.2, the Bid Security shall be also extended accordingly. If a joint venture makes a bid, it may provide the Bid Security following either of the two methods below: a) Each and every member of the joint venture shall provide its individual Bid Security provided that total value of Bid Security of all members is not lower than that mentioned in ITB Section 18.2; if the bid security of one member is determined as invalid, the Bid of the joint venture shall be further considered and evaluated. If any member of the joint venture violates the law, causing its bid security to be seized as prescribed in ITB Section 18.5, then the bid security of all members in joint venture shall be seized as a result.

b) If joint-venture members agree to let one member be responsible for the Bid Security of all members in joint venture, the Bid Security may then be in the name of the joint venture or the member in charge, provided that the total value is not lower than that mentioned in ITB Section 18.2. If any member in joint venture violates law, causing its bid security to be seized as prescribed in ITB Section 18.5, then the bid security for the whole joint venture shall be seized as a result.

18.2. Value, currency and effective period of the Bid Security shall be specified in the **BDS**. For centralized procurement of goods where bidder selection is based on supply capacity, the bid security amount shall correspond to the bid price stated in the Bid Submission Form after any discount (if applicable), with the bid security percentage specified in the **BDS**. The validity period of the bid security shall be calculated from the bid closing date until the last valid day of the bid security (The bid security shall remain valid until the last valid day without necessarily extending until the end of 24 hours of that day).

18.3. A Bid Security shall be considered invalid in any of the following cases: having a lower value or shorter effective period as required in ITB Section 18.2, incorrect beneficiary name, does not have a valid signature (digital signature for electronic bid security), signed before the Investor issues the Bidding proposal, includes conditions that are disadvantageous to the Investor (including failure to fully meet the commitments specified in Form No. 04A and Form No. 04B of Chapter IV).

If a bid security is provided in the form of a letter of guarantee or a guarantee insurance certificate, such a document must be signed and (if applicable) stamped by a legally authorized representative of a domestic credit institution, a branch of a foreign bank established under Vietnamese law, a domestic non-life insurance enterprise, or a branch of a foreign non-life insurance enterprise established under Vietnamese law.

18.4. Unsuccessful bidders shall have their bid security either returned or released within the time period as prescribed in the **BDS**. For the selected bidder, the Bid Security shall be returned or released upon the contract becoming effective.

	18.5. The contractor violates the bidding laws, resulting in the bid guarantee not being refunded in the following cases: After the bid closing time and during the validity period of the BID, the contractor submits a written withdrawal of the BID or refuses to perform one or more of the tasks proposed in the BID according to the requirements of the BD; The contractor violates the provisions of Article 16 of the Bidding Law or violates the bidding laws, leading to the cancellation of the bid. The contractor fails to implement the contract performance guarantee as stipulated in Article 68 of the Bidding Law; The contractor does not proceed or refuses to negotiate the contract (if any) within 10 days from the date of receiving the contract negotiation invitation, or has negotiated the contract but refuses to sign the contract negotiation minutes, except in cases of force majeure; The contractor does not proceed or refuses to complete the contract within 20 days from the date of receiving the Notification of bid acceptance and contract award from the Investor, except as stipulated in Clause 4, Article 34 of Decree No. 214/2025/ND-CP or force majeure; The contractor does not proceed or refuses to sign the contract within 20 days from the date of completing the contract, except in cases of force majeure.
18a. Format and signatures of Bids	18a.1. Bids to be prepared shall consist of: one original Bid as required in ITB 10 and the quantity of copies as stipulated in BDS. The envelope's cover page must clearly show "ORIGINAL OF BID PROPOSALS", "COPY OF BID PROPOSALS". On the circumstance of Bids modification or substitution, Bidder shall thereby prepare one original and the quantity of copies documentations as defined in BDS. The envelope's cover page must clearly show "ORIGINAL MODIFICATION OF BID PROPOSALS", "COPY MODIFICATION OF BID PROPOSALS", "ORIGINAL SUBSTITUTION OF BID PROPOSALS", "COPY SUBSTITUTION OF BID PROPOSALS".

	Should alternative technical proposals are to be provided in Bids as regulated in ITB 12, Bidders are required to prepare one original and the quantity of copies stipulated in BDS. The envelope's cover page must clearly show "ORIGINAL ALTERNATIVE TECHNICAL PROPOSALS", "COPY ALTERNATIVE TECHNICAL PROPOSALS". 18a.2. Bidders are wholly responsible for the consistency of the original and the copy. Should there be any discrepancy between the original and the copy, if such discrepancy does not affect the ranking order of Bidders, the original shall be the basis for evaluation. Should there be any discrepancy between the original and the copy, if such discrepancy leading to the evaluation result on the original being different from the copies, and/or affects the ranking order of Bidders, Bidder's Bid with discrepancy shall be eliminated. 18a.3. The original Bids should be typed or written by fade resistant ink, paginated in consecutive order. Application Letter, Letter of discount (if any), addendum, clarification of Bids, Price quotation and other forms in Chapter IV – Bidding Forms must be signed and stamped (if available) by the Bidder's legal representative. In the event of authorization, a power of attorney in accordance to Form 02 Chapter IV – Bidding Forms or Company Charter, certified Decision branch establishment or documentation demonstrating the competence of authorized person must also be submitted along with Bid. 18a.4. In case of Co-bidding, Bids should have the signatures of all Alliance members' legal representative or the representative of Alliance in accordance with Alliance agreement. To ensure the legal bind among all members, Alliance agreement must hereby have the signatures of all members' legal representative. 18a.5. Words that are added, inserted between lines, erased or overwritten shall be valid if and only if there is signature of Application Letter's signee on such page or on side of such words.
19. Bid closing time	19.1. The bid closing time is the time specified in Invitation to Bid.

	19.2. The investor can extend the bid closing time by amending the Bidding Document. When extending the bid closing time, all responsibilities of the investor and the Bidder based on the previous bid closing time will be adjusted according to the new extended bid closing time.
20. Submit, withdraw and amend Bidding Document	20.1. Submission of Bid: A bidder only submit one set of Bidding proposal for an Invitation to Bid when participating in bidding. In the case of a joint venture, the leading member of the joint venture (according to the joint venture agreement) shall submit the Bidding proposal after obtaining the approval from all members of the joint venture. 20.2. Modification and Resubmission of Bid: If a bidder needs to modify a submitted Bidding Proposal, they must firstly withdraw the entire previously submitted Bid for appropriate modification. Once the modifications are completed, the bidder shall submit a new Bid. In case the bidder has submitted a Bid before the Investor makes amendments to the Bidding Documents (if any), the bidder must resubmit a new Bid to comply with the amended Bidding Document. If the bidder fails to resubmit the Bid, the previously submitted Bid (before the amendment of the Bidding Document) will not be opened, reviewed, or evaluated. 20.3. Withdrawal of Bid: A bidder is permitted to withdraw the Bid before the bid closing time. In case the Bid is withdrawn after the bid closing time and during the validity period of the Bidding Proposal, the bidder will not be returned the bid security, will be considered as not ensuring credibility when participating in the bidding, and the Bidding proposal will not be evaluated further. The system will notify the bidder the withdrawal status (successful or unsuccessful) and record the timestamp of the withdrawal. 20.4. Resubmission and Modification of Bid: A bidder may only withdraw, modify, or resubmit the Bid prior to the bid closing time. After the bid closing time, all Bidding Proposals successfully submitted on the system (except for those submitted by a bidder before the amendment of the Bidding Document, where the bidder did not resubmit a new Bid in

	accordance with the amended Bidding Document) will be opened for evaluation.
21. Bid opening	21.1. The Investor must open the bids within no more than 2 hours from the bid closing time. In case only one bidder submits the Bid, the Investor shall consider and handle the situation as prescribed in Clause 5, Article 140 of Decree No. 214/2025/ND-CP; in case no bidder submits the Bid, the Investor shall considers of either extending the bid closing time or reinitiating the bidder selection process (cancel this Invitation to Bid and issue a new one) in accordance with Clause 4, Article 140 of Decree No. 214/2025/ND-CP. 21.2. The bid opening minutes shall be publicly posted on the System within 24 hours from the bid opening time, including the following main contents: a) Information about the bidding package: • Invitation to Bid number; • Name of the bidding package; • Name of the Investor; • Method of bidder selection; • Type of contract; • Bid opening completion time; • Total number of participating bidders. b) Information about the participating bidders: • Bidder's name; • Bid price; • Discount percentage (%) (if any); • Bid price after discount (if any); • Value and validity of the bid security; • Validity period of the Bid Proposals; • Execution period for the bidding package; • Other relevant information (if any).

	c) In case the bidding package is divided into several independent parts, information about the bid price for each part must be included as mentioned in Point b of this Clause.
22. Confidentiality	22.1 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 such process until publication of the Contract Award. Under no circumstances, may information contained in a bid be revealed to (an)other bidder(s), except for information disclosed in the minutes of bid opening. 22.2. Except for cases of bid clarification prescribed and the negotiation of contract, the Bidder is not permitted to contact to the Investor on any matter related to its bid and the procurement from the time of bid opening until the publication of bidder selection.
23. Clarification of Bids	23.1. After completing the bid opening process, Bidders shall provide Bid clarifications to conform to the Investor's request, including their eligibility, conformity and qualifications, tax or duty payment and declaration obligations, specific documents on personnel proposed in Bid of the Bidders. Clarification of eligibility must not result in any substantial change in the eligibility of participating Bidders. Clarification of eligibility of Bid (other than eligibility), technical, financial proposal must not result in any substantial change in basic details of submitted Bid or any substantial change in bid price. 23.2. During the evaluation process, Bid clarifications involving Bidders and the Investor shall take place directly by writing documents. 23.3. Bid clarifications shall be attended by the Investor and the Bidders whose Bids need to be clarified only. In either cases where the Bidder fails to provide any clarification directly affecting the evaluation of eligibility, qualifications and technical or financial requirements, or provides such clarification without conforming to the Investor's request for clarification, the Investor shall conduct the evaluation of that Bidder's Bid that has been submitted prior to the deadline for submission of bids. The Procuring Entity must give the

	Bidders a reasonable amount of time, but not less than 03 working days, for the Bidders to clarify the Bids. 23.4. A Bidder shall not, at its discretion, provide clarification of its Bid after the bid submission deadline. 23.5. In the event of any discrepancy or inconsistency or unclear points in the content of a Bidder's Bid, the Investor shall request the Bidder to provide clarifications in compliance with the regulations laid down in ITB Section 23.1. 23.6. In the event of any suspicion regarding legitimacy of documents provided by the Bidder, the Investor may verify with organizations and individuals relevant to the contents of the documents. 23.7. Where the BD requires commitment, contracts for rules for warranty, maintenance, preservation which are not attached to the Bid, the Investor shall request the Bidder to clarify the Bidder's Bids and provide additional documents within at least 3 working days in order to evaluate the Bids.
24. Deviations, Reservations, and Omissions	24.1. "Deviation" means a departure from the requirements specified in the Bidding Documents; 24.2. "Reservation" means the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; 24.3. "Omissions" means the failure to submit part or all of the information or documentation required in the Bidding Documents.
25. Determine the responsiveness of the Bid	25.1. The Investor shall determine the responsiveness of the Bid based on its contents as stipulated in Section 10 of the ITB. 25.2. A basically responsive Bid is one that meets the requirements stated in the Bidding Document without any deviations, Reservations, or omissions of essential content. Deviations, conditions, or omissions of essential content refer to aspects in the Bidding Document that: a) If accepted, would significantly affect the scope, quality, or functionality of the goods or related services; or would impose substantial limitations, inconsistent with the Bidding

	Document, on the rights of the Investor or the obligations of the Bidder under the contract. b) If rectified, would unfairly affect the competitive position of other bidders whose Bids are deemed basically responsive to the Bidding Document requirements. 25.3. The Investor must examine the technical aspects of the Bid as stipulated in Sections 15 and 16 of the ITB to ensure that all requirements specified in the Bidding Document have been met and that the Bid contains no deviations, Reservations, or omissions of essential content. 25.4. If a Bid does not basically meet the requirements stated in the Bidding Document, it shall be rejected. Modifications to deviations, Reservations, or omissions of essential content in the Bid to make it compliant with the Bidding Document shall not be permitted.
26. Nonmaterial nonconformities	26.1. Provided that a bid is substantially responsive, the PE may accept nonconformities in the bid that do not constitute a material deviation, reservation or omission. 26.2. Provided that a bid is substantially responsive, the PE may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation requirements. Requesting information and documentation on such nonconformities shall not be related to any aspect of the bid price. Failure of the Bidder to comply with the request may result in the rejection of its bid. 26.3. Provided that a bid is substantially responsive, the PE shall make adjustment for nonmaterial, quantifiable 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 nonconforming item or component.
27. Subcontractors	27.1. "Subcontractor" means a bidder subcontracted to a prime contractor to render related services. 27.2. In cases where service requirements are specified in Form No. 11(b), Chapter IV, the Investor may allow the contractor to use subcontractors. The declaration of subcontractor usage shall be carried out in accordance with

	Form No. 09A, Chapter IV. Maximum rate of Subcontractor's participation is stipulated in BDS. 27.3. Subcontracting shall not cause any change in a prime contractor's liabilities. The prime contractor must assume liability for the quantity, quality, progress and others for any part of the works that its subcontractors execute. The subcontractor's qualifications shall not be taken into consideration during the evaluation of the prime contractor's Bid. The prime contractor itself shall meet qualifications and capacity criteria (without regard to qualifications of subcontractors). 27.4. Contractors may sign contracts with Sub-contractor in the list of sub-contractors stated in its Bids or with Sub-contractor which Investor approved. 27.5. Contractors who commit acts of bid transferring according to the provisions of Clause 8, Article 16 of the Procurement Law will be handled according to the provisions of according to the provisions of Point b, Clause 1, Article 133 of Decree No. 214/2025/ND-CP. 27.6. The contractor is not allowed to use subcontractors who participate in providing consulting services for the awarded package, and these consulting services include: appraisal of prices; contract supervision; inspection; preparation and appraisal of BD; evaluation of Bid; appraisal of pre-qualification results and contractor selection results; project management consulting; contract management; and other consulting services where these consulting tasks are directly related to the package.
28. Preference in bidder Selection	28.1. Principles of Preference: a) If a bidder is eligible for more than one type of preference in the evaluation of capacity and experience or financial evaluation, only the most beneficial preference shall be applied for the bidder in each respective evaluation category. b) If all bidders receive the same preference or if none of the bidders qualify for any preference, the preference calculation is not required for comparison and ranking. c) The bidder must provide evidence that the bidder, the goods, or the services offered are eligible for preference as stipulated in Clause 1, Article 10 of the Law on Bidding.

d) A bidder is eligible for preference when supplying goods in which the domestic production cost accounts for at least 30% of the total cost.

28.2. For goods specified at Point i, Clause 1, Article 10 of the Law on Bidding, the determination of preferential goods shall be carried out in accordance with the provisions of the sectoral and industry management laws, and not based on the provisions of Section 28.3 ITB;

28.3. The Bid evaluation shall allow for preference for the purposes of comparing and ranking Bids:

The Goods shall be preferred only if the Bidder bidding for supply of such Goods establishes that their domestic production costs account for 30% or more. Percentage of domestic production costs of goods produced in Vietnam can be determined using formulas below:

Direct formula: $D (\%) = G^*/G \times 100\%$

Indirect formula: $D (\%) = (G - C)/G \times 100\%$

Where:

G*: Means domestic production costs

G: Means offer price of the goods stated in the Bid, less tax amounts levied; in case of contractor that is manufacturer, G means ex work costs (EXW) of goods

C: Means import costs, excluding duties and fees relating to import

D: Means percentage (%) of domestic production costs of the goods. Where $D \geq 30\%$, such goods are preferred in accordance with Articles 6, 7, 8, 9, 10 and 11 of Decree No. 214/2025/ND-CP.

28.4. Preference calculation method shall be prescribed in **BDS**.

28.5. Bidders are required to provide information about types of goods entitled to preferential treatment by completing Forms No. 15 - Chapter IV as a basis for consideration and evaluation of preference. If the Bidder fails to do so, its goods shall be deemed ineligible for preferential treatment.

28.6. If all the goods that a Bidder bids to supply are not eligible for preferential treatment, the preferential value intended for such goods shall not be evaluated and determined.

28.7. The bidder must attach supporting documents to prove

	that the goods offered are eligible for preference.
29. Bid evaluation	29.1. The expert team shall apply the evaluation method specified in the BDS to evaluate the Bids. 29.2. Process of evaluation is as follows: a) Step 1: Evaluation of Eligibility as stipulated in Section 1, Chapter III. b) Step 2: Evaluation of Capacity and Experience as stipulated in Section 2, Chapter III c) Step 3: Technical Evaluation + Technical evaluation shall be conducted according to evaluation criteria specified in Section 3 of Chapter III. Bid Evaluation Criteria; + Only technically responsive bidders shall have their financial proposals considered and evaluated in accordance with Sections 4 and 5 of Chapter III. Bid Evaluation Criteria. d) Step 4: Financial Evaluation as stipulated in Section 4, Chapter III. dd) Step 5: Bidder Ranking After the financial evaluation, bidder ranking shall be conducted according to the regulations in the BDS. If only one bidder passes the financial evaluation, ranking is not required. e) The first-ranked bidder is invited for contract negotiation (if necessary). If the first-ranked bidder refuses for contract negotiation according to the time as requested in the Invitation for negotiation letter sent by the Investor, then the next-ranked bidder will be invited for contract negotiation without re-ranking the bidders.
30. Contract negotiation	30.1. The Investor shall be invited bidder who ranks first place for contract negotiation if necessary. The contract negotiation shall base on the followings: a) Bid Evaluation report; b) The bid and bid clarification documents by the bidder (if any); c) BD. 30.2. Principles for contract negotiation:

	a) The contents of bid that are conformable with Bidding Documents shall not be negotiated; b) The contract negotiation shall not change the unit price determined at the financial evaluation step. 30.3. Contents for contract negotiation: a) Contents that are not detailed enough, unclear or inconsistent between the Bids and the Bidding Documents, or between different contents in the Bidding Documents, may lead to incidents, disputes or negative impacts. affects the responsibilities of the parties during contract implementation; b) The contractor's proposed changes or alternative technical plans if the BD has provisions allowing the contractor to offer alternative technical plans according to ITB Section 12.1; c) Negotiation about key personnel: During the negotiation process, the contractor is not allowed to change key personnel (personnel proposed in the Bid or personnel who have been replaced once as prescribed in Clause 4, Article 45 of Decree No. 214/2025 /ND-CP), except Bidding evaluation time is longer than expected in the contractor selection plan or due to force majeure reasons, key personnel positions are proposed by the bidder can not participate in contract performance. In that case, the contractor has the right to change other personnel but must ensure that the proposed replacement personnel has qualifications, experience, and capacity equivalent to or higher than the proposed personnel and the bidder is not allowed to change bid price; d) Negotiate issues that arise during the contractor selection process (if any) to complete the detailed contents of the bidding package; dd) Negotiate non-serious errors specified in ITB Section 26; e) Negotiate other necessary contents. 30.4. During the contract negotiation process, the negotiating parties complete the draft contract document; SCC, contract annexes including a detailed list of scope of supply, price list, and supply schedule.
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	30.5. In case the negotiation is not successful, the Investor shall consider and decide to invite the next ranked bidder to negotiate; In case negotiations with the next ranked bidders are unsuccessful, the Investor considers and decides to cancel the bid according to the provisions of ITB Section 32.
31. Conditions for Bid Award	A bidder will be considered for contract award if it meets all the following conditions: 31.1. The Bid is valid as stipulated in Section 1, Chapter III. If, at the time of bid approval, the bidder is temporarily suspended or has been removed from the system, the Investor must request the bidder to restore its participation status to be eligible for bid approval. 31.2. The bidder possesses the required capacity and experience as stipulated in Section 2, Chapter III. 31.3. The technical proposal meets the requirements as stipulated in Section 3, Chapter III. 31.4. The bidder meets the conditions specified in the BDS. 31.5. The proposed contract award price (including taxes, fees, and charges, if applicable) does not exceed the approved package price. If the bidding package estimate is lower or higher than the approved package price, the bidding package estimate will replace the package price as the basis for bid approval.
32. Bidding cancellation	32.1. Bidding process shall be cancelled when: a) All of the submitted Bids fail to meet the BD requirements; b) Changes in the objectives or investment scope in the approved investment decision for a project, or changes in the objectives or scope of procurement for a procurement estimate, due to the reorganization of administrative units, restructuring of state agencies, or other force majeure events that alter the workload or evaluation criteria stated in the Bidding Documents; c) The BD fails to comply with the regulations laid down in Law on Bidding or other relevant law to the extent that the winning Bidder fails to meet the requirements for execution of the Contract;

	d) The winning Bidder commits prohibited acts under Article 16 of the Law on Bidding; dd) Cancellation of the bidding shall be carried out in accordance with Clause 5, Article 42 of the Law on Bidding. 32.2. Any entity or person that commits violation against law on bidding as prescribed in Points c, d of Section 32.1 – ITB shall be liable for indemnities paid to related parties and shall be sanctioned under law. 32.3. Where the cancellation of procurement procedures stated under this Section occurs, within 5 working days, the Investor shall return or release the Bid Security to the Bidder who has submitted the original copy of that Bid Security, except if the Bidder violates Clause 9, Article 14 of the Law on Bidding.
33. Notification of Bidder selection result	33.1. The Investor shall publish the Notification of Bidder selection result on the Vietnam National Electrical Procurement System, enclosing the Bid Evaluation Report, within 5 working days after approving recommendations for contract award. Content of the Notification of Bidder selection result shall consist of the following: a) Bidding package information: - Invitation to bid number; - Package name; - Bidding package Price or approved estimate of costs (if any); - Investor's name; - Contractor selection method; - Contract type; - Implementation duration of the contract package; b) Winning or successful Bidder's information: - Tax code - Bidder's name; - Bid price; - Discounted bid prices (if any); - Technical-part evaluation point (if any); - Evaluated prices (if any); - Bid price at which each Bidder is awarded the Contract; - Implementation duration of the contract package; - Contract execution duration.

	c) For each type of the goods or equipment to be supplied in the procurement, the Investor shall publish the following information: - Name of the goods; - Supply capacity; - Characteristics, technical specifications; codes, labels, markings; - Origin; - Bid price at which the Contract is awarded. d) List of Bidders whose bids are rejected and brief reasons for their rejection. 33.2. Where the Bidder requests specific reasons for being rejected, the Bidder shall send the request to the System or meet the Investor directly. The Investor must respond to the Bidder within 2 working days after receiving the request. 33.3. In case of cancellation of the bidding process prescribed in ITB Section 32.1 (a) –reasons for such cancellation shall be clearly defined in the notice of contract award and on the System.
34. Change in quantity of Goods and Services	34.1. At the time of contract award, the Investor has the right to increase or decrease the quantity of the Goods and Related Services, originally specified in Chapter V - Scope of Supply and Technical requirements, provided that it does not exceed the rate specified in the BDS and there is no change to unit price, other conditions or terms of the Bidding Documents or the Bid. Increase or decrease rate stipulated in the BDS. 34.2. Optional Additional Purchase Before the contract expires, the Investor and the Bidder may agree to procure additional quantities of goods or services beyond those specified in Chapter IV, provided that the additional volume does not exceed the percentage stipulated in the BDS and complies with Clause 8, Article 39 of the Law on Bidding. The additional work must be similar to the work specified in the signed contract and must have an established unit price. This additional quantity of goods or services shall not be used to evaluate the bidder's capacity and experience. For a joint venture Bidder, the distribution of responsibilities for executing the additional volume under the optional purchase shall follow the work division ratio specified in the signed contract, unless otherwise agreed upon by the parties.

35. Notification of Bid Acceptance and Contract Award	As soon as the Investor publishes the Notice of Contract Award, the Investor shall send a Letter of Bid Acceptance and Contract Award, including requirements pertaining to performance security, time frame for finalizing and signing contract, using Form No. 16 of Part IV. The Letter of Bid Acceptance and Contract Award is part of the contract documents. In case the winning bidder fails to complete, sign the contract or submit the contract performance security within the deadline stated in the Letter of Bid Acceptance and Contract Award, the bidder will be disqualified and will not be refunded. Bid security value as prescribed in ITB Section 18.2. The time limit stated in the Letter of Bid Acceptance and Contract Award is calculated from the date the Investor sends this letter to the winning bidder.
36. Conditions for contract signing	36.1. At the time of signing the Contract, the winning Bidder's Bid remains valid. 36.2. At the time of signing the Contract, the winning Bidder shall satisfy technical and financial capability and qualification requirements to execute the Contract in accordance with BD requirements. If that winning Bidder has no longer satisfied basic technical qualification and financial requirements as prescribed in the BD, the Investor shall refuse to sign the Contract with that Bidder. The Investor shall cancel the contractor selection decision, Letter of Bid Acceptance and Contract Award issued previously, and invite the next ranked Bidder for contract negotiation (if any). 36.3. The investor must ensure the conditions for advance capital, payment capital and other necessary conditions to implement the bidding package on schedule.
37. Performance Security	37.1. Before signing the contract or before the contract takes effect, the winning bidder must submit contract's performance security as prescribed in GCC Section 5 - Chapter VI. In case of applying a contract performance security letter, the form is specified in Part IV or another form approved by the Investor. 37.2. The Performance Security shall not be refunded if: a) The Contractor refuses to execute the Contract when the Contract is in force;

	b) The Contractor violates terms and conditions of the Contract Agreement; c) The Contractor refuses the request to extend the validity of the Contract Performance Security due to the Contractor's fault, leading to a delay in the contract implementation progress.
38. Handling complaints in bidding	38.1 When detecting that legal rights and interests are affected, contractors, agencies and organizations may request competent persons and investors to review issues in the contractor selection process and contractor selection results according to the provisions of Articles 89 of the Bidding Law and Articles 137, 138, and 139 of Decree No. 214/2025/ND-CP. 38.2. In case of petition to the Investor, contractor, agency or organization, send the petition directly on the System. In case of petition to the Competent Person, the contractor shall send the petition to the address specified in BDS.

CHAPTER II. BID DATA SHEET (BDS)

ITB 1.1	Investor: VNPT Net Corporation.
ITB 1.2	Name of the bidding package: Purchasing solution for 5G radio system and service Project name: Purchasing 5G Radio System Equipment for the Vinaphone Network in Central Provinces for the 2025–2026 period – As Part of the 5G Implementation Plan under Resolution 57-NQ/TW. The quantity and ID numbers of the lots pertaining to the bidding package: This bidding package has only one (01) lot.
ITB 3	Sources of Funds: fixed asset depreciation
ITB 5.1 (c)	Competition in the bidding process must be maintained as follows: - Participating Bidders must not own stock or equity capital of over 30% of Investor VNPT Group, except for the following cases: + Bidder is a member company or subsidiary of a Vietnamese state- owned group or Vietnamese state-owned corporation and Bidder's main production and business industry are consistent with the properties of such group/ corporation's bidding package. + Bidder is a parent company, subsidiary or member company of a Vietnamese state-owned economic group or Vietnamese state-owned corporation whose products and services in the bidding package belong to the main production and business industry of the group/corporations and this bidding package is from a subsidiary or member company. - Participating Bidders must not own stock or equity capital with the Consultancy Contractors of the Bidding package; do not own the stock or equity of over 20% of an organization, an individual for each party. Details as follow: + Consultancy of designs preparation: Not Applicable + Consultancy on valuation: Not Applicable + Consultancy on contract implementation supervision and inspection: Not Applicable + Consultancy on Bidding Documents preparation and appraisal: Not Applicable + Consultancy on Bids evaluation: Not Applicable

	+ Consultancy on appraisal of bidder selection results: Not Applicable + Consultancy on project management, contract management, other consulting services that directly related to the bidding package: Not Applicable. - Government administrative organizations and enterprises that have the same direct management agency and contribute capital when participating in each other's bidding packages do not have to meet the regulations on legal independence and financial independence between bidders and Investor The ratio of shares and capital contribution between the parties is determined at the time of bid submission and according to the ratio stated in the Business Registration Certificate, Establishment Decision, and other equivalent documents. If a Bidder participating in the bidding package as a co-bidder or Consultancy Contractors is selected as an alliance, the capital ownership ratio of other organizations or individuals in the alliance is determined by the following formula: $\text{Capital ownership ratio} = \sum_{i=1}^n X_i \times Y_i$ Where: X_i: Capital ownership ratio of other organizations or individuals in the alliance member ordinal number i; Y_i: Percentage (%) of the part of work by alliance member ordinal number i in Alliance agreement; n: Number of members in the alliance.
ITB 5.4	Not applicable
ITB 7.5	Pre-Bid Meeting: Not applicable
ITB 8	Fees for submitting Bidding: free of charge
ITB 10.8	Bidders shall submit with their bids following documents: The bid shall include: Bidder shall provide the notarized/authenticated copy of one of the following documents: the valid establishment, business registration license issued by the competent agency in the respective jurisdiction where the bidder operates. In case of necessity, the foreign Bidders (or foreign member of Joint Venture) shall

	provide the notarized/authenticated and consular legalized copy of one of above documents as required by VNPT. Executive Summary: describe all essential parts of the Bid; Proposed Product Descriptions (technical and functional) for the offered goods, services...; Scope of Supplying of offered goods, services... based on PART II. CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS; Period of contract execution based on PART II. CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS; Documents for proving the validity of import costs of locally produced/processed goods and services as a basis for determining preferences. For Statement of Compliance: The Bidder shall state his degree of compliance and make reference (if any) in relation to all requirements in the following contents: Chapter I. Instructions to Bidders and Chapter II. Bid Data Sheet, Part I; Article 1 and 2, Bid Evaluation Criteria as specified in Chapter III, Part I; Scope of supply and technical requirements of the package as specified in Part II; General Conditions of Contract, Specific Conditions of Contract as specified in Part III; Contract Form as specified in Part IV. For each item, the Bidder shall respond in writing down as follows: - FC (Full Compliance) means the Bidder fully meets the requirements specified in the item without any deviations or exceptions. - PC (Partial Compliance) means the Bidder partially meets the requirements specified in the item. The Bidder must explain the deviations or the exceptions or the effects that will have on overall performance of the offered equipment/service. - NC (Non-Compliance) means the Bidder is unable to meet the requirements specified in the item.
ITB 12.1	Bidders are not allowed to propose Alternative Technical solution.
ITB 13.5	In the Bill of Quantity (BoQ), the Bidder shall quote prices according to the following requirements:

	Bidder shall provide Bill of Quantity (BoQ) in the given Forms 11 - Chapter IV. Other format shall be not considered. All items quoted in the BoQ must have unit price and unit price of each item must be unique within the BoQ. The “included”, “FOC” or other definition is not accepted. The unit price must be applied for the next system expansion contract. The Purchaser has the right to buy, not limited quantity of any item in the quotation of bid. All necessary hardware, license, software, features, accessories and related services,... shall be included and clearly shown in Bidder's Bill of Quantity (BoQ). The C/O, Manufacturer of system (HW, SW) supplied in this procurement package must be detailed in the Bill of Quantities (BoQ) for each item. If the price in the BoQ have “Total discount”, the Bidder shall clearly express discount content and method toward each item in BoQ. If the discount method is unclear, pricing discount means even proportion discount for every item of BoQ. All prices shall be expressly stated. The bill of quantities and price list shall enable VNPT to identify the total price for the System of the quoted package which is compliant to the PART II. CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS. The bid price shall be valid in accordance with DAP of Incoterms 2010. For the Bid price, Bidder shall consider the Insurance requirement as follow: Bidder will bear the risk of loss of, damage to and will maintain appropriate insurance in relation to the Hardware, Firmware, Software, Documentation and Spare Parts until the date that equipment is completely delivered to Vietnam International airport/seaport, at which time risk of loss and damage will pass to Purchaser.
ITB 15.10	The estimated usage period of the goods (for requesting materials and spare parts): 5 years from expired date of warranty.
ITB 16.2	Documentary evidence of the Bidder’s capability to perform the contract if its bid is accepted contains: - In case The Bidders is not manufacturer, the Bidder must show the Authorized letter of the manufacturer or Certificate of Joint Venture or Equivalent document for the main offered goods. In case the bid is not enclosed with such document, the Bidder must be responsible to clarify and supplement in the process of evaluating the bid. The Bidders are being awarded the contract only after having submitted to the Authorized letter of the manufacturer or Certificate of Joint Venture or equivalent document.

	- Provide all documents to prove that the Bidders have enough key human resources required in Clause 1.2, Section 2, Chapter III of the bidding documents. - Goods (Software and Hardware) supplied for this procurement package shall be committed to the legal rights and complied with the rules of intellectual property law and the international treaties to which Vietnam is a member. - The Bidder shall ensure the intellectual property right for all offered equipment (including hardware and software). Bidder shall have following written commitments: - The bidder shall ensure that he does not have any activities that affect the safety of telecom infrastructure in supplying telecom equipment in the world and in Vietnam; - The bidder shall ensure that, in case of bid winning, the telecom equipments which are supplied by the bidder do not affect the safety of telecom infrastructure; - If the competent authorities detect telecom equipment supplied by the bidder affecting the safety of telecom infrastructure, the bidder shall be fully responsible and must pay compensation for any damage related.
ITB 17.1	The effective period of bid proposal shall be: ≥ 180 days from the day of bid closing time.
ITB 18.2	Content of Bid Security: - Value and currency of the Bid Security: 93.000 USD or 2.454.363.000 VND. Bid security is required in the template of a guarantee letter. The guarantee letter must be signed by legal representative of the banks or branch of a foreign bank established according to Vietnam regulations. For Bidders listed in the list of Bidders with violations specified in Clause 1, Article 20 of Decree No. 214/2025/NĐ-CP and published on the Vietnam National Electronic Procurement System, a bid security measure must be implemented with a value three times the required value mentioned above for a period of two years from the last occurrence of such violations. In the case of a joint venture contractor, if any member of the joint venture has committed the violations specified in Clause 1, Article 20 of Decree No. 214/2025/NĐ-CP, that member must implement a bid security measure with a value three times the bid security value corresponding to the percentage of work that the member undertakes in the joint venture, for a period of two years from the last occurrence of such violations. - The effective period of the Bid Security shall be: ≥ 210 days from the day of bid closing time.

ITB 18.4	The unsuccessful bidders shall have their bid security either returned or released within 14 days, from the date on which the results of bidder selection are notified.
ITB 18a.1	18a.1. The quantity of copies: 01 copy (contains 01 USB which stores data of the bid. Data files must be in types of format: .doc/.xls and *.pdf). In case of modifying, substituting Bid Proposals or offering alternative technical proposal, Bidders shall have to submit a number of copy Modification, Substitution of Bid Proposals, Alternative technical proposal equal to the number of copy of Bids.
ITB 27.2	Maximum rate of Subcontractor's participation: 8% of total of the bid price.
ITB 28.4	The calculation of margin of preference corresponding to the evaluation method is as follow: a) Preference for goods with Vietnam origin which have Percentage of Goods' local cost of production below 50% and no goods with Percentage of Goods' local cost of production of 50% or more as follow: Non-incentive goods will be adjusted for comparison and ranking by adding 7.5% of the bid price (after error correction, deviation adjustment, and any discounts) offered for the goods to the bidder's bid price minus the discount value (if any) for comparison and ranking If the contractor offers goods of Vietnamese origin with a domestic production cost ratio of less than 50% and the production facility has at least 50% of the employees being disabled, war invalids, or ethnic minorities with a labor contract with a contract implementation period of 3 months or more and at the time of bid closing, the contract is still valid, they will enjoy a 10% incentive coefficient instead of the 7.5% incentive coefficient. b) Preference for goods with Vietnam origin which have Percentage of Goods' local cost of production of 50% or more as follow: Goods which are not subject to margin of preference shall be added an additional amount of 10% of the quoted price after deduction of discounts of this goods (if any) to the Bidder's evaluated price for comparison and ranking; goods which are subject to margin of preference with Percentage of Goods' local cost of production below 50% shall be added an additional amount of 2.5% of the quoted price after deduction of discounts of this goods (if any) to the Bidder's bid price minus the discount value (if any) for comparison and ranking; goods with Vietnam origin which have Percentage of Goods' local cost of production below 50% and production facility has at least 50% of workers, employees who are disabled, war veterans, or ethnic minorities with a valid labour contract which has duration of 3

months or more and at the time of bid closing shall not be added any additional amount to bid price for comparison and ranking.

For cases where the contractor offers goods of Vietnamese origin with a domestic production cost ratio of 50% or more, and the manufacturing facility employs at least 50% disabled people, war veterans, or ethnic minorities with labor contracts lasting 3 months or more, and the contract is still valid at the time of bid closing, the preferential coefficient will be 12%, instead of the 10% preferential coefficient.

c) Innovative products with Vietnam origin are entitled to preferences as follow:

For method of evaluated price, goods which are not subject to margin of preference shall be added an additional amount of 15% of the quoted price after deduction of discounts of this goods (if any) to the Bidder's bid price minus the contractor's discount (if any) for comparison and ranking; goods which are subject to margin of preference with Percentage of Goods' local cost of production below 50% shall be added an additional amount of 7.5% of the quoted price after deduction of discounts of this goods (if any) to the Bidder's bid price minus the contractor's discount (if any) for comparison and ranking; goods which are subject to margin of preference with Percentage of Goods' local cost of production below 50% shall be added an additional amount of 5% of the quoted price after deduction of discounts of this goods (if any) to the Bidder's bid price minus the contractor's discount (if any) for comparison and ranking;

For goods that are not innovative products of Vietnamese origin, if the contractor offers goods with Vietnamese origin and a domestic production cost ratio of less than 50%, the 15% coefficient will be replaced by 7.5% when calculating the preferential treatment. For goods with Vietnamese origin and a domestic production cost ratio of 50% or more, the 15% coefficient will be replaced by 10% when calculating the preferential treatment.

d) Innovative Vietnamese-origin products receive incentives according to Clause c of this Article when they meet one of the following conditions:

- These products fall under the list of high-tech products prioritized for investment and development or encouraged for development, as designated by the Prime Minister's decision;
- These products are formed from scientific and technological research results of science and technology enterprises as per the law on science and technology enterprises;
- These products are created based on the bidder's patents, layout-design of semiconductor integrated circuit, or plant varieties with granted protection

	certificates within the past 5 years, or based on the bidder's computer programs with granted copyright registration certificates within the past 5 year; - They are semiconductor chip products; - These products win Ho Chi Minh awards, state awards for science and technology as per the law on science and technology awards; - They are new products created from research and development results at one of the facilities of the National Innovation Center; - They are new products created from the results of scientific research and technology development as per the law on technology transfer. Innovative products specified in this Clause are entitled to incentives for a period of 6 years from the first time they are produced and are eligible to place on the market.
ITB 29.1	Method for evaluating Bidding Proposals: a) Qualification and experience evaluation: pass/fail; b) Technical evaluation: scoring against 1.000 points. c) Financial evaluation: The method of evaluated price.
ITB 29.2 (dd)	The comparison and ranking of Bid Proposals shall be determined based on the bid price excluding taxes, fees, and charges related to importation, special consumption tax (if any), and value-added tax (VAT).
ITB 31.4	The bidder who has the lowest evaluated bid price after error correction and adjustment of deviation, and minus (-) its discount.
ITB 34.1	The maximum volume increase rate is: 10%; The maximum volume decrease rate is: 10%
ITB 34.2	Additional purchase option: Not applicable
ITB 38.2	- Competent person: VNPT Net Corporation Address: No. 30, Pham Hung Street, Tu Liem Ward, Hanoi, Vietnam.

CHAPTER III. BID EVALUATION CRITERIA

SECTION 1: VERIFICATION AND EVALUATION OF BIDS' ELIGIBILITY

1.1. Verification of Bids' eligibility:

- a) Checking the number of copies of Bids;
- b) Checking the components of the original Bids, including: Application Letter, Joint Venture Agreement (if any), Authorization Letter for signing Application Letter (if any); Bid Security (Not applicable for advance bidding); Documentation establishing the eligibility, capability and experience; technical proposals; financial proposals and other contents of Bids stated in ITB 10;
- c) Checking the consistency of the original and the copies for in depth evaluation.

1.2. Evaluation of Bids' eligibility:

Bidders' Bids are considered eligible when the following requirements are met:

- 1) Attached with the original Bids;
- 2) Application Letter had been signed and stamped (if available) by Bidder's legal representative. The Application Letter must be signed after the date of issue of Bidding Document. For Joint venture bidder, Application Letter shall be signed and stamped (if available) by the legal representative of each and every member in the Joint venture or by the appointed member of the Joint venture in accordance with the allocation of responsibility stated in Joint venture Agreement;
- 3) Application Letter must not offer variety propositions of quoted price or price with inclusion of unfavorable conditions for the Investor;
- 4) Validity period of Bids satisfies requirements in ITB 17.1;
- 5) (Not applicable for advance bidding) Bid security does not violate any requirements stipulated in ITB 18.3. The Letter of guarantee must be signed directly, stamped (if available) by a legal representative of a credit institution or a branch of a foreign Bank established in accordance with Vietnamese law; or Guarantee insurance certificate must be signed directly, stamped (if available) by legal representative of a domestic non-life insurance company or a branch of a foreign non-life insurance company established under Vietnamese law. The Letter of guarantee or Guarantee insurance certificate must have value, validity, Investor's identification (beneficiaries) as regulated in BD. The Letter of Guarantee or Guarantee insurance certificate must not be signed before the Investor issues the BD; must not accompanying with unfavorable conditions to Investor (including the failure to fully meet the commitments as prescribed in Form No. 4A, Form No. 4B, Chapter IV);
- 6) Bidder is not named in two or more Bids as Contractor (either as independent contractor or member in an Joint venture) for a same Bid package;

7) For Joint venture Bidder: Attached with Joint venture agreement signed directly and stamped (if available) by the legal representatives of each and every Joint venture's member. The Joint venture agreement must clearly state the part of work and the correspondent estimated value that each member shall perform in accordance with Form No. 03 Chapter IV. The division of work in the Joint venture must be based on the items in the Price Schedule or according to the work in the production process of the items in the Price Schedule; The division of work in the Joint venture may not assign works that do not belong to these items or do not belong to the production process of these items.

8) Bidder's (or every Joint venture's members in case of Co-Bidder) eligibility and qualification is compliance in accordance with ITB 5.

9) Within 03 years before the bid closing time, the bidder does not have personnel (signed a labour contract with the bidder at the time the personnel committed the violation) whom is convicted by the Court of violating regulations on bidding that cause serious consequences according to the provisions of Criminal Law for the purpose of facilitating that bidder to win the bid selection.

SECTION 2. EVALUATION CRITERIA FOR QUALIFICATIONS AND EXPERIENCE

1.1. EVALUATION CRITERIA FOR QUALIFICATION AND EXPERIENCE

Criteria for evaluation of capability and experience shall follow Table 01 (for Bidders who are not manufacturers of goods in the scope of the bidding package) or Table 02 (for Bidders that are manufacturers of goods in the scope of the bidding package). Bidders that are manufacturers of goods in the scope of the bidding package can choose to provide Manufacturing capability in table 02 or Experience in performing contracts which supply similar goods in table 01. Bidder is evaluated as comply with capability and experience requirement when all evaluation criteria are met. Capability and experience of sub-contractors shall not be considered when evaluating Bids of Contractor (unless using special sub-contractor is allowed in BD). The Contractor itself has to comply the requirements of capability and experience (capability and experience of sub-contractors shall not be considered).

In case the currency mentioned in similar contracts or payment confirmation of the Investor for the goods supply contracts has been performed or the tax payment declaration or related documents proving the capacity and experience of bidder is not USD or VND, when preparing the bid, the bidder must convert it into USD/VND to serve as the basis for evaluating the bid. The conversion is applied at the selling rate of the Joint Stock Commercial Bank for Foreign Trade of Vietnam (Vietcombank) at the date of signing the similar contract.

The evaluation of bidder's qualifications and experience is carried out according to the criteria table as below.

Table No.01

TABLE OF CAPABILITY AND EXPERIENCE EVALUATION CRITERIA

(for Bidders who are not manufacturers ⁽¹⁾ of goods in the scope of the bidding package)

Criteria		Compliance Requirements			Document Submission Requirements
No.	Description	Requirements	Single Entity	Joint Venture	
				All Partners Combined	Each Partner
1	Non-performance of contracts occurring as a result of contractor fault	From January 1, 2023 ⁽²⁾ to the bid closing time, the bidder doesn't have two or more contracts (supply of goods, EPC, EP, EC, PC, turnkey) that are not completed due to the bidder's fault ⁽³⁾ .	Must meet requirement	Not applicable	Must meet requirement
2	Performance of duty or tax declaration and payment obligation	Having fulfilled duty or tax declaration and payment obligation ⁽⁴⁾ of the nearest fiscal year from bid closing date.	Must meet requirement	Not applicable	Must meet requirement
3	Financial capability				
3.1	Results of financial activities ⁽⁵⁾	The Bidder's net worth calculated as the difference between total assets and total liabilities within the last fiscal year promptly before the bid submission deadline should be positive.	Must meet requirement	Not applicable	Must meet requirement
					Form No. 08

Criteria		Compliance Requirements			Document Submission Requirements	
No.	Description	Requirements	Single Entity	Joint Venture		
				All Partners Combined		Each Partner
		(Net Worth = Total Assets – Total Liabilities)				
3.2	Average Annual Turnover (exclusive of VAT)	The Bidder’s minimum average annual turnover (exclusive of VAT) within 03 ⁽⁶⁾ fiscal years promptly prior to the bid submission deadline is 6.347.000 USD or the equivalent of 167.489.000.000 VND ⁽⁷⁾	Must meet requirement	Must meet requirement	Not applicable	
4	Experience in performing similar goods supply contracts	The proposer has satisfactorily and substantially completed at least 01 similar contract as a main contractor (as an independent contractor or consortium member) or sub-contractor (8) between January 01 2023 (9) and the deadline for submission of Proposals. A similar contract is a contract which: - Has similar nature: Goods with the same HS code 8517 or The contract to supply one of the types of telecommunication network equipment (such as eNodeB, gNodeB, ...) (10); - Has minimum scale (value) of: 2.323.000	Must meet requirement	Not applicable	Must meet requirement (equivalent in proportion to the assigned portion of work)	

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Criteria		Compliance Requirements			Document Submission Requirements
No.	Description	Requirements	Single Entity	Joint Venture All Partners Combined Each Partner	
		USD or equivalent 61.293.659.000 VND(11).			
5	Capabilities of care, servicing, maintenance, overhaul, repair, furnishing of replacement spare parts or supply of other after-sale services ⁽¹²⁾	The Bidder shall provide the proof of its capabilities of carrying out maintenance, repair, replacement spare part stocking or other after-sale service obligations in one of the following manners: - The Bidder must guarantee that it is independently capable of carrying out maintenance, repair, spare part stocking or other after-sale service obligations as per BD requirements. - The Bidder must sign an Agreement-in-principle with a unit having full capabilities of carrying out maintenance, repair, spare part stocking or other after-sale service obligations according to BD requirements.	Must meet requirement	Must meet requirement	The Bidder's Undertaking or Agreement-in-principle

Notes:

(1) Manufacturer means a firm/factory that directly produces goods or engages in the production of goods, or a subsidiary or parent company in charge of distribution or selling of goods produced by another subsidiary or parent company of the same group or corporation.

(2) Insert the required period of time, normally 03 - 05 years prior to the deadline for submission of Proposals. E.g.: since January 01, 2019 to the deadline for submission of Proposals.

(3) Non-performance of contracts for supply of goods, EPC, EP, PC, turnkey contracts, as a result of contractor default, includes:

- All contracts for supply of goods, EPC, EP, PC, and turnkey contracts where the non-performance was decided by the Employer/Purchaser and was not challenged by the contractor;

- Contracts for supply of goods, EPC, EP, PC, and turnkey contracts where the non-performance was decided by the Employer/Purchaser and was so challenged by the contractor but fully settled by an arbitration council or court against the contractor.

Non-performance of contracts for supply of goods, EPC, EP, PC, and turnkey contracts shall not include contracts where the decision of the Employer/Purchaser was overruled by the dispute resolution mechanism. Non-performance must be based on all information on disputes or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the proposer have been exhausted. Completion of contracts after the prescribed completion date, as a result of the contractor's fault, shall not be considered non-performance.

In case of a consortium proposer, if one or several members of the consortium has committed violations and thus are prohibited from participating in bidding as prescribed in clause 1 Article 133 of the Decree No. 214/2025/ND-CP, other members of the consortium shall not be considered to have non-performing contracts, as a result of the contractor's fault. In case one or several members of the consortium breach the contracts or are no longer capable of performing the contracts, causing adverse impacts on the progress, quality and efficiency of the packages, only such member(s) shall be considered to have failed to perform the contracts, and other members of the consortium shall not be considered to have non-performing contracts, as a result of the contractor's fault.

(4) The proposer shall provide documentary evidence that it has discharged all obligations to declare and pay CIT (or TIN, in case the proposer is a household business) of the fiscal year prior to the deadline for submission of Proposals. Tax declaration and payment obligations must have been fulfilled before the deadline for submission of Proposals. Tax payment obligation means the obligation to make payment of

the tax which is determined on the basis of tax rate, taxable income, and assessable turnover declared by the proposer on the Electronic Taxation System (the amount paid corresponds to the amount payable); if delay in paying tax or tax exemption/reduction is allowed under the State policies, these policies shall apply. The proposer is required to submit the following documents:

- The tax return (or notice of payment given by a tax authority to a household business) and the payment receipt bearing the tax authority's certification printed from the Electronic Taxation System; of
- The tax return (or notice of payment given by a tax authority to a household business) and the tax authority's certification of fulfillment of tax obligations.

If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, the requirement regarding fulfillment of obligations to declare and pay tax shall apply to the fiscal year preceding the year Y (year Y-1).

(e.g.: If the deadline for submission of Proposals is March 20, 2024, and the fiscal year of the proposer begins on January 01 and ends on December 31, the proposer shall be required to demonstrate that it has fulfilled all obligations to declare and pay tax of the year 2022).

- For foreign bidders: Bidder provide audited financial report of the latest fiscal year compared to the deadline for submission of Bids.
- (5) The net asset value is determined according to the proposer's financial statements. If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, the proposer's net asset value shall be determined according to financial statements of the year preceding the year Y (year Y-1).

E.g.: If the deadline for submission of Proposals is March 20, 2024, the fiscal year of the proposer begins on January 01 and ends on December 31, and the RFP document imposes a requirement that the proposer must submit financial statements of the last 03 years, the proposer's net asset value shall be determined according to the financial statements of the year 2022.

This criterion shall not be required if the proposer is a household business.

- (6) Insert the required period of time, normally 03 - 05 years prior to the deadline for submission of Proposals. If the proposer has been operating for a number of year that is shorter than the one required in the RFP document, the average annual turnover (exclusive of VAT)

shall be calculated for its total operating years. If the proposer's average annual turnover (exclusive of VAT) reaches the minimum amount specified in the RFP document, it shall be further considered and evaluated.

If the proposer is a household business, it shall not be required to submit financial statements but must provide documents demonstrating that its turnover corresponds to its tax obligations.

If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, financial statements of the years preceding the year Y (year Y-1, Y-2, etc.) shall be submitted.

E.g. 1: If the deadline for submission of Proposals is March 20, 2024, the fiscal year of the proposer begins on January 01 and ends on December 31, and the RFP document imposes a requirement that the proposer must submit financial statements of the last 03 years, the proposer shall be required to submit financial statements of 2020, 2021, and 2022.

E.g. 2: The average annual turnover (exclusive of VAT) within the last 03 fiscal years prior to the deadline for submission of Proposals. In this case, if the deadline for submission of Proposals is November 15, 2024, the proposers shall be required to submit financial statements of 2021, 2022, and 2023. A proposer that is established in 2022 shall be further evaluated if its average annual turnover in 2022 and 2023 meets the requirement.

(7) Normal calculation of the average annual turnover (exclusive of VAT):

a) In case the duration of the package is 12 months or longer, the turnover shall be calculated as follows:

The required minimum value of the average annual turnover (exclusive of VAT) = [(The package price - VAT amount)/the duration of the package expressed in years] x k. The factor "k" in this formula normally ranges from 1,5 to 2.

b) In case the duration of the package is less than 12 months, the turnover shall be calculated as follows:

The required minimum value of the average annual turnover (exclusive of VAT) = (The package price - VAT amount) x k. The factor "k" in this formula is normally 1,5.

(8) For contracts under which the proposer participated as a consortium member or sub-contractor, only the proposer's share, by value, shall be considered to meet this requirement.

(9) Insert the required period of time, normally 03 - 05 years prior to the deadline for submission of Proposals. E.g.: since January 01, 2019 to the deadline for submission of Proposals.

(10) Similar nature: The Purchaser shall select and insert one of the following options in the RFP document:

a) Option 1: goods are of the same general field (the Purchaser shall clearly indicate such general field such as medical devices, electrical equipment, office supplies, etc.) **or**

b) Option 2: The RFP document shall impose these 2 criteria:

(i) Criterion 1: goods are of the same general field (the Purchaser shall clearly indicate such general field such as medical devices, electrical equipment, office supplies, etc.)

(ii) Criterion 2: goods bear the same Chapter code, Heading code (i.e. 4 first digits of the code) in the Harmonized Commodity Description and Coding System issued by the World Customs Organization (WCO) (hereinafter referred to as HS code). HS codes are determined according to the Circular No. 31/2022/TT-BTC dated June 08, 2022 of the Ministry of Finance of Vietnam (published on the website of the General Department of Vietnam Customs at address: <https://www.customs.gov.vn>).

If the proposer offers a good which is of the same field (Criterion 1) or bears the same first 4 digits of HS code (Criterion 2) as the good required in the RFP document, this good shall be considered to have similar nature to the subject good of the package. In case a good bears different HS codes which are also clearly indicated in the RFP document, the proposer that offers a good bearing any of these HS codes shall be considered substantially responsive to the requirements of the RFP document.

E.g.: The subject good of the package is laptops and bears HS code of 84.71.30.20, all goods bearing HS code of 84.71.xx.xx shall be considered as Goods of similar nature. In case the HS code of the subject good of the package is not available, the proposer shall provide the contracts for supply of goods of the same general field as required in the RFP document (Criterion 1).

- For a package of procurement of medical devices, HS codes shall be determined according to the Circular No. 14/2018/TT-BYT dated May 15, 2018 of the Ministry of Health of Vietnam. Goods of similar nature determined according to HS code (criterion 2) are medical devices which are in the same heading (bear the same first 4 digits of HS code) as the good to be procured as prescribed in the Circular No. 14/2018/TT-BYT.

During the supplier selection, if the Circular No. 31/2022/TT-BTC and/or Circular No. 14/2018/TT-BYT are/is amended or replaced, the new ones shall apply).

- If it is difficult for the Purchaser to determine HS codes of the goods according to Criterion 2, the RFP document may impose requirements regarding the goods of similar general field (according to Criterion 1). In this case, if the proposer determines that the good of the package and the good in its finished item or contract (tested and accepted) are in the same heading (the same first 4 digits of HS code), this item or contract shall be considered to be similar for further consideration and evaluation (i.e. the proposer is considered to have met Criterion 2).

- In case the package comprises multiple items, only the general field and HS codes of main items of the package are required.

(11) Scale of similar contract:

Where the package comprises multiple items of goods, the value of each item must be specified to facilitate evaluation of the proposer's experience in performing similar contracts for supply of goods.

Where the package comprises various items, the Investor shall, depending on the nature and scale of the package, impose the requirement concerning the scale of similar contracts on the basis of the main items of the package (such main items must be specified) or all items of the package, including the scale of each main item or each item. In case of procurement of a large amount or quantity of goods, the required ratio of the scale of a similar contract to that of the subject package (Y) may be reduced to **Y/1,25**. The factor "Y" normally is about 50% of the value of the subject package. In some special cases where the package comprises some items in the same Chapter or Heading, the scale of similar contracts shall be determined according to points (iii) and (iv) of this section.

For a package for procurement of goods whose amount or quantity depends on demands for such goods over years and whose duration extends beyond 1 year, the RFP document shall impose the required value of a similar contract determined for 01-year cycle, instead of the value for total number of years.

E.g.: For a package for procurement of material X to meet demands of the Purchaser in 2024 and 2025 (from January 01, 2024 to December 31, 2025) where the price of the package is VND 100.000.000.000 (estimated for demands of 02 years), the required value of a

similar contract is $50\% \times VND\ 100.000.000.000 / 2 = VND\ 25.000.000.000$. Evaluation of scale of similar contracts shall be based on the value of completed and accepted work items. To be specific:

- (i) The proposer has completed at least 01 contract for supply of all types of similar goods whose value is at least **Y** (or **Y/1,25**, for procurement of large amount or quantity of goods). In this case, the value of each similar item of goods supplied under the contract must not reach 50% (or 40%, for procurement of large amount or quantity of goods) of the corresponding value of such item in the package; or
- (ii) The proposer has supplied similar goods under different contracts (which have been completed or are in progress), provided that the value of each of such similar good items supplied is equivalent to at least 50% of the value of each of the good items of the subject package (or 40%, for procurement of large amount or quantity of goods). In this case, the proposer may not aggregate the values of a similar good item supplied under different contracts to meet the requirement that the value of this similar good item reaches at least 50% (or 40%, for procurement of large amount or quantity of goods) of the value of the good of the subject package.

Where:

- + The good item considered to have been completed is a part or all of quantities of the goods in the item which has been tested and accepted within a prescribed period of time, regardless of the date of signing the contract. Time of certifying a completed good item for determining similar good items shall be the time when the good is tested and accepted, regardless of the date of signing the contract.
- + A completed contract is a contract under which all goods supplied have been tested and accepted or a contract which has been duly finalized. Time of certifying a completed contract for determining similar contracts shall be the time when the goods were tested and accepted, regardless of the date of signing the contract.
- If the proposer is both a manufacturer and a supplier (i.e. some goods or a portion of the quantity of goods offered in its Proposal is produced by the proposer itself while the rest is purchased by the proposer from other manufacturer(s)/supplier(s)), in addition to information on its experience in performing similar contracts, the proposer shall declare information on its production capacity according to Section 4 Table No. 02 of this Chapter. Evaluation of the proposer's experience shall be carried out on the basis of similar contracts for supply of goods (corresponding to the portion of goods purchased by the proposer from other manufacturer(s)/supplier(s)) and the proposer's production capacity (corresponding to the portion of goods to be manufactured by the proposer itself).

If several goods of the package are in the same Chapter or Heading (bearing the same HS Code A), evaluation of scale of similar contracts shall rely on the value of completed goods which have been tested and accepted. To be specific:

- (iii) The proposer has completed at least 01 contract for supply of adequate similar goods whose value is at least **K** (or **K/1,25**, for procurement of large amount or quantity of goods). The factor K equals 50% of the sum of the values of the goods which are not in the same Chapter or Heading (i.e. bear HS codes other than code A) and the highest value of the goods which bear the same code A (the value of the good is determined according to the price of the package or approved procurement cost estimate); or
- (iv) The proposer has supplied similar good items under different contracts (which have been completed or are in progress), provided that the value of each of such similar good items which do not bear code A is equivalent to at least 50% of the value of each of the good items of the subject package (or 40%, for procurement of large amount or quantity of goods). The required value of a similar good item bearing the same code A shall not be smaller than 50% of the highest value of the good items of the subject package which bear the same code A (or 40%, for procurement of large amount or quantity of goods). In this case, the proposer may not aggregate the values of a similar good item supplied under different contracts to meet the requirement that the value of this similar good item reaches at least 50% (or 40%, for procurement of large amount or quantity of goods) of the value of the good of the subject package.

* Examples for notes (10), (11):

- E.g. 1: The subject package includes 500.000 disposable syringes bearing HS code **9018.31.10** (as prescribed in the Circular No. 14/2018/TT-BYT) worth VND 1.000.000.000 and 100 sets of ceiling-mounted surgical lights bearing HS code **9405.10.20** (as prescribed in the Circular No. 14/2018/TT-BYT) worth VND 2.000.000.000. Proposer X has contract A (in progress) for supply of 2 ventilators bearing HS code **9018.90.30**, one of which worth VND 900.000.000 (>50% of the value of disposable syringes) has been successfully delivered (tested and accepted), and contract B (in progress) for supply of 200 sets of surgical lights bearing HS code **9405.40.91**, of which 80 sets worth VND 1.450.000.000 (>50% of the value of ceiling-mounted surgical lights) have been successfully delivered (tested and accepted), so proposer X is considered to have met requirements concerning similar contracts of this package.

- E.g. 2: The subject package is a tipper truck with 20 spare tires; the value of the package as indicated in the approved procurement cost estimate is VND 1,8 billion (including VND 1,64 billion for buying the tipper truck and VND 0,16 billion for buying 20 spare tires). Thus, the main good of this package is the tipper truck and the required scale of a similar contract is equivalent to 50% x VND 1,64 billion.

- E.g. 3: The subject package includes 50 air conditioners (bearing HS code 8415; the estimated price is VND 2 billion); 20 laptops (bearing HS code 8507; the estimated price is VND 400 million); 20 laser printers (bearing HS code 8443; the estimated price is VND 100 million); the delivery of goods must be completed within 180 days from the effective date of the contract. The consortium proposer A-B consists of member A that is an air conditioner manufacturer and takes charge of supplying the air conditioners (80% of the value of goods of the package), and member B that is a trader and takes charge of supplying laptops and printers (20% of the value of goods of the package).

In this case, the consortium proposer A-B is considered to have met the production capacity and experience requirements for executing the package if:

- + Member A has provided documentary evidence demonstrating that the design capacity of its factory or technology line for production of air conditioners achieves at least 12,5 air conditioners/month (1,5 x 50 air conditioners x 30/180 days) or the highest air conditioner output per month within the last 05 years prior to the deadline for submission of Proposals is equal to or higher than 12,5 air conditioners/month;
- + Member B has supplied the goods bearing HS code 8507, 8443 under the same contract or 02 different contracts, provided that the value of goods bearing HS code 8507 under a contract is equal to or higher than 50% of the value of laptops of the package (i.e. >50% x VND 400 million), and the value of goods bearing HS code 8443 under a contract is equal to or higher than 50% of the value of laser printers (i.e. >50% x VND 100 million).

- E.g. 4: The subject package Q includes the following goods:

No.	List of goods	HS Code	Estimated price (VND)
1	Goods A	9025	10.000.000.000
2	Goods B	9030	8.000.000.000
3	Goods C	9030	12.000.000.000

In this case, proposer A that submits a Proposal for the above-mentioned package Q is considered to meet the requirement concerning experience in performing similar contracts if:

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- + It has completed a goods supply contract under which total value of those goods bearing HS codes 9025 and 9030 is at least VND 11 billion (50% x (VND 10 billion + VND 12 billion)); or
- + It has completed 01 contract for supply of the goods bearing HS code 9025 worth at least VND 5 billion (50% x VND 10 billion) and 01 contract for supply of the goods bearing HS code 9030 worth at least VND 6 billion [50% x VND 12 billion)]."

If proposer A submits 02 contracts under which both the goods bearing 9025 and 9030 have been supplied, the value of the goods bearing HS code 9025 and the value of those bearing HS code 9030 under contract 01 are VND 3 billion and VND 5 billion respectively, and the value of the goods bearing HS code 9025 and the value of those bearing HS code 9030 under contract 02 are VND 3 billion and VND 4 billion respectively, this proposer shall be considered to have failed to meet the requirement concerning experience in performing similar contracts.

(12) If after-sale services are not required, this evaluation criterion may be crossed out.

If the proposer's commitments are not available, they may be added during the evaluation of its Proposal. If the proposer fails to provide commitments within a reasonable period of time as requested by the Purchaser, its Proposal shall be considered to have failed to meet requirements concerning warranty, maintenance, repair and provision of spare parts and other after-sale services, and thus rejected.

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Table 02

TABLE OF CAPABILITY AND EXPERIENCE EVALUATION CRITERIA
(for Bidders that are manufacturers⁽¹⁾ of goods in the scope of the bidding package)

Criteria			Compliance Requirements			Document Submission Requirements
No.	Description	Requirements	Single Entity	Joint Venture		
				All Partners Combined	Each Partner	
1	Non-performance of contracts occurring as a result of contractor fault	From January 1, 2023 ⁽²⁾ to the bid closing time, the bidder doesn't have two or more contracts (supply of goods, EPC, EP, EC, PC, turnkey) that are not completed due to the bidder's fault ⁽³⁾ .	Must meet requirement	Not applicable	Must meet requirement	Form No. 07
2	Performance of duty or tax declaration and payment obligation	Having fulfilled duty or tax declaration and payment obligation ⁽⁴⁾ of the nearest fiscal year from bid closing date.	Must meet requirement	Not applicable	Must meet requirement	The Bidder's Undertaking in the application letter
3	Financial capability ⁽⁵⁾					
3.1	Results of financial activities ⁽⁶⁾	The Bidder's net worth calculated as the difference between total assets and total liabilities within the last fiscal year promptly before the bid submission deadline should be positive. (Net Worth = Total Assets – Total	Must meet requirement	Not applicable	Must meet requirement	Form No. 08

Criteria			Compliance Requirements			Document Submission Requirements
No.	Description	Requirements	Single Entity	Joint Venture		
				All Partners Combined	Each Partner	
		Liabilities)				
3.2	Average annual turnover (exclusive of VAT) ⁽⁷⁾	Minimum average annual turnover (exclusive of VAT), calculated within 03 ⁽⁸⁾ fiscal years preceding the deadline for submission of Proposals, of 6.347.000 USD or the equivalent of 167.489.000.000 VND ⁽⁹⁾ .	Must meet requirement	Must meet requirement	Not applicable	Form No. 08
4	Production capacity ⁽¹⁰⁾	The proposer shall provide documents demonstrating its capacity for producing the good of the package meeting requirements adopting any of these two options: - The design capacity of its production factory or technology line achieves at least: 103 products/month; Or: - The highest production output per month within the last 05 years prior to the deadline for submission of Proposals achieves at least: 103 products.	Must meet requirement	Not applicable	Must meet requirement (equivalent in proportion to the assigned portion of work)	Form No. 05B

Criteria		Compliance Requirements			Document Submission Requirements
No.	Description	Requirements	Single Entity	Joint Venture All Partners Combined Each Partner	
5	Capabilities of care, servicing, maintenance, overhaul, repair, furnishing of replacement spare parts or supply of other after-sale services ⁽¹¹⁾	The Bidder shall provide the proof of its capabilities of carrying out maintenance, repair, replacement spare part stocking or other after-sale service obligations in one of the following manners: - The Bidder must guarantee that it is independently capable of carrying out maintenance, repair, spare part stocking or other after-sale service obligations as per BD requirements. - The Bidder must sign an Agreement-in-principle with a unit having full capabilities of carrying out maintenance, repair, spare part stocking or other after-sale service obligations according to BD requirements.	Must meet requirement	Must meet requirement	The Bidder's Undertaking or Agreement-in-principle

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Notes:

(1) Manufacturer means a firm/factory that directly produces goods or engages in the production of goods, or a subsidiary or parent company in charge of distribution or selling of goods produced by another subsidiary or parent company of the same group or corporation.

(2) Insert the required period of time, normally 03 - 05 years prior to the deadline for submission of Proposals. E.g.: since January 01, 2019 to the deadline for submission of Proposals.

(3) Non-performance of contracts for supply of goods, EPC, EP, PC, turnkey contracts, as a result of contractor default, includes:

- All contracts for supply of goods, EPC, EP, PC, and turnkey contracts where the non-performance was decided by the Employer/Purchaser and was not challenged by the contractor;

- Contracts for supply of goods, EPC, EP, PC, and turnkey contracts where the non-performance was decided by the Employer/Purchaser and was so challenged by the contractor but fully settled by an arbitration council or court against the contractor.

Non-performance of contracts for supply of goods, EPC, EP, PC, and turnkey contracts shall not include contracts where the decision of the Employer/Purchaser was overruled by the dispute resolution mechanism. Non-performance must be based on all information on disputes or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the proposer have been exhausted. Completion of contracts after the prescribed completion date, as a result of the contractor's fault, shall not be considered non-performance.

In case of a consortium proposer, if one or several members of the consortium has committed violations and thus are prohibited from participating in bidding as prescribed in clause 1 Article 133 of the Decree No. 214/2025/ND-CP, other members of the consortium shall not be considered to have non-performing contracts, as a result of the contractor's fault. In case one or several members of the consortium breach the contracts or are no longer capable of performing the contracts, causing adverse impacts on the progress, quality and efficiency of the packages, only such member(s) shall be considered to have failed to perform the contracts, and other members of the consortium shall not be considered to have non-performing contracts, as a result of the contractor's fault.

(4) The proposer shall provide documentary evidence that it has discharged all obligations to declare and pay CIT (or TIN, in case the proposer is a household business) of the fiscal year prior to the deadline for submission of Proposals. Tax declaration and payment obligations must have been fulfilled before the deadline for submission of

Proposals. Tax payment obligation means the obligation to make payment of the tax which is determined on the basis of tax rate, taxable income, and assessable turnover declared by the proposer on the Electronic Taxation System (the amount paid corresponds to the amount payable); if delay in paying tax or tax exemption/reduction is allowed under the State policies, these policies shall apply. The proposer is required to submit the following documents:

- The tax return (or notice of payment given by a tax authority to a household business) and the payment receipt bearing the tax authority's certification printed from the Electronic Taxation System; of

- The tax return (or notice of payment given by a tax authority to a household business) and the tax authority's certification of fulfillment of tax obligations.

If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, the requirement regarding fulfillment of obligations to declare and pay tax shall apply to the fiscal year preceding the year Y (year Y-1).

(e.g.: If the deadline for submission of Proposals is March 20, 2024, and the fiscal year of the proposer begins on January 01 and ends on December 31, the proposer shall be required to demonstrate that it has fulfilled all obligations to declare and pay tax of the year 2022).

- For foreign bidders: Bidder provide audited financial report of the latest fiscal year compared to the deadline for submission of Bids.

(5) When offering their innovative products, an individual or group of individuals producing such innovative products as prescribed in clause 4 Article 6 of the Decree No. 214/2025/ND-CP shall not be required to meet the requirements regarding financial capability, number of years of operating in the same industry within 06 years from the date on which the products are first produced and placed on the market.

(6) The net asset value is determined according to the proposer's financial statements. If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, the proposer's net asset value shall be determined according to financial statements of the year preceding the year Y (year Y-1).

E.g.: If the deadline for submission of Proposals is March 20, 2024, the fiscal year of the proposer begins on January 01 and ends on December 31, and the RFP document imposes a requirement that the proposer must submit financial statements of the last 03 years, the proposer's net asset value shall be determined according to the financial statements of the year 2022.

This criterion shall not be required if the proposer is a household business.

(7) When offering its innovative products as prescribed in clause 4 Article 6 of the Decree No. 214/2025/ND-CP, a domestic start-up shall not be required to meet this criterion within 06 years from the date on which its products are first produced and placed on the market.

A domestic proposer that receives transfer of technology for producing goods originating in Vietnam in accordance with the RFP document shall not be required to meet this criterion within 05 years from the date on which its products are first produced and placed on the market. In order to prove its receipt of technology transfer/receipt of transfer of technology subject to encouraged transfer for producing the goods originating in Vietnam, the domestic proposer shall be required to submit a certificate of registration of technology transfer/certificate of transfer of technology subject to encouraged transfer which is issued according to regulations of the law on technology and the law on investment.

A domestic proposer that produces the goods originating in Vietnam in accordance with the RFP document shall not be required to meet the revenue requirement when offering the goods of a category which is first produced and placed on the market by this proposer within 05 years prior to the deadline for submission of Proposals.

(8) Insert the required period of time, normally 03 - 05 years prior to the deadline for submission of Proposals. If the proposer's number of operating years is fewer than the one required in the RFP document, the average annual turnover (exclusive of VAT) shall be calculated for its total operating years. In this case, if the proposer's average annual turnover (exclusive of VAT) reaches the minimum amount specified in the RFP document, it shall be further considered and evaluated.

If the deadline for submission of Proposals falls after the end of a fiscal year of the proposer (year Y) and before or on the last day of the 3rd month from the end of the year Y, financial statements of the years preceding the year Y (year Y-1, Y-2, etc.) shall be submitted.

E.g.1: If the deadline for submission of Proposals is March 20, 2024, the fiscal year of the proposer begins on January 01 and ends on December 31, and the RFP document imposes a requirement that the proposer must submit financial statements of the last 03 years, the proposer shall be required to submit financial statements of 2020, 2021, and 2022.

E.g. 2: The average annual turnover (exclusive of VAT) within the last 03 fiscal years prior to the deadline for submission of Proposals. In this case, if the deadline for submission of Proposals is November 15, 2024, the proposers shall be required to submit financial statements of 2021, 2022, and 2023. A proposer that is established in 2022 shall be further evaluated if its average annual turnover in 2022 and 2023 meets the requirement.

If the proposer is a household business, it shall not be required to submit financial statements but must provide documents demonstrating that its turnover corresponds to its tax obligations.

(9) Normal calculation of the average annual turnover (exclusive of VAT):

a) In case the duration of the package is 12 months or longer, the turnover shall be calculated as follows:

The required minimum value of the average annual turnover (exclusive of VAT) = [(The package price - VAT amount)/the duration of the package expressed in years] x k. The factor “k” in this formula normally ranges from 1,5 to 2.

b) In case the duration of the package is less than 12 months, the turnover shall be calculated as follows:

The required minimum value of the average annual turnover from production and business activities (exclusive of VAT) = (The package price - VAT amount) x k. The factor “k” in this formula is normally 1,5.

(10) Where the package comprises various items, the Investor shall, depending on the nature and scale of the package, impose the requirement concerning the design capacity of production factory/technology line or the highest production output per month within the last 05 years prior to the deadline for submission of Proposals on the basis of the main items of the package (such main items must be specified) or all items of the package, corresponding to the requirements regarding the main item or all goods of the package, for the proposer that is a trader.

The design capacity of production factory/technology line or the highest production output per month within the last 05 years prior to the deadline for submission of Proposals = k x (The required quantity of the package x 30/the duration of the package expressed in days). Normally, k = 1,5; for procurement of a large amount or quantity of goods, k = 1 may apply”.

E.g.: The quantity of goods to be procured is 12.000 milk boxes, the duration of the package is 20 days, and k = 1,5 applies, the proposer’s required minimum design capacity per month/the highest milk production output per month: $1,5 \times (12.000 \times 30/20) = 27.000$ milk boxes.

In case the goods are domestically produced by a Vietnamese proposer (whether or not they are placed on the market), the proposer shall be required to demonstrate that its design capacity or production output meets the requirement.

If the proposer is both a manufacturer and a supplier (i.e. some goods or a portion of the quantity of goods offered in its Proposal is produced by the proposer itself while the rest is purchased by the proposer from other manufacturer(s)/supplier(s)), in addition to information on its experience in performing similar contracts, the proposer shall declare

information on its production capacity according to Section 4 Table No. 01 of this Chapter. Evaluation of the proposer's experience shall be carried out on the basis of similar contracts for supply of goods (corresponding to the portion of goods purchased by the proposer from other manufacturer(s)/supplier(s)) and the proposer's production capacity (corresponding to the portion of goods to be manufactured by the proposer itself).

The proposer may submit the documents such as invoices, inventory lists, etc. to demonstrate its production output per month; submit documents proving the design capacity of its factory/technology line to demonstrate its production capacity.

(11) If the proposer's commitments are not available, they may be added during the evaluation of its Proposal. If the proposer fails to provide commitments within a reasonable period of time as requested by the Purchaser, its Proposal shall be considered to have failed to meet requirements concerning warranty and provision of spare parts and other after-sale services, and thus rejected. If after-sale services are not required, this evaluation criterion may be crossed out.

1.2. EVALUATION CRITERIA OF KEY SPECIALISTS

a, Key personals:

Bidder must provide a list of key personals that are in charge of main implementation mile stones of this project including but not limited to installation, installation supervision, dimensioning and planning, integration, operating, maintaining radio system dedicated to deploy this project meet following requirements:

Table 03: Key personnel requirements

No.	Position	Number of personnel	Experience in similar works	Academic qualifications
1	Project manager	01	At least 03 year(s) or At least 02 Contract(s)	Bachelor degree or equivalent in IT/Telecom/Electronics
2	Specialists for project implementation	02	At least 02 year(s) or At least 01 Contract(s)	Bachelor degree or equivalent in IT/Telecom/Electronics

Bidders shall submit proposed key specialists detailed information and experience documents as follow Form 06A, 06B and 06C - Chapter IV. Bidding Forms. The Bidder shall provide details about key personnel that it proposes and attached qualifications of the proposed personnel by completing Form 06A, 06B and 06C - Chapter IV. Key personnel may be permanently contracted or temporarily employed by the Bidder. If key personnel that the Bidder provides in its Bid are not responsive to BD requirements, the Procuring Agency shall permit the Bidder to provide key personnel clarifications, modifications or additions to ensure conformance to BD requirements within a reasonable time that is not less than 03 working days. The Bidder is given the only one chance to replace a staff member not responsive to the requirement. Where the Bidder has no personnel replacement conforming to BD requirements, the Bidder shall be disqualified. The Bidder providing untrue information about its personnel shall in no case be allowed to replace its personnel. In addition, not only shall its Bid be disqualified, but the Bidder itself shall also be deemed as engaged in the fraudulent practice indicated under Clause 4 Article 16 of the Law on Bidding and be handled according to the provisions of Point a, Clause 1, Article 133 of Decree No. 214/2025/ND-CP.

SECTION 3. TECHNICAL EVALUATION CRITERIA

The Bidder shall state its degree of compliance in relation to all requirements in Chapter V. Scope of supply and technical requirements and the Technical Evaluation Table below.

For each item, the Bidder shall respond in writing down as follows:

- FC (Full Compliance) means the Bidder fully meets the requirements specified in the item without any deviations or exceptions.
- PC (Partial Compliance) means the Bidder partially meets the requirements specified in the item. The Bidder must explain the deviations or the exceptions or the effects that will have on overall performance of the offered equipment/service.
- NC (Non-Compliance) means the Bidder is unable to meet the requirements specified in the item.

For technical requirements of BD, the Bidder must clearly explain technical solution for each compliance statement (if any).

Detailed Evaluation of Technical Evaluation

Technical evaluation shall be based on the scale of 1000 points (possibly achieved highest score).

- o *The total score granted is more than or equal 900.*
- o *The score granted in each item is not less than the minimum-scored requirement of that item.*

Technical Evaluation Table

Item	SESSION2. TECHNICAL REQUIREMENTS	DETAILED TECHNICAL REQUIREMENT ITEMS IN SESSION2, CHAPTER V	Max Point	Min Point
	A. GENERAL REQUIREMENT		50	50
1	Warranty period is not less than 24 months from the date of issuing FAC.	Follow II.1.2.6 in Chapter V	3	3
2	The Trial-run period for each PO shall commence on the issuance date of the PAC and shall be considered to be completed if within 60 days from issuance date of the PAC of each PO if the system is in continuous and well operation and the minor defects stated in the PAC have been corrected/adjusted;		3	3
3	The Investor has the right to purchase the whole or a part of equipment with unlimited quantity for other projects (if any) with the proposed unit price of this Bid.		2	2
4	The Bidder has state of full compliance with Specific Conditions of Contract stipulated in Part III - Conditions of Contract, as following: - Performance Security in GCC 5 and SCC 5.2; - Advance Payment Guarantee of each PO in GCC 13 and SCC 13.1; - Insurance in SCC 19; - Inspections and Tests in GCC 21 and SCC 21.1, 21.2;		4	4

	- Sanctions and Damages in GCC 22 and SCC 22 - Warranty in GCC 23 and SCC 23.3, 23.5, 23.6;			
5	Applicable law shall be substantive laws of Vietnam.		4	4
6	Arbitration: Any disputes or discrepancies which may arise out of this contract shall be settled smoothly, amicably, based on mutual benefit and understanding; If an attempt at settlement has failed, all disputes arising out of or in relation to this contract shall be finally settled by the Vietnam International Arbitration Centre at the Vietnam Chamber of Commerce and Industry in accordance with its Arbitration Rules; The place of arbitration shall be carried out in Country of Vietnam; The arbitrary award shall be substantiated in writing. The decision of the arbitration shall be final and binding for both parties; All expenses in connection with the arbitration shall be born by the losing party.		3	3
7	The Bidder is required to provide the Procuring Entity with an official letter of commitment to guarantee the following requirements:			
	+ The Bidder has no activity that may pose potentially unsafe operation to telecommunication infrastructure in providing telecoms equipment in the world and in Vietnam as well.		3	3
	+ If the Bidder rewards, the telecoms equipment supplied by the Bidder do not pose any unsafety to VNPT's telecoms infrastructure; In case, authorized organization/officer detects/reveals the supplied equipment poses dangers or unsafety to the telecoms infrastructure, the Bidder has to takes all responsibilities and compensates for all related damages.			
	Postspone, cancel bidding result, and forbid the Bidder to participate in any bid in accordance with the Laws if the bidder is detected/revealed and informed by the authorized organization that the supplied equipment poses dangers or unsafety to telecoms infrastructure.		3	3
8	Delivery Completion time for each PO: all shipments to the End-User's sites shall be made no later than 70 days from the Contract/PO Signing Date (time of delivery shall not include the duration of Buyer doing customer clearance for the Supplies).		3	3
9	All goods offered by the bid for the tender package must be manufactured at least 2025 . The RAN system shall be offered with the latest hardware, software release (tested, approved and commercialized). Bidder must provide related documents such as roadmap, product life cycle,....		2	2
10	All related services (including project management fee) are requested to be offered in site/cell unit.		2	2
11	The offered RAN System shall comply with 3GPP R15 for 4G_LTE advanced and R18 for 5G-NR, capable of supporting 3GPP standards R18 and later version		3	3
12	The RAN system shall be offered with the latest software release support multi band, multi technology following VNPT current deployment (3G WCDMA/4G LTE/5G NR, tested, approved and commercialized). In addition, the Bidder must include an estimate schedule for future releases for a period of two years.		3	3
13	The Bidder must commit to adjust 4G License (BW, Hardware activation code, MIMO, Power, VoLTE, DL/UL throughput...) - if any, 5G License (BW, Hardware activation code, Massive MIMO DL/UL Layer, Power, VoNR, DL/UL throughput...), among eNodeBs - if any/gNodeBs in the system supplied whenever receiving a request from VNPT. VNPT can adjust or the Bidder supports without any conditions.		3	3

14	The offered equipment must be compliant with Vietnam regulation: QCVN 47:2015/BTTTT (National technical regulation on radio spectrum and radiation of Radio Telecommunications Equipments), QCVN 18: 2022/BTTTT (National technical regulation on Electromagnetic Compatibility for Radio Equipment), 13/2023/TT-BTTTT (3560-4000MHz frequency spectrum planning for Vietnam's IMT public terrestrial mobile communication system issued on 23 November 2023).		3	3
15	The Bidder's radio equipment must compliant with Vietnam's 5G spectrum planning and has been commercially deployed globally. The Bidder must: + Present signed contract or confirmation letter signed by CTO/CEO or an authorized representative from at least one telecom operator from G7 countries for reference confirming that the Bidder has supplied at least 3,000 (three thousand) 5G sites with continuous 3700-3900 MHz frequency range; + Or the Bidder's 5G equipment operating at 2600 MHz or 3700-3900 MHz frequency has completed the technical testing phase and provided services to customers on VNPT's network and was certified to meet the requirements before the bid closing time. + Or present signed contract for supplying 5G radio system equipment in 3700-3900 MHz frequency range to VNPT		3	3
16	In case the new gNodeB can run ENDC with existing eNodeBs of any other providers, the Bidder must present: + Confirmation letter signed by CTO/CEO or an authorized representative from at least one telecom operator from G7 countries for reference confirming that new gNodeB can run ENDC with other provider's eNodeBs with the scale of gNodeBs being equal to or greater than scale of the new gNodeBs provided in this bid package, and + Confirmation letter signed by authorized representative from current eNodeB provider confirming that new gNodeB can run ENDC with their eNodeBs (including those equivalent to VNPT's currently deployed eNodeBs in both hardware and software) for long-term operation. The Bidder that does not provide Confirmation letter must supply eNodeBs to run ENDC with gNodeBs	Follow the detailed requirements in article 3. Scope and requirement for 4G/5G ENDC, in Chapter V	3	3
	B. TECHNICAL REQUIREMENTS		950	850
	I. REQUIREMENT FOR SUPPLIED GOODS		200	180
	I.1. Engineering and Designing		20	
	1. Production qualifications and Pre-installation site survey	Follow II.1.1.1 and II.1.1.2	10	
	2. Designing and Engineering	Follow II.1.1.3	10	
	I.2. Procuring, Product Supplying and Services		180	
	1. Radio Base Station equipment (gNodeB)	Follow II.1.2.1	50	
	2. Management system	Follow II.1.2.2	30	
	3. Installation accessories	Follow II.1.2.3	20	
	4. Software, Rights to use and Features	Follow II.1.2.4	50	
	5. Implementation and services	Follow II.1.2.5	30	
	II. OTHER TECHNICAL REQUIREMENTS		750	670
	II.1. General requirements		100	90
	1. Roadmap and Network Evolution	Follow II.2.1.1	15	

	2. gNodeB Architecture and Configuration	Follow II.2.1.2	15	
	3. RAN Design and Upgrade	Follow II.2.1.3	15	
	4. Inter-working Function	Follow II.2.1.4	15	
	5. RAN Transport	Follow II.2.1.5	10	
	6. Synchronization	Follow II.2.1.6	10	
	7. IOT (interoperability tests)	Follow II.2.1.7	5	
	8. Self-Optimizing Network (SON)	Follow II.2.1.8	10	
	9. Environmental Requirements	Follow II.2.1.9	5	
	II.2. 5G-NR RAN REQUIREMENTS		600	540
	1. gNodeB hardware requirements		200	
	1.1. General	Follow II.2.2.1.1	100	
	1.2. Baseband	Follow II.2.2.1.2	50	
	1.3. Radio Units	Follow II.2.2.1.3	50	
	2. 5G-NR Functionality Requirements		400	
	2.1. Architecture	Follow II.2.2.2.1	30	
	2.2. Software Functionalities	Follow II.2.2.2.2	30	
	2.3. Open RAN and Cloud RAN	Follow II.2.2.2.3	60	
	2.4. Interworking with LTE	Follow II.2.2.2.4	30	
	2.5. Voice over NR	Follow II.2.2.2.5	40	
	2.6. RAN Slicing	Follow II.2.2.2.6	30	
	2.7. RAN sharing	Follow II.2.2.2.7	30	
	2.8. Dual Connectivity and Carrier Aggregation	Follow II.2.2.2.8	40	
	2.9. Dynamic Spectrum Sharing	Follow II.2.2.2.9	30	
	2.10. MIMO and Beamforming	Follow II.2.2.2.10	20	
	2.11. QoS management	Follow II.2.2.2.11	30	
	2.12. Security architecture and procedure	Follow II.2.2.2.12	30	
	II.3. OPERATION AND MAINTENANCE CENTRE		50	40
	1. FUNTION REQUIREMENT		20	
	1.1 General requirement	Follow II.2.3.1.1	3	
	1.2 Configuration Management	Follow II.2.3.1.2	3	
	1.3 Database Handling	Follow II.2.3.1.3	3	
	1.4 Software Management	Follow II.2.3.1.4	3	
	1.5 Fault Management	Follow II.2.3.1.5	3	
	1.6 Performance Management	Follow II.2.3.1.6	3	
	1.7 Quality Management	Follow II.2.3.1.7	2	
	2. HARDWARE REQUIREMENT		10	
	2.1 Functional architecture.	Follow II.2.3.2.1	5	
	2.2. Hardware architecture	Follow II.2.3.2.2	5	
	3. SOFTWARE REQUIREMENT		18	
	3.1. Software Architecture	Follow II.2.3.3.1	4	
	3.2. Security Management	Follow II.2.3.3.2	4	
	3.3. Interfaces and Connections	Follow II.2.3.3.3	3	
	3.4. Upgrade and Expansion	Follow II.2.3.3.4	4	
	3.5. Redundancy and Reliability	Follow II.2.3.3.5	3	
	4. OTHER REQUIREMENTS	Follow II.2.3.4	2	
	TOTAL		1000	900

SECTION 4. FINANCIAL EVALUATION CRITERIA

The Evaluated price method includes following steps:

No.	Contents	Note
1	Determine bid price	(excluding taxes, fees and charges)
2	Correct errors	Note (1)
3	Adjust deviation	Note (2)
4	Determine bid price after error correction and adjustment of deviation, and minus (-) discount (if any);	
5	Determining the evaluated price: $G_{DG} = G \pm \Delta_G + \Delta_{UD}$ In which: * $G = (\text{bid price} \pm \text{value of errors} \pm \text{value of deviations}) - \text{value of discounts (if any)}$ * Δ_g denotes value of elements embedded on the same level for the life circle of goods: Δ_g: Power consumption (of all gNodeB and eNodeB - if bidder must supply – as required in Chapter V) • <i>Number of years of goods' life cycle: power consumption in 5 years</i> • <i>Power consumption = $P * 5 * 365 * 24 * 2.204,0655$ VND (before tax). Therein:</i> • <i>P: Daily average power consumption as required in Chapter V - II.2.1.2</i> • <i>Unit price of 1kWh is 2.204,0655 VND (before VAT – according to clause 2 – Decision 1279/QĐ-BCT, date 19/05/2025)</i> * Δ_{UD} denotes value that must be added if the evaluated subject is not entitled to any preference indicated in ITB Section 28	
6	Rank bidders: the Bidder having the lowest evaluated bid price after error correction and adjustment of deviation and minus (-) discount (if any) and plus (+) value of preference (if any) shall be ranked the first.	(excluding taxes, fees and charges)

(1), (2) Carry out error correction and deviation adjustment (if any) as prescribed in Article 31, Article 68 of the Decree No. 214/2025/ND-CP (if any);

CHAPTER IV. BIDDING FORMS

Form No.01A.	Application letter (For Bidder without discount proposal or Bidder with discount proposal in separate Letter of Discount);
Form No.01B.	Application letter (For Bidder with discount proposal in Application Letter);
Form No. 02.	Power of Attorney;
Form No. 03.	Joint Venture Agreement;
Form No. 04A.	Bid Security (applicable to single bidder)
Form No. 04B.	Bid Security (applicable to joint venture bidder)
Form No. 05A.	Similar performed contracts;
Form No. 05B.	Report on Manufacturing Capability;
Form No. 06A.	Proposal of key Personnel;
Form No. 06B.	Professional resume of key personnel;
Form No. 06C.	Qualification record;
Form No. 07.	History of Nonperforming Contracts Occurring as a Result of Contractor fault
Form No. 08.	Bidder's financial situation;
Form No. 09A.	Scope of work for sub-contractors;
Form No. 10A.	Bidder information sheet;
Form No. 10B.	JV Member Information Sheet.
Form No. 11.	Summary of Bid Price
Form No. 11(a1).	Price Schedule for Goods manufactured, processed overseas
Form No. 11(a2).	Price Schedule for Goods manufactured, processed in domestic country or Goods manufactured, processed overseas and have been imported and offered in Vietnam
Form No. 11(b).	Price Schedule for related Services
Form No. 15A.	List of Domestic Production cost for Preferential goods

APPLICATION LETTER ⁽¹⁾

(For Bidder without discount proposal or Bidder with discount proposal in separate Letter of Discount)

Date: ____ *[note down date/ month/ year]*

Package: ____ *[note down bidding package name referred in Invitation for Bids, BDs]*

Project: ____ *[note down project name]*

Invitation letter number: ____ *[note down Invitation letter number for limited bidding only]*

To: ____ *[note down full and exact name of the Investor]*

After thorough consideration of the Bidding Documents and its amendment for the Bid package No. ____ *[note down No. of written amendment (if any)]* which we have received, we, ____ *[note down name of Bidder]*, commit to perform the Bid Package ____ *[note down name of Bid Package]* in accordance with the requirements in Bidding Documents with total offered amount of ____ *[show value in number, words and currency of the Bids]* ⁽²⁾ and attached Price Schedule.

The Bid package implementation time is ____ *[note down implementation time for all works according to requirements of Bidding Documents]* ⁽³⁾.

We commit:

1. Not to be in the process of dissolution or having Business registration certificate, cooperative registration certificate, union of cooperatives registration certificate or cooperative group registration certificate revoked; not falling into a case of insolvency specified by the bankruptcy law (For business household: not being in the process of operation termination nor having its business household registration certificate revoked);
2. Not to infringe the regulations on ensuring competitiveness in procurement.
3. Has fulfilled tax obligations of the latest fiscal year compared to the deadline for submission of Bids.
4. Not in the period of being banned from bidding in accordance with the Procurement Law.
5. Not being examined for penal liability (For business household: its head is not being examined for penal liability).
6. Within 03 years before the bid closing time, does not have personnel (signed a labour contract with the bidder at the time the personnel committed the violation) whom is convicted by the Court of violating regulations on bidding that cause serious consequences

according to the provisions of Criminal Law for the purpose of facilitating that bidder to win the bid selection.

7. Not to carry out acts of corruption, bribery, bid-rigging, obstructing and infringement of other provisions of the Procurement law when attending this Bid package.

8. To declare earnest information in this Bid.

9. On the circumstance that we are the successful bidder, the Bids and additional documents, clarification documents under the Bids shall form a binding agreement between the two parties until the contract is signed.

10. If our Bid is accepted, we commit to perform our obligations covering contract performance security set forth in Item 37 ITB this BD.

This Bid Proposal shall be valid within _____⁽⁴⁾ days, from the date _____ month _____ year _____⁽⁵⁾

Bidder's legal representative⁽⁶⁾

[Name, title, signature and seal⁽⁷⁾]

Note:

(1) Bidder's attention required: the Application Letter must be written in full and with accurate information about the name of the Investor, the Bidder, the effective time of the Bids, and signed, sealed by the legal representative of the Bidder.

(2) Bid price stated in the Application Letter must be specified and fixed in number, in words and consistent with total price recorded in Summary of Bid Price. Bidder may not offer varying bid price or attach detrimental conditions for the Investor. Should the Bid package is divided into independent Parts, Bidder is expected to quote price for each Part and the total price for all Parts which they participate. If Bidding Documents allows for quotation in different currencies, Bidder must specify values of each currency in number and in words.

(3) Bid package implementation time as stipulated in the Application Letter must be compliant with the Technical proposal and delivery schedule, service implementation (if any) as stipulated in the Bids.

(4) Note down numbers of days in validity as stipulated in **BDS 17.1**. Effective time of Bids is calculated from the Bid closing date to the last effective date as stipulated in Bidding Documents. From Bid closing time to the end of 24 hours of the Bid closing date is counted as 1 day.

(5) Note down the closing date as stipulated in **ITB 19.1**.

(6) In case the legal representative of the Bidder grants authority to subordinate to sign Application Letter, Power of Attorney in accordance with Form 02 of this Chapter must be enclosed; in case in the company charter or in other related documents with assignment of responsibilities to subordinate to sign Application Letter, such documents must be enclosed (Power of Attorney in accordance with Form 02 of this Chapter may not be required). Should Bidder participate as Co-Bidder, Application Letter must be signed by the legal representative of each and every Joint Venture member, unless Joint Venture Agreement as Form No. 03 of this Chapter states that an appointed member of the Joint Venture shall sign the Application

Letter. If each member of Joint Venture has authorized to sign the Application Letter, they are to perform as independent Bidder. If Bidder wins the bid, it must present notarized copies of such documents to the Investor prior to contract signing. In case initially declared information is inaccurate, the Bidder shall be considered an infringing **ITB 4**.

(7) Provided that Foreign Bidder has no stamp, such Bidder must submit confirmation from a competent authority certifying that Application Letter and other documents are duly signed by the representative of the Bidder.

APPLICATION LETTER ⁽¹⁾

(For Bidder with discount proposal in Application Letter)

Date: ____ *[note down date/ month/ year]*

Package: ____ *[note down bidding package name referred in Invitation for Bids, BDs]*

Project: ____ *[note down project name]*

Invitation letter number: ____ *[note down Invitation letter number for limited bidding only]*

To: ____ *[note down full and exact name of the Investor]*

After thorough consideration of the Bidding Documents and its amendment for the Bid package No. ____ *[note down No. of written amendment (if any)]* which we have received, we, ____ *[note down name of Bidder]*, commit to perform the Bid Package ____ *[note down name of Bid Package]* in accordance with the requirements in Bidding Documents with total offered amount of ____ *[show value in number, words and currency of the Bids]* ⁽²⁾ and attached Price Schedule.

We commit to deduct from total amount of Bid quoted price a discount of: ____ *[show discount amount in number, words and currency of the Bids]* ⁽³⁾.

Quoted price after discount is: ____ *[show value in number, words and currency of the Bids]*.

The Bid package implementation time is ____ *[note down implementation time for all works according to requirements of Bidding Documents]* ⁽⁴⁾.

We commit:

1. Not to be in the process of dissolution or having Business registration certificate, cooperative registration certificate, union of cooperatives registration certificate or cooperative group registration certificate revoked; not falling into a case of insolvency specified by the bankruptcy law (For business household: not being in the process of operation termination nor having its business household registration certificate revoked);

2. Not to infringe the regulations on ensuring competitiveness in procurement.

3. Has fulfilled tax obligations of the latest fiscal year compared to the deadline for submission of Bids.

4. Not in the period of being banned from bidding in accordance with the Procurement Law.

5. Not being examined for penal liability (For business household: its head is not being examined for penal liability).

6. Within 03 years before the bid closing time, does not have personnel (signed a labour contract with the bidder at the time the personnel committed the violation) whom is convicted by the Court of violating regulations on bidding that cause serious consequences according to the provisions of Criminal Law for the purpose of facilitating that bidder to win the bid selection.

7. Not to carry out acts of corruption, bribery, bid-rigging, obstructing and infringement of other provisions of the Procurement law when attending this Bid package.

8. To declare earnest information in this Bid.

9. On the circumstance that we are the successful bidder, the Bids and additional documents, clarification documents under the Bids shall form a binding agreement between the two parties until the contract is signed.

10. If our Bid is accepted, we commit to perform our obligations covering contract performance security set forth in Item 37 ITB this BD.

This Bid Proposal shall be valid within _____⁽⁵⁾ days, from the date _____ month _____ year _____⁽⁶⁾

Bidder's legal representative⁽⁷⁾

[Name, title, signature and seal⁽⁸⁾]

Note:

(1) Bidder's attention required: the Application Letter must be written in full and with accurate information about the name of the Investor, the Bidder, the effective time of the Bids, and signed, sealed by the legal representative of the Bidder.

(2) Bid price stated in the Application Letter must be specified and fixed in number, in words and consistent with total price recorded in Summary of Bid Price. Bidder may not offer varying bid price or attach detrimental conditions for the Investor. Should the Bid package is divided into independent Parts, Bidder is expected to quote price for each Part and the total price for all Parts which they participate. If Bidding Documents allows for quotation in different currencies, Bidder must specify values of each currency in number and in words.

(3) Specify whether the discount will be applied for the whole bid package or a specific part or any part, item (specify part of work to be discounted).

(4) Bid package implementation time as stipulated in the Application Letter must be compliant with the Technical proposal and delivery schedule, service implementation (if any) as stipulated in the Bids.

(5) Note down numbers of days in validity as stipulated in **BDS 17.1**. Effective time of Bids is calculated from the Bid closing date to the last effective date as stipulated in Bidding Documents. From Bid closing time to the end of 24 hours of the Bid closing date is counted as 1 day.

(6) Note down the closing date as stipulated in **ITB 19.1**.

(7) In case the legal representative of the Bidder grants authority to subordinate to sign Application Letter, Power of Attorney in accordance with Form 02 of this Chapter must be enclosed; in case in the company charter or in other related documents with assignment of responsibilities to subordinate to sign Application Letter, such documents must be enclosed (Power of Attorney in accordance with Form 02 of this Chapter may not be required). Should Bidder participate as Co-Bidder, Application Letter must be signed by the legal representative of each and every Joint Venture member,

unless Joint Venture Agreement as Form No. 03 of this Chapter states that an appointed member of the Joint Venture shall sign the Application Letter. If each member of Joint Venture has authorized to sign the Application Letter, they are to perform as independent Bidder. If Bidder wins the bid, it must present notarized copies of such documents to the Investor prior to contract signing. In case initially declared information is inaccurate, the Bidder shall be considered an infringing **ITB 4**.

(8) Provided that Foreign Bidder has no stamp, such Bidder must submit confirmation from a competent authority certifying that the signatures in Application Letter and other documents are duly signed by the representative of the Bidder.

POWER OF ATTORNEY⁽¹⁾

____ Date ____ month ____ year

I am _____ [insert name, ID/passport number, position of bidder's legal representative], the legal representative of _____ [insert name of bidder] at _____ [insert address of bidder] hereby authorizes _____ [insert name, ID/passport number, position of authorized person] to perform the following tasks during the participation in the process of bidding for _____ [insert name of the procurement] of _____ [insert name of the project] held by _____ [insert name of the Investor]:

[- Sign the Application letter of Technical Proposal and Financial Proposal;

- Sign the Joint venture agreement (if any);

- Sign documents in communication with the Investor during the bidding process, including the request for Clarification of Bidding Documents and Bids; sign requests for bid withdrawal, modification or substitution of Technical Proposal or Financial Proposal;

- Participate in contract negotiation and conclusion;

- Sign complaint letter (if any);

- Sign contract with the Purchaser if the bidder is successful] (2).

The authorized person only performs the tasks within the scope of authorization of a legal representative of _____ [insert name of bidder]. _____ [insert name of bidder's legal representative] is totally responsible for the tasks performed by _____ [name of authorized person] within the authorization scope.

The Power of Attorney is effective from _____ [insert date] to _____ [insert date]⁽³⁾ and is made into _____ copies with equal authentic value. _____ copies are kept by the authorizer, and _____ copies are kept by the authorized person.

Authorized person

[Full name, position, signature and stamp (if any)]

Authorizer

[Full name, position, signature and stamp of the legal representative]

Notes:

(1) The original of the Power of Attorney shall be sent to the Investor together with the Application letter. The Bidder's legal representative may authorize their deputies, subordinates, directors of branches, and heads of representative offices of the

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Bidder to perform the tasks on behalf of the Bidder. The authorized person may use the seal of the Bidder or their seal. The authorized person may not authorize another person.

(2) The scope of authorization shall include one or multiple tasks above.

(3) Insert the effective date and expiration date of the Power of Attorney in conformity with the bidding process.

A handwritten signature in blue ink, located in the bottom right corner of the page. The signature is stylized and appears to be a combination of letters and a flourish.

JOINT VENTURE AGREEMENT ⁽¹⁾

____ Date ____ month ____ year

Procurement: ____ [insert name of the procurement package]

Project's name: ____ [insert the project's name]

Pursuant to⁽²⁾ ____ [Law on Bidding No 22/2023/QH15, No 90/2025/QH15 approved by Vietnam National Assembly];Pursuant to⁽²⁾ ____ [the Government's Decree No. 214/2025/NĐ-CP dated August 04, 2025 Detailing a number of articles of and measures to implement the Law on bidding regarding contractor selection]

In response to Bidding Documents for ____ [insert name of procurement package] dated ____ [insert date written on the Bidding Documents];

Representatives of signatories to the joint venture agreement include:

Name of joint venture member ____ [insert name of each joint venture member]

Mr./Ms. _____

Position: _____

Address: _____

Phone number: _____

Fax: _____

Email: _____

Account: _____

TIN: _____

Power of Attorney No. ____ dated ____ (in case of authorization).

Parties (hereafter referred to as "members") have reached a consensus on entering into a joint venture agreement with the following contents:

Article 1. General principles

1. Members voluntarily establish this joint venture to participate in the process of bidding for ____ [insert name of procurement package] of ____ [insert project name].

2. Official name of the joint venture used in every transaction related to the procurement: _____ *[insert the agreed name of the joint venture]*.

3. Every member is committed not to unilaterally participate or establish a joint venture with another member to participate in this procurement. If awarded the contract, no member is entitled to refuse to fulfill the duties and obligations prescribed in the contract. Any member of the joint venture that refuses to perform their duties as agreed must:

- *Pay damages to other parties in the joint venture;*
- *Pay damages to the Purchaser as prescribed by the contract;*
- *Be subject to other disciplinary actions* _____ *[specify the action].*

Article 2. Division of responsibilities

All members unanimously to undertake joint and separate responsibility to execute _____ *[insert name of procurement package]* of _____ *[insert project name]* as follows:

1. Lead member of the joint venture:

All parties unanimously authorize _____ *[insert name of a party]* as the Lead member of the joint venture who represents the joint venture to perform the following tasks ⁽³⁾:

- [- Sign the Application letter of Technical Proposal or Financial Proposal;*
- Sign documents with the Investor during the short listing processing, including the request for Clarification of Bidding Documents and Bids; sign requests for bid withdrawal, modification or substitutions;*
- Provide Bid Security for the joint venture;*
- Participate in contract negotiation and conclusion;*
- Sign complaint letter (if any);*
- Perform other tasks except for contract conclusion: _____ [specify other tasks (if any)].*

2. Tasks of joint venture members are specified in the table below⁽⁴⁾:

No.	Name	Tasks	Proportion of total bid
1	Name of Lead member	- _____ - _____	- _____ % - _____ %
2	Name of second member	- _____	- _____ %

		- ____	- ____%
....			
Total		All tasks of the procurement	100%

Article 3. Effect of Joint venture agreement

1. The Joint venture agreement takes effect from the date of signing.

2. The Joint venture agreement expires in the following cases:

- All parties have fulfilled their duties and finalized the contract;

- The agreement is unanimously terminated by all parties;

- The joint venture is not awarded the contract;

- The bidding for _____ *[insert name of the procurement package]* of _____ *[insert the project name]* is cancelled as notified by the Investor.

The joint venture agreement is made into _____ copies with equal legal value, each party keeps _____ copies.

LEGAL REPRESENTATIVE OF LEAD MEMBER

[Full name, position, signature and stamp]

LEGAL REPRESENTATIVE OF JOINT VENTURE MEMBER

[Full name, position, signature and stamp of each member]

Notes:

(1) Depending on size and nature of the procurement, this Joint venture agreement may be amended. If the procurement is divided into independent lots, the Joint venture agreement shall specify names and numbers of lots in which the joint venture participates, and clarify joint and separate responsibilities of every joint venture member.

(2) Provide updated legal normative documents in force.

(3) Scope of authorization includes one or multiple tasks above.

(4) The Bidder shall specify detailed tasks and estimate equivalent value of tasks performed by every joint venture member, joint and separate responsibilities of member, including the Lead member.

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BID SECURITY⁽¹⁾**(Applicable to single Bidder)****Beneficiary:** ____ *[insert name and address of the Procuring Entity]***Date of issuance:** ____ *[insert date of issuance]***BID GUARANTEE No.** ____ *[insert reference number of the Bid Guarantee]***Guarantor:** ____ *[insert name and address of issuing bank, if it is not written in the title]*

We have been informed that _____ *[name of the Bidder]* (hereinafter called "the Bidder") has submitted to participate in the bid for the execution of _____ *[name of procurement package]* of _____ *[insert project name]* under Invitation to Bid No. *[insert reference number of the Invitation to Bid]*.

We hereby undertake with the Beneficiary that we guarantee for the Bidder to participate in the bid for this procurement with an amount of _____ *[insert amount in figures, in words and currency]*.

This Guarantee takes effect within ____ ⁽²⁾ days, from _____ *[insert date]* ⁽³⁾.

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

1. After the bid closing time and during the validity period of the Bid, the Bidder has a written document withdrawing the Bid or refusing to perform one or more of the proposed works in the Bid as required by the Bidding Documents;

2. The contractor commits a violation of the provisions of Article 16 of the Law on Bidding or violates the law on bidding, leading to the cancellation of the bid according to the provisions of Point d and Point dd, Clause 1, Article 17 of the Law on Bidding;

3. The contractor fails to implement measures to ensure contract performance as prescribed in Article 68 of the Law on Bidding;

4. Fails or refuses to negotiate the contract within 10 days, from the date on which the notification of contract negotiation sent by the Investor is received, excluding force majeure events;

5. The Bidder fails or refuses to conclude the contract within 20 days after receiving the notice of contract award from the Investor, except for force majeure;

6. The Bidder fails or refuses to sign the contract within 20 days after concluding the contract, except for force majeure.

If the Bidder is selected, this Guarantee shall expire when the Bidder sign the contract and furnishes the Performance Security to the beneficiary as agreed in the contract.

If the Bidder is not the successful Bidder, this Bid Security shall be invalidated promptly after we receive the copy of the written notification of contract award or within 30 days after the expiration of the Bid, whichever comes first.

Any claim under this guarantee must be submitted to our office before or on the last day of validity of this guarantee. We unconditionally and irrevocably undertake to pay to the Investor any sum within the limit of the above guarantee amount upon claim by the Investor.

Legal representative of Bank

*[Full name, position, signature
and stamp]*

Notes:

(1) Applicable to Bid Security in the form of Bid Guarantee issued by a credit institution or a branch of foreign bank established under Vietnamese law.

(2) Insert as prescribed in **BDS 18.2**.

(3) Insert the bid closing date as prescribed in **ITB 19.1**.

BID SECURITY ⁽¹⁾
(Applicable to joint venture Bidder)

Beneficiary: ____ *[insert name and address of the Procuring Entity]*

Date of issue: ____ *[insert date of issue]*

BID GUARANTEE No. ____ *[insert reference number of the Bid Guarantee]*

Guarantor: ____ *[insert name and address of issuing bank, if it is not written in the title]*

We have been informed that ____ *[insert name of the Bidder]*⁽²⁾ (hereinafter called "the Bidder") has submitted to participate in the bid for the execution of ____ *[insert name of procurement package]* of ____ *[insert project name]* under Invitation to Bid.

We hereby undertake to guarantee for the Bidder to participate in the bid for this procurement with an amount of ____ *[insert amount in figures, in words and currency]*.

This Guarantee takes effect within ____⁽³⁾ days, from ____ *[insert date]*⁽⁴⁾.

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

1. After the bid closing time and during the validity period of the Bid, the Bidder has a written document withdrawing the Bid or refusing to perform one or more of the proposed works in the Bid as required by the Bidding Documents;

2. The contractor commits a violation of the provisions of Article 16 of the Law on Bidding or violates the law on bidding, leading to the cancellation of the bid according to the provisions of Point d and Point dd, Clause 1, Article 17 of the Law on Bidding;

3. The contractor fails to implement measures to ensure contract performance as prescribed in Article 68 of the Law on Bidding;

4. Fails or refuses to negotiate the contract within 10 days, from the date on which the notification of contract negotiation sent by the Investor is received, excluding force majeure events;

5. The Bidder fails or refuses to conclude the contract within 20 days after receiving the notice of contract award from the Investor, except for force majeure;

6. The Bidder fails or refuses to sign the contract within 20 days after concluding the contract, except for force majeure.

7. If any Joint Venture Partner ____ *[insert full name of the JV Party]* violates law, thus resulting in the forfeiture of its Bid Security as provided in Section 18.5 – ITB in the BD, the Bid Security of all JV Partners shall also be forfeited.

If the Bidder is selected, this Guarantee shall expire when the Bidder sign the contract and furnishes the Performance Security to the beneficiary as agreed in the contract.

If the Bidder is not the successful Bidder, this Bid Security shall be invalidated promptly after we receive the copy of the written notification of contract award or within 30 days after the expiration of the Bid, whichever comes first.

Any claim under this guarantee must be submitted to our office before or on the last day of validity of this guarantee. We unconditionally and irrevocably undertake to pay to the Investor any sum within the limit of the above guarantee amount upon claim by the Investor.

Legal representative of Bank

*[Full name, position, signature
and stamp]*

Notes:

(1) If the Bid Security is in breach of one of the following regulations: If its value is less than, or its validity period is shorter than, as required in Section 18.2 – ITB; the name of the beneficiary is incorrect; it is not the original one; it bears invalid signature; it is signed before the Procuring Agency issues BD; or it attaches unfavorable terms and conditions binding upon the Investor or the Procuring Agency, it shall be deemed invalid, this Bid Security is the irrevocable Bid Security.

(2) Name of the Bidder may be:

- name of the Joint Venture Party. For example, if the Joint Venture comprising Bidder A + B submits the Bid, insert “Joint Venture comprising Bidder A + B” as the name of the Bidder;

- Name of the JV Partner responsible for furnishing the Bid Security for the entire Joint Venture or other Joint Venture Partners. For example, if the Joint Venture Party A + B + C participates in the bidding pursuant to the Joint Venture Agreement whereunder the Bidder A furnishes the Bid Security for the entire Joint Venture, the

name of the Bidder shall be inserted as "Bidder A (on behalf of the Joint Venture involving Bidder A + B + C)"; whereunder Bidder B is assigned to furnish the Bid Security for itself and Bidder C, the name of the Bidder shall be inserted as "Bidder B (on behalf of Bidder B +C)";

- Name of the Joint Venture Partner furnishing its Bid Security severally.

- In case the joint venture agreement does not specifically assign the responsibility for performing the bid security of the members in the joint venture, but the total value of the bid security of the members of the joint venture has been performed, attached in the Bid, meets the requirements of the BD, it is still considered to meet the bid security value.

(3) Inserted as specified under the regulations on effective period laid down in Section 18.2 – **BDS**.

(4) Record the bid closing date as prescribed in IB . The validity period of the bid security is calculated from the bid closing date to the last effective date of the bid security (the end date of the bid security is on the last effective date of the bid security and does not necessarily have to be until the end of 24 hours of that day).

(5) In case the bid security lacks one or more commitments in the above commitment contents, it will be considered a disadvantageous condition for the Investor and the Inviting Party according to the provisions of Section 18.3 ITB and the letter of guarantee will be considered invalid.

SIMILAR CONTRACT PERFORMED BY THE BIDDER⁽¹⁾*(Intended for commercial Bidders)*Bidder's name: *[insert full name of the Bidder].*

Each contract should consist of the following particulars:

Name and reference number of the contract	<i>[insert full name and reference identification number of the contract]</i>		
Contract signing date	<i>[insert day, month, year]</i>		
Completion date	<i>[insert day, month, year]</i>		
Total contract amount	<i>[insert total contract amount and currency(ies)]</i>		Equivalent to VND or USD _____
Each Joint Venture Partner shall insert the summary of part of work it assumed and amount of portion of the contract it assumed	<i>[insert the summary of part of work that it undertook as a Joint Venture Partner]</i>	<i>[insert the ratio in percentage of the amount of the portion of contract that it assumed to total contract price; contract sum and currency(ies) already agreed upon]</i>	Equivalent to VND or USD _____
Project identification:	<i>[insert full name of the project under the contract in question]</i>		
Investor's name:	<i>[insert full name of the Investor under the contract in question]</i>		
Address: Telephone/fax: E-mail:	<i>[insert full current address of the Investor]</i> <i>[insert telephone and fax number, including country and region code]</i> <i>[insert e-mail address]</i>		
Description of similarities as defined in Section 2.1 of Chapter III ⁽²⁾			
1. Type of Goods	<i>[insert information as appropriate]</i>		

2. Regarding the amount of the contract that was performed	<i>[insert the actual amount of contract performed based on the amount of contract determined during the acceptance testing or contract termination process]</i>
3. Regarding size of performance	<i>[insert the size specified in the contract]</i>
4. Other specifications	<i>[insert other specifications where necessary]</i>

Notes:

Bidders should scrutinize the BD and propose different types of similar contracts to satisfy BD requirements.

(1) In case of Joint Venture, each JV Partner must fill out this Form. If a Bidder has multiple Contracts, insert each of these Contracts to fill out this Form.

(2) The Bidder only inserts similarities to the procurement requirements.

(3) If the amount of contract is not calculated in USD or VND, it must be converted into VND at the exchange rate specified in Section 2.1 of Chapter III for evaluation purposes.

REPORT ON MANUFACTURING CAPABILITY
(Intended for Bidders that are manufacturers)

Bidder's name: _____ *[insert full name of the Bidder]*.

Number of factories, production facilities (commonly called factories): _____
[insert the number of factories]

Each factory must be identified by the following particulars provided by the Bidder:

Factory's identification:	<i>[insert name of the Factory]</i>
Address:	<i>[insert the address of the Factory]</i>
Total investment:	<i>[Insert the amount]</i>
Rated capacity:	<i>[insert rated capacity]</i>
Real capacity:	<i>[insert real capacity determined in the latest year]</i>
Production standard:	<i>[insert the production standard in use, if any]</i>
Total personnel on duty:	<i>[insert total personnel working at the Factory]</i>

Note:

In case of Joint Venture, each JV Partner must fill out this Form.

TABLE OF PROPOSED KEY PERSONNEL

The Bidder shall include key personnel in its Bid as provided in subparagraph a of Section 2.2 in Chapter III and evidence of the capacity of engaging such key personnel in performing the Contract awarded. Key personnel may be permanently contracted or temporarily employed by the Bidder. If key personnel that the Bidder includes in its Bid is not responsive to BD requirements, the Investor shall permit the Bidder to provide modifications, clarifications (addenda) or changes to key personnel to ensure conformance to BD requirements within a reasonable time that is not less than 03 working days. The Bidder is given the only one chance to replace a staff member not responsive to the requirement. Where the Bidder has no personnel replacement conforming to BD requirements, its Bid shall be rejected or disqualified. The Bidder's provision of untrue information about key personnel shall be evaluated as fraudulent practice, resulting in the Bidder's failure to obtain permission for personnel substitution and disqualification.

No.	Full name	Title of position
1	<i>[The Bidder selects key personnel from its own Data Sheet available on the System]</i>	<i>[specify the title of position that it holds in the Contract]</i>
2		
...		

Form No. 06B**PROFESSIONAL RESUME OF KEY PERSONNEL**

Bidder shall provide information as required below and provide notarized copies of related Diplomas, Certificates.

Job position	Name:	Date of birth:
Personnel Information	Qualification:	
	Name of employer:	
	Address of employer:	
Current job	Tel:	Contact (Head of department / Human resources officer):
	Fax:	E-mail:
	Title:	Years of working for current employer:

TECHNICAL EXPERIENCE AND QUALIFICATIONS⁽¹⁾

No.	Name of key personnel	From (date)	To (date)	Company / Project / Title / Relevant managerial and professional experience
1	[name of first key personnel]	...	...	...
2				
...	...			

(1) List the expert's work history in chronological order, without listing work done that is inappropriate or unrelated to the requested work.

INCOMPLETED CONTRACT (GOODS SUPPLYING CONTRACT, EPC CONTRACT, EP CONTRACT, PC CONTRACT, TURNKEY CONTRACT) DUE TO BIDDER'S FAULT IN THE PAST ⁽¹⁾

Name of Bidder: _____

Date: _____

Name of member of Joint Venture (if any): _____

Incompleted goods supplying Contract, EPC Contract, EP Contract, PC Contract, turnkey Contract due to bidder's fault in the past as stipulated in item 2.1 Chapter III

☐ Having no or one incompleted goods supplying Contract, EPC Contract, EP Contract, PC Contract, turnkey Contract due to bidder's fault from 01st January.....[year] as stipulated in evaluation criteria 1 in Table of capability and experience evaluation criteria – Item 2.1 Chapter III.

☐ Having two or more incompleted goods supplying Contract, EPC Contract, EP Contract, PC Contract, turnkey Contract due to bidder's fault from 01st January.....[year] as stipulated in Table of capability and experience evaluation criteria – Item 2.1 Chapter III.

Year	Incomplete work of contract	Description of contract	Total contract value (value, currency, exchange rate, equivalent value in USD)
		Description of contract: _____ Investor: _____ Address: _____ Reason for contract incomplection: _____	

Note:

(1) Bidders must declare all incompleted goods supplying Contract, EPC Contract, EP Contract, PC Contract, turnkey Contract due to bidder's fault in the past accurately and truthful; If the Investor find that any Bidder has the incompleted goods supplying Contract, EPC Contract, EP Contract, PC Contract, turnkey Contract due to bidder's fault in the past but not declare, it shall be considered as fraud and the Bidder shall be eliminated. For Joint Venture, each member of Joint Venture must fill in this form

BIDDER'S FINANCIAL SITUATION ⁽¹⁾

Name of the Bidder: _____

Date: _____

Name of the member of Joint Venture (if any): _____

Bidder's financial year from date ____ month ____ to date ____ month ____ (<i>Bidder fill in this content</i>)			
Financial data for the most recent years as required by Bidding Documents			
	Year 1:	Year 2:	Year 3:
Total assets			
Total liabilities			
Net asset value			
Total Revenues (VAT excluded)			
Average annual revenue (VAT excluded) ⁽²⁾			
Profits before taxes			
Profits after taxes			

Note:

(1) If Co-Bidding, each member of Joint Venture must declare under this form.

(2) In order to determine the average annual revenue (VAT excluded), the Bidder shall divide this total revenue (VAT excluded) by the number of years based on provided information.

Annual revenue is calculated as the total revenue in the financial statements for that year (VAT excluded).

Average annual revenue (VAT excluded) = Total annual revenue (VAT excluded) as stipulated in Bidding Documents/ the number of years.

In case of newly established bidder with insufficient year as stipulated in Bidding Documents, Average annual revenue (VAT excluded) shall be calculated on the number of years for which bidder has financial data.

Attached with this Form are copies of financial statements (Balance sheets including all related notes, and Business result report) for the years as indicated above, complying with the following condition:

1. All such documents reflect the financial situation of the Bidder or member of Joint Venture, NOT the financial situation of an associate such as parent company associated with a subsidiary or an associate company with the bidder or Joint Venture member.

2. Financial statements must be complete, including enough contents as regulated.

3. Financial statement must correspond to accounting periods already completed and attached with copy of one of following documents:

- Tax inspection- settlement record or equivalent document;
- Self- declaration tax sheet (VAT tax and company income tax) and certified by tax authority about time of submission or equivalent document;
- Documents prove that the Bidder has declared the electronics tax settlement or equivalent document;
- Written confirmation of tax administration agency about performing tax submission mandatory (for a whole year) or equivalent document;
- Auditing report;
- Other documents.

SCOPE OF WORK FOR SUB-CONTRACTORS ⁽¹⁾

No	Sub-Contractor Name ⁽²⁾	Scope of Work ⁽³⁾	Volume of Work ⁽⁴⁾	Estimated Value ⁽⁵⁾	Contract or Agreement with Sub-Contractor ⁽⁶⁾
1					
2					
3					
4					
...					

Note:

(1) Bidder fills in this Form in case of using Sub-Contractors for doing some part of bid package.

(2) Bidder specifies Names of Sub-Contractors. If Sub-Contractor names are not defined at the attending the Bid package, Bidder shall not fill in this column but fill in column "Scope of Work". Should Bidder is selected under this circumstance, mobilization of Sub-contractor shall require Investor's approval.

(3) Bidder specifies scope of work for Sub-Contractors.

(4) Bidder specifies volume of work for Sub-Contractors.

(5) Bidder specifies value (%) of Bid price attributed to Sub-Contractors.

(6) Bidder specifies Contract or Agreement No. and encloses the original or notarized copies.

**LIST OF SUBSIDIARY COMPANIES UNDERTAKING A PART OF THE
WORK OF THE BIDDING PACKAGE ⁽¹⁾**

No	Subsidiary companies name ⁽²⁾	Scope of Work in the Bidding package ⁽³⁾	Estimated Value % in Total Bid price ⁽⁴⁾	Note
1				
2				
...				

Note:

(1) In the event that Bidder participating in the bid is the parent company (for example, a Corporation) that mobilizes its subsidiary to perform a part of work of the Bidding package, Bidder must specify the part of work for these companies according to this Form. The evaluation of experience in performing similar contracts is based on the value and volume of work undertaken by the parent Company, subsidiary companies in the Bidding package. If Bidder is not the parent Company, this Form is not applicable.

(2) Specify the name of the subsidiary, member company.

(3) Specify Scope of Work undertaken by subsidiary, member company.

(4) Bidder specifies value (%) of Bid price attributed to subsidiary, member company.

BIDDER'S INFORMATION SHEET s

Date: _____

No and Name of the Bidding package: _____

Page _____ / _____ page

Name of Bidder: <i>[Bidder's name]</i>
<i>In case of Joint Venture, name of each member</i>
Place of business registration, activity: <i>[name of province/ city of place of business registration, activity]</i>
Year of establishing: <i>[year of establishing]</i>
Legal address of the Bidder: <i>[in place of register]</i>
Information of legal representative of the Bidder
Name: _____
Address: _____
Tel/fax: _____
Email: _____
1. Enclose the copy of one of these documents: Business Registration, Establishing Decision or equivalent documents issue by authority in the country where the Bidder is operating.
2. Present the Organization chart of the Bidder.

JOINT VENTURE MEMBER INFORMATION SHEET ⁽¹⁾

Date: _____

Serial number and name of procurement package: _____

Page _____ / _____ pages

Name of JV Bidder:
Name of JV member:
Country of Registration of JV Member:
Year of Establishment of JV Member:
Legal Address of JV member in Country of Registration:
Legal representative of JV member information Name: _____ Address: _____ Telephone/Fax: _____ Email Address: _____
1. Attach a copy of one of the following documents: Certificate of Incorporation, Establishment Decision or equivalent documents issued by competent agencies. 2. Diagram of organizational structure.

Notes:

(1) In case of joint venture, each JV member shall fill in this form.

The BoQ stipulated in ITB 13.5 must be separated into the following Templates:

Form No. 11.1

SUMMARY OF BID PRICE

No	Content	Bid price
1	Internationally produced/ processed goods	(M1)
2	Locally produced/ processed goods or Internationally produced/ processed goods which have been imported and offered for sale in Vietnam	(M2)
3	Related Services	(I)
	Total Amount of Bid Price (<i>Transferred to Application Letter</i>)	(M1) + (M2) + (I)

PRICE SUMMARY TABLE

Unit: USD/VND

Central provinces for the 2025-2026 period

No.	Items	Total Price
I	gNodeB	
1	Hardware (HW)	
2	Software (SW)	
		
	Total I	
II	OSS	
1	Hardware (HW)	
2	Software (SW)	
		
	Total II	
III	Other Equipment	
1		
2		
		
	Total III	
IV	Spare part	
1		
2		
		
	Total IV	
V	Services	
1		
2		
3		
4		
5		
6		
7		

	Total V	
VI	Total goods price excluding taxes, fees and charges (if any)	
VII	Total taxes, fees and charges (if any)	
VIII	Total bid price of goods including taxes, fees and charges (if any)	

The legal representative of the Bidder

[name and title, sign and stamp]

*** REQUIREMENTS:**

1. In each item, Bidder is requested to offer detailed descriptions including: manufacturer, country of origin, product code, quantity, unit price, total price, etc.
2. In the process of offering price of bidders:
 - + After discount (if any), the unit price of spare part must not be higher than unit price of main equipment in Bid quotation list.
 - + After discount (if any), the items have the same commodity code (Item code or product code or Part number ...) must have the same unit price.
 - + After discount (if any), the items with the same functionality and capability (hardware or software or features ...) must have the same unit price.
 - + In case of discount, bidder must show the total discount value of the package (before taxes and fees...)
4. The Bid shall be required to propose a detailed price to every card functionality.
5. VNPT has the right to buy the whole or a part of equipment with unlimited quantity for other projects of VNPT (if any) with the unit price after discount of this Bid.
6. Currency of Bid:
 - + Any costs arising inside Vietnam must be quoted in VND.

ce 

Form No. 11(a1)

BID PRICE OF INTERNATIONALLY PRODUCED/ PROCESSED GOODS

1	2	3	4	5	6	7	8	9
No.	List of Goods	Unit	Quantity	Year of manufacture	Origin, Marking, Label of Product	Unit Price	Amount (Column 4x6)	Taxes, fees and charges (if any)
1	gNodeB 3700MHz - 3 sector	site	160				A1	T1
2	Expanding the corresponding OSS system to support the operation and management of radio base station equipment within the scope above (*)	set	1				A2	T2
3								
n	Goods n th						An	Tn
	Total goods price excluding taxes, fees and charges (if any)						A = A1 + A2 + ...An	
	Total taxes, fees and charges (if any)							T = T1 + T2 + ...Tn

	Total bid price of goods including taxes, fees and charges (if any) (Switch to Price Summary Table)	M1 = A + T
--	--	------------

The legal representative of the Bidder
[name and title, sign and stamp]

Note:

In the column (1), (2), (3), (4) the Bidder records in accordance with list of goods specified in Section1, Part II - Scope of supply and Technical Requirements

Columns (5), (6), (7), (8): the Bidder offers. Bidder offers unit price at Column (7) as set forth in BDS 13.5, including all costs and expenses necessary for supplying goods as requirements of the Investor, excluding taxes, fees, charges (if any) in Column (9) and expenses for Relevant Service in Form No. 11 (b).

Column (9) consists of all taxes, fees, charges (if any).

Total value of tax, fees, and charges (if any) shall not be considered in the evaluation process to compare and rank Bidders. The proposed bidding price and the contract price must include the value of tax, fees, and charges (if any).

() Expanding existing Hardware/Software or supplying new Hardware/Software (depend on Bidder's technical solution) and Installation accessories (if any)*

Form No. 11(a2)

**BID PRICE OF LOCALLY PRODUCED/ PROCESSED GOODS OR INTERNATIONALLY PRODUCED/ PROCESSED
 GOODS, WHICH HAVE BEEN IMPORTED AND OFFERED FOR SALE IN VIETNAM**

1	2	3	4	5	6	7	8	9
No.	List of Goods	Unit	Quantity	Year of manufacture	Origin, Marking, Label of Product	Unit Price	Amount (Column 4x6)	Taxes, fees and charges (if any)
1							A1	T1
2							A2	T2
3								
4								
...								
n	Goods n th						An	Tn
		Total goods price excluding taxes, fees and charges (if any)					A = A1 + A2 + ...An	
		Total taxes, fees and charges (if any)						T = T1 + T2 + ...Tn
		Total bid price of goods including taxes, fees and charges (if any) (Switch to Price Summary Table)					M2 = A + T	

The legal representative of the Bidder
[name and title, sign and stamp]

Note:

In the column (1), (2), (3), (4) the Bidder records in accordance with list of goods specified in Section 1, Part II - Scope of supply and Technical Requirements

Columns (5), (6), (7), (8): the Bidder offers. Bidder offers unit price at Column (7) as set forth in BDS 13.5, including all costs and expenses necessary for supplying goods as requirements of the Investor, excluding taxes, fees, charges (if any) in Column (9) and expenses for Relevant Service in Form No. 11 (b).

Column (9) consists of all taxes, fees, charges (if any).

Total value of tax, fees, and charges (if any) shall not be considered in the evaluation process to compare and rank Bidders. The proposed bid-winning price and the contract price must include the value of tax, fees, and charges (if any).

(*) *Expanding existing Hardware/Software or supplying new Hardware/Software (depend on Bidder's technical solution) and Installation accessories (if any)*

Form No. 11(b)

COST BREAKDOWN OF SERVICES

No	Description of Service	Quantity	Unit	Location of implementation	Date of completion	Unit price	Amount	Taxes, fees and charges (if any)	Amount including taxes, fees and charges (if any)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(3)x(7)	(9)	(10)=(8)+(9)
1	Service for gNodeB								
1.1	Service for gNodeB: - Transportation (include loading/unloading and warehouse), insurance thereof for the Hardware, Spare Parts from the Vietnam port/airport to the End-User's Site where the Hardware is to be installed and insurance during the process installation, integration and commissioning to the date of PAC. - Site survey, network design, installation, database setting, commissioning	160	Site	Central provinces, Vietnam	Depends on VNPT's demand at the time of contract performance				

[illegible]

	(hardware/software), database setting, commissioning and integrating, put into service.									
3	24-months warranty for whole supplied goods			The implementation locations in chapter V. Scope of Supply and Technical Requirements						
Total amount of Bids; taxes, fees and charges (if any) excluded										
Total amount of taxes, fees and charges (if any)										
Total Amount of Bid price for Related services including taxes, fees, charges (if any) (Transferred to Summary of Bid price)										(I)

Note:

Columns (7), (8), (9) and (10) filled by Bidder.

LIST OF DOMESTIC PRODUCTION COST FOR PREFERENTIAL GOODS

Line Item No.	Description of Goods	Bid Prices of Goods specified in Bid	Amounts of all Taxes(2)	Domestic Production Costs	Percentage (%) of Domestic Production Costs
		(I)	(II)	G*	D(%) = G*/G Where: G = (I) - (II)
	(1)	(2)	(3)	(4)	(5)
1	1st Good				
2	2nd Good				
...	...				
n	nth Good				

Legal representative of Bidder
[name, title, sign and stamp]

Notes:

- Goods not subject to get the preferential duties shall not be completed this form. Bidder shall prepare any documentary evidence to prove that such tax amount and all import cost listed above had been paid on good.

PART II - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS

CHAPTER V. SCOPE OF SUPPLY AND TECHNICAL REQUIREMENT

SECTION 1. SCOPE OF SUPPLYING GOODS AND DELIVERY SCHEDULE

Scope of supplying and delivery schedule goods and related services shall be specified by the Investor in Bidding Documents and include description of Goods supplied as well as delivery schedule.

Information in this Item is to support Bidders in completing Price List following the corresponding forms in Chapter IV – Bidding Forms.

I. SCOPE OF SUPPLYING GOODS AND RELATED SERVICES

1. Scope of supplying goods

- 5G implementation architecture: Non-Standalone (NSA) Option 3x.
- The item, unit, volume, configuration and purchased licenses of 5G gNodeBs to be offered under the scope of this Procurement package are as below:

No.	Item	Unit	Quantity	Requirement	Description
1.	gNodeB 3700MHz sector - 3	site	160	1. Hardware: - BBU multi-mode. - 03 AAU 5G 3700MHz 64T64R. 2. License: - 5G: + 5G 3700MHz S1/1/1- massive MIMO 16 DL layer /4 UL layer; + 100MHz bandwidth/cell, 320W/cell; - 3.5Gbps total throughput per site. 3. Software, feature included. 4. Installation accessories included.	Follow to detailed requirement in Notes as below and Item II.1.2.1, II.1.2.3, II.1.2.4,
2.	OSS expansion (and related equipment – if any)	Set	01	Hardware, software (include license, feature) and installation accessories.	Follow to detailed requirement in Item II.1.2.2; II.1.2.3, II.1.2.4
3	Spare parts	Set	01		Follow to detailed requirement in Item II.1.2.8

Notes:

1. 5G licenses will be quoted in 10MHz steps in order to expand RF cell bandwidth, i.e 60MHz to 70/80/90/100MHz.

2. *Massive MIMO license will be quoted in steps in order to flexibly deploy 8 DL layer/16 DL layer.*
3. *5G RTU/licenses will be purchased based on the total RTU/licenses and could be adjusted flexibly among gNodeBs.*
4. *All hardware, software, license, features purchased under this Procurement package are perpetual ones.*
5. *Other items, such as connected user, VoNR user, can be used by VNPT based on supplied BBU hardware capacity without license/feature limitation from Bidder.*

2. Scope of supplying related services

No	Service description	Quantity	Unit	Place of Service performance	Date of Service Completion	Note
1	Service for gNodeB: - Transportation (include loading/unloading and warehouse), insurance thereof for the Hardware, Spare Parts from the Vietnam port/airport to the End-User's Site where the Hardware is to be installed and insurance during the process installation, integration and commissioning to the date of PAC. - Site survey, network design, installation, database setting, commissioning and integrating, put into service, Optimization and Fine tuning, KPI management.	160	Site	Vinaphone network	Depends on VNPT's demand at the time of contract performance	Follow to detailed requirement in Item II.1.2.5
2	Service for OSS (Expanding existing Hardware/Software or supplying new Hardware/Software) and other core elements: - Transportation (include loading/unloading and warehouse), insurance thereof for the Hardware, Spare Parts from the Vietnam port/airport to the End-User's Site where the Hardware is to be installed and insurance during the process installation, integration and commissioning to the date of PAC.	01	Set	Vinaphone network	Depends on VNPT's demand at the time of contract performance	Follow to detailed requirement in Item II.1.2.5

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	- Site survey, network design, installation or expansion (hardware/software), database setting, commissioning and integrating, put into service.						
3	Warranty service for whole supplied goods.	24	Month	Vinaphone network	Depends on VNPT's demand at the time of contract performance	Follow to detailed requirement in Item II.1.2.6	


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3. Scope and requirement for 4G/5G ENDC

- Bidder must supply software, ENDC Interworking features/license for 1920 4G cells of existing eNodeBs in the provinces under this bid package to run 5G NSA with 160 new gNodeBs, and unit price must be quoted per cell regardless 4G cell bandwidth/frequency band.

The number of ENDC licenses used for the 4G cosite and 4G neighbor sites will be specified by VNPT at the time of gNodeBs deployment.

(If Bidder must upgrade software of the existing 4G network to run ENDC with the new gNodeBs, the software upgrade cost shall be included in the bid price and shall be the responsibility of Bidder)

- If new gNodeB can run ENDC with existing eNodeBs, but Bidder is not the current eNodeB provider in the provinces under this bid package, Bidder shall be required to provide:
 - + confirmation letter signed by CTO/CEO or an authorized representative from at least one telecom operator from G7 countries for reference confirming that new gNodeB can run ENDC with other provider's eNodeBs with the scale of gNodeBs being equal to or greater than scale of the new gNodeBs provided in this bid package, and
 - + confirmation letter signed by authorized representative from current eNodeB provider confirming that new gNodeB can run ENDC with their eNodeBs (including those equivalent to VNPT's currently deployed eNodeBs in both hardware and software) for long-term operation.

If Bidder does not provide confirmation letters, it will shall be understood that new gNodeB can not run ENDC with existing eNodeBs (of any other providers), and Bidder must supply 04 (four) eNodeBs to run ENDC with one gNodeB (which means a total of 640 eNodeBs must be provided under this bid package) as specified below.

- If new gNodeB cannot run ENDC with existing eNodeBs, Bidder must provide:
 - + 01 (one) eNodeB 1800spaMHz 4T4R (excluding BBU; 3 RRUs dualband 1800/2100MHz; 3 LTE cells 20MHz 4T4R, at least 40w/port, this eNodeB will be configured to share BBU with new gNodeB), installation accessories and software, features, licenses to run ENDC with one gNodeB.
 - + 03 (three) eNodeBs 1800MHz 4T4R (01 eNodeB includes BBU; 3 RRUs single-band 1800MHz; 3 LTE cells 20MHz 4T4R, at least 40W/port), installation accessories and software, features, licenses.

+ Expand OSS and other core elements (if needed)

+ Service for whole new eNodeB:

- Transportation (include loading/unloading and warehouse), insurance thereof for the Hardware, Spare Parts from the Vietnam port/airport to the End-User's Site where the Hardware is to be installed and insurance during the process installation, integration and commissioning to the date of PAC.
- Site survey, network design, installation, database setting, commissioning and integrating, put into service, optimization and fine tuning, KPI management.
- + Expansion service for OSS and other core elements (if needed)
- + Warranty service for whole supplied goods (24 months)

(Technical requirement for 4G will be detailed in II.1.2.9 – 4G requirements for new eNodeBs (used to run ENDC))

II. DELIVERY SCHEDULE

No	List of Goods	Unit	Quantity	Time of Delivery	Place of Delivery
1	gNodeB (eNodeB) and installation accessories	Site	160	Within 70 days from the PO signing date	End-User's Site
2	OSS (and other core elements – if any) and installation accessories	Set	01		

III. RESPONSIBILITY MATRIX

- Bidder must build the responsibility assignment matrix for all parties in the project implementation

IV. OTHER REQUIREMENTS

- Bidder shall read carefully and state his degree of compliance and make reference (if any) in relation to all requirements set forth by VNPT and follow the instruction in the chapter III – Bid Evaluation Criteria, Section 3 – Technical Evaluation Criteria.

- All necessary hardware, license software/features, accessories and related services, all installation materials and accessories required for installation/commission as requirements of the offered system must be included in Bidder's procurement package price and detailed in Bidder's Bill of Quantity (BoQ).
- Bidder must provide BoQ in the format given in Chapter IV.
- To evaluate the technical aspects, Bidder should provide a complete list of equipment and services offered (same format and content with detailed BoQ without price).

SECTION 2. TECHNICAL REQUIREMENTS

- The technology of system is latest state-of-art using for 5G. All features/functionalities described in this document must be made available and ready for VNPT-Net to use.
- In addition to the State of Compliance to VNPT-Net's requirements in section 2, Bidder has to state clearly the Scope of Works, System Design with proper calculation on dimensioning based on the input parameters provided by VNPT-Net.
- Bidder must submit detailed equipment description (hardware, software, features...) for reference.
- The supplied equipment must be integrated and interoperated compatible with existing network.
- Letters used to indicate VNPT's requirement level of each technical requirement item are clarified below:

For each of the requirement, Bidder shall respond in writing down as follows:

- ✓ **FC (Full Compliance)** means Bidder fully meets the requirements specified in the item without any deviations or exceptions.
- ✓ **PC (Partial Compliance)** means Bidder partially meets the requirements specified in the item. Bidder must explain the deviations or the exceptions or the effects that will have on overall performance of the offered equipment/service.
- ✓ **NC (Non-Compliance)** means Bidder is unable to meet the requirements specified in the item.
- + Bidder has to provide further information (although this information is not the reason for either acceptance or rejection of Bidder's proposal) to clarify every item. Comments can either be written in detail or given by the thorough references.
- + Bidder's statement shall be written in English and in the **Times New Roman font with 12 pt in size.**

I. GENERAL INTRODUCTION OF PROJECT AND PROCUREMENT PACKAGE

1. Project:

- Purchasing 5G Radio System Equipment for the Vinaphone Network in Central provinces for the 2025-2026 period – As Part of the 5G Implementation Plan under Resolution 57-NQ/TW.

- Location of implementation: Central provinces.

2. Procurement package:

- Procurement package: Supplying 5G radio system equipment and related services.
- Bidder selection form: International open bidding.
- Bidder selection method: one-stage and one-envelope bidding.
- The duration of package performance: 365 days.
- The type of contract: Fixed unit price contract.

II. TECHNICAL REQUIREMENTS

II.1 Requirements for offered goods:

Bidder should regard our requirements carefully in order to make compliance statements and the bid price.

- All features/functionalities described must be made available and ready for VNPT to use.
- Technical requirements detailed in this item are basic ones that provided for offered RAN equipment under procurement package.
- Bidder must take full responsibility in implementing project from beginning to the end that includes three major contents:
 - + Engineering and Designing.
 - + Procuring and Product Supplying.
 - + Installation and Construction.
- *Bidder must follow hardware/software/features/rights to use requirements and other ones detailed as below in order to make the bid price.*

VNPT's requirements for equipment purchasing under this procurement package are detailed here below:

II.1.1 Engineering and Designing

II.1.1.1 Production qualifications

- Bidder is required to give a reference list of 5G-NR RANs, both commercial and trial ones that you provided worldwide.
- Bidder is required to list the roadmap products.
- Product line and main business operations are suitable with procurement package.
- Bidder must have full suitable tool for this package, such as designing tool, optimisation tool, test phone, interface tester, etc).

II.1.1.2 Pre-installation site survey

Bidder must carry out all necessary site survey for all sites in order to collect enough information to implement this project. The pre-installation site survey including:

- Site location survey.
- Installation plan (floor plan, cable tray plan, network integration plan, etc).
- Network planning and design.

All the relevant documents must be submitted to VNPT to get approval.

II.1.1.3 Designing and Engineering

Bidders must base on the requirement specified in this document to design the system and plan the network accordingly. Bidders must provide the detailed solution of system design with dimensioning, interconnection plan, configuration and capacity of equipment, must be documented and submitted in the tender, at least as below:

- System dimensioning.
- Interconnection diagram between offered radio system and VNPT existing mobile network.
- Resource allocation (i.e: Bandwidth, throughput, etc) is used for multi-technology/multi-mode 4G/5G on multi-Band 1800/3700MHz and single-technology/single-mode 5G band 3700MHz in Baseband under one site.
- The information relating to deployed D-RAN, such as: Function split option between BBU and RRU, Interface between BBU and RRU (types, protocol, dimensioning bandwidth), maximum distance between RRU and BBU supported with requirement accordingly (additional hardware/software, changes), etc.
- LTE/NR interworking plan between new 4G/5G layer and existing 4G layer which will comply with below strategy:

- + ENDC awareness must be considered in idle and connected mode to encourage ENDC support UEs to utilize 5G capacity/coverage.
 - + ENDC capable UEs should be moved to new 4G/5G layer to leverage 5G coverage.
 - + 4G only UEs should be configured to stay on existing 4G coverage.
 - + VoLTE service should be configured to stay on existing 4G coverage for service continuity.
 - LTE/NR interworking plan is designed to support (but not limited to) 5G 3700MHz and 4G 1800MHz/2100MHz/900MHz (ENDC b3_n77, ENDC b1_n77 or ENDC b1-b3_n77...), according to VNPT spectrum resource.
 - CA Configuration is designed to support (but not limited to) CA band combination including bandwidth and MIMO info, Up link CA, intra-site CA, inter-Site CA .
 - A detail of the method to calculate power license, hardware license... for supplied gNodeB.
- The designing document for 5G RAN system proposed in the procurement package also cover the following points:
- gNodeB Hardware:
 - + Hardware configurations (number of main function modules and cards: CPU, interfaces, RF module, Base band Processing module, etc).
 - + Diagram of RF part for interconnection between radio equipment and Antenna, power system, etc.
 - + Equipment processing capability.
 - + Requirement S1/X2 transmission capacity.
 - Requirement for connection and design:
 - + Network integration plan with connection in each direction between offered radio equipment and other systems in detail. Bidder must clearly indicate number of GE required (based on designed result) offer in each S1/X2 interface. Bidder shall suggest profile for eNodeB/gNodeB in busy hour (such as: Intra-Site Handover, Inter-Site Handover, Inter-RAT Handover, CA Configuration, Paging number, Attach & Detach per User...) for VNPT to refer.
 - + OSS configuration, capacity and extra-tools. Bidder should describe clearly the link diagram connection between OSS and radio system and list all equipment needed for this connection.

- + The design must include the overall structure of NR-RAN network in the project implementation area, distinguish clearly the existing part, extension part, new part and the total capacity of the elements after finishing the project.

Besides designing document and solution document (if any), Bidder shall provide full technical documents related to the equipment installed in the system. A minimum of information detailed in technical documents include:

- Operating environment of equipment (temperature, humidity, cooling, etc).
- The weight, dimensions (HxWxD) of equipment.
- Power characteristics (AC/DC), power consumption.
- Hardware installation introduction.
- Software and features of equipment.

The designing document and solution document for RAN system proposed in the procurement package also cover items as below.

II.1.2 Procuring, Product Supplying and Services

II.1.2.1 Radio Base Station equipment

II.1.2.1.1 Requirements for supplied gNodeB

1. Common requirements

- The offered system (hardware and software) must be compliant with 3GPP standards Release 18 for 5G-NR, software can be capable of supporting later version and previous software version backward compatibility.
- The offered system software must be compliant with 3GPP standards TS 36.101, TS 36.101-3, TS36.104, TS36.133, TS36.141, TS36.201, TS36.211, TS36.212, TS36.213, TS36.214, TS36.314, TS36.321, TS36.322, TS36.323, TS36.331, TS36.410, TS36.411, TS36.412, TS36.413, TS36.414, TS36.420, TS36.421, TS36.422, TS36.423, TS36.424, TS36.455,...
- The RAN system shall be offered with the latest software release support multi band, multi technology following VNPT current deployment (3G WCDMA/4G LTE/5G NR, tested, approved and commercialized). In addition, the Bidder must include an estimate schedule for future releases for a period of two years.

- The offered equipment must be compliant with Vietnam regulation: QCVN 47:2015/BTTTT (National technical regulation on radio spectrum and radiation of Radio Telecommunications Equipments), QCVN 18: 2022/BTTTT (National technical regulation on

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Electromagnetic Compatibility for Radio Equipment), 13/2023/TT-BTTTT (3560-4000MHz frequency spectrum planning for Vietnam's IMT public terrestrial mobile communication system issued on 23 November 2023), and other relevant technical regulations applicable to type 1-O 5G base station radio equipment (if any).

- The Bidder's radio equipment must be compliant with Vietnam's 5G spectrum planning and has been commercially deployed globally. The Bidder must:

- + Present signed contract or confirmation letter signed by CTO/CEO or an authorized representative from at least one telecom operator from G7 countries for reference confirming that the Bidder has supplied at least 3,000 (three thousand) 5G sites with continuous 3700-3900 MHz frequency range;
- + Or the Bidder's 5G equipment operating at 2600 MHz or 3700-3900 MHz frequency has completed the technical testing phase and provided services to customers on VNPT's network and was certified to meet the requirements before the bid closing time.
- + Or present signed contract for supplying 5G radio system equipment in 3700-3900 MHz frequency range to VNPT
- The offered equipment is Distributed RAN and ready to support transition to Centralized RAN.
- The gNodeB must be ready for both NSA and SA architecture.
- gNodeB ready to support network sharing (NSA/SA, MOCN/MORAN).
- gNodeB is designed based on SDR Technology.
- gNodeB support multi-technology and multi-mode.
- gNodeB shall be newest commercial product with the latest software version based on the product roadmap officially issued by Bidder.
- gNodeB must be ready to support IPv4, IPv6 and dual stack IPV4/IPV6.
- gNodeB support CPRI/eCPRI/OBSAI interfaces.

2. 5G gNodeB

- The offered system must be compliant with 3GPP specifications.
- Licensed frequency band is TDD 3700-3800MHz.
- The gNodeB must be compliant with 3GPP standards/specifications as listed in I.1.

- VNPT can deploy gNodeB with different channel bandwidths (such as 60/70/80/90/100MHz per cell) without any limitation from Bidder (without any changing/adding/upgrading hardware/software). Bidder must detail licenses dimension and calculation in 10MHz steps with formulas and description for VNPT to expand RF cell bandwidth and verify (when necessary).

II.1.2.1.2 Radio Unit (AAU)

- AAU 3700MHz 64T64R (Band 77), at least 192 antenna element, RRU hardware support at least 320W, OBW 200MHz on band 3700MHz-3900MHz, support 02 5G NR cells of 100MHz TDD with Massive MIMO 16 DL layer/4 UL layer.
AAU weight (without pole kit) must be less than 30kg.
- One AAU pole kit must be included in one AAU.
- Bidder will provide the maximum distance between AAU and BBU supported with requirement accordingly (additional hardware/software changes) in the submission document.

II.1.2.1.3 Base band Unit (BBU) for new gNodeB

- BBU hardware offered is ready to support with detail technical description
 - + Multi-band, multi-technology at least 4G/5G technology.
 - + 4G/5G DSS FDD.
 - + 5G NSA/SA simultaneously.
 - + ENDC configuration (E-UTRAN New Radio – Dual Connectivity).
 - + 5G FDD and TDD simultaneously.
- The BBU hardware is ready at least 06 5G TDD cells with 100MHz bandwidth, Massive MIMO with 16 DL layers / 4 UL layers. Maximum number of baseband processing cards in one BBU offered under this package must not exceed 2 (≤ 2)
- BBU hardware supports CA and DSS simultaneously, of which:
 - + At least 2CC in Inter-band Carrier Aggregation.
 - + LTE-NR DSS feature along with 5G FDD and 5G TDD carrier aggregation.
 - + The following modulation schemes must be used for DL and UL:

- + 16 QAM for both DL and UL.
- + 64 QAM for both DL and UL.
- + 256 QAM for DL.

- BBU hardware offered is ready to support both GPS synchronisation and the clock from IP transmissions.
- BBU is able to connect to 4G existing system based on X2 interface.
- BBU hardware offered is ready to support at least 5Gbps throughput in DL and at least 2Gbps throughput in UL.
- BBU must support at least 01 10Gbps optical interfaces, LC, 1310nm SM for backhaul transmission. The RJ-45 and SFP 10Gbps Ethernet interfaces should be included as well. SFP+ 10km Requirements are as below:

#	SFP+ 10km Requirement	Priority
1	Connector type: Duplex LC	M
2	Fiber optic cable mode: Single mode	M
3	Transceiver type: SFP+	M
4	Transmission rate $\geq 9.9\text{Gb/s}$	M
5	The transmission distance $\geq 10\text{km}$	M
6	The proposed optical module supports plugging and unplugging without needing to power off the device	M
7	The proposed optical module supports DOM (Digital Optical Monitoring) or DDM (Digital Diagnostic Monitoring) monitoring feature or equivalent	M
8	The proposed optical module is compatible with IEEE 802.3ae 10GBase-LR/LW standard	M
9	Maximum Bit Error Rate (BER) (test with sample $2^{31} - 1$ PRBS) $\leq 10^{-12}$	M
10	Power consumption $\leq 2\text{W}$	O
11	Optical Tx wavelength range (nm) 1260-1360	O
12	Optical Rx wavelength range (nm) 1260-1360	O

(M: Mandatory, O: Optional)

- BBU supports co-transmission mode to use the same transmission line for 4G LTE and 5G NR using a single optical transmission interface.
- Bidder will provide details fronthaul and backhaul interfaces supported on the offered BBU, including number of interfaces/ports, capacity, type (electrical/optical, CPRI/eCPRI), etc.
- BBU should have an interface for connecting to GPS antenna and one interface for local management.

II.1.2.1.4 Other requirements

- Bidder will provide dimension and weight for BBU and AAU.
- 19 inch wide for BBU is prefer.
- Bidder will provide operation environment for BBU and RRU/AAU (outdoor class should be IP65).
- gNodeB shall support DC -48V input.
- Bidder will provide a detail about the VLAN configuration for S1/X2/OAM, synchronization and all related limitations of system.
- Bidder will provide detailed diagram, specifying interface ports for synchronization, OAM in gNodeB.

II.1.2.2 Management system

II.1.2.2.1 Oss system

- The Operation and Maintenance Centre shall provide all the operation and maintenance functions for gNodeB/eNodeB purchased, with minimum hardware capacity redundancy of 30%.
- Bidder could reuse and expand the existing OSS system (using for operation and maintenance of existing gNodeBs/eNodeBs in Vinaphone Network. General introduction of project and procurement package) to simplify network operation purpose.
- OSS system shall support and include license, software, features, statistic and feature management function to operate and maintain the offered gNodeBs. Bidder is required to describe this function (methodology, data collection, verification, reporting...) in detail, and supply this function (software, feature of OSS and additional hardware if needed).
- The OSS system and other core element is ready (hardware/software/license/feature) to support monitoring, management and network analysis requirements:
 - + FCAPS management architecture.

- + All file data (call trace data, call statistic, CDR, FM/PM/CM/Inventory...)
- + Interface support (NBI, SNMP) to connect to other system follow TMF/GSMA/3GPP recommendation.
- In case Bidders provide new OSS system, OSS system includes 01 OMC server located in Ha Noi and 01 OMC remote located in Da Nang city. Connection between OMC Server with OMC remote will be via IP transmission network:
 - + The OSS system offered shall support to control Antenna tilt using RET AISG 2.0 standard.
 - + Platform of the OSS system is latest hardware product. The RAN equipment purchased in this procurement package must be facilitated with OSS Platform of the OSS system is latest hardware product. The RAN equipment purchased in this procurement package must be facilitated with OSS.
- Completed installation material set and accessories for OSS should be included.

II.1.2.2.2 CEM/SON/Automation/Orchestration

- The system is ready (including hardware/software/feature) to support Service and Resource Orchestration function:
 - Network Function Management Function (NFMF).
- Bidder is required to provide document and clarification about bidder's solution for service and resource orchestration.
- Bidder is required to provide detail roadmap of OSS evolution to support service and resource orchestration.
- The system is ready (including hardware/software/feature) to support all data files required for CEM for all network elements simultaneously and automatically (trace call data, all call statistics, measurement...). The information collected and reported to CEM includes (but not limited to):
 - + Common Information: Date, Time zone, UE type, Call ID, IMEI, Mobility, service, roamer, subscriber, technology.....
 - + 5G NR Information: RSRQ/RSRP, ARFCN, RB, E-RAB, Neighbor information, Establishment, Frequency band, LTE Connection Service, Physical Cell Id, QCI, CGI, Segment End Reason, Segment Start Reason, Tracking Area Code, Uplink Channel Number, Downlink Channel Number, Handover, Redirection release,
- + OSS system includes SON (hardware/software/feature).

- + Bidder describes SON features and supplies SON features as required in Appendix 1 (such as Self-configuring features, Self-optimizing features, Self-healing features and other features) follow ODA recommendation and architecture.
- + System shall support to configure & optimize the network automatically/remotely.
- Bidder shall describe available Automation systems/applications to support OSS/BSS (topology, working principal, data processing methodology...).

II.1.2.3 Installation accessories

- Rodent-resistant optical cable (including connector) and DC cable for connecting from each radio unit (AAU) to system module (BBU).
- Bidder shall provide at least 1 clamp per meter for optical cable, DC cable.
- Completed installation material set and accessories for both indoor and outdoor parts for each tri-sector site must be included. The accessories must include (Grounding cable, DC Distribution Box in order to distribute DC current to AAU, DC power supply cable for indoor, optical cable, alarm connection box, AAU pole materials (boom and bracket included if any), required fixing accessories, etc. The contractor independently estimates the material set to ensure sufficient installation).

II.1.2.4 Software Rights to use and Features

II.1.2.4.1 Software and Rights to use (RTU)

- Latest software version: For all the hardware equipment requested gNodeBs, OSS and other related equipment, Bidder must state clearly with latest software version available.
- All the RTU for hardware, software, features and capacity purchased must be included in the total bid price. The RTU/licenses must be calculated and offered based on the total number of the gNodeBs in the procurement package.
- All hardware, software, license, features for gNodeBs of this procurement package are perpetual ones without any additional cost.
- The Bidder must commit to adjust 5G License (BW, Hardware activation code, Massive MIMO DL/UL Layer, Power, VoNR, DL/UL throughput...), among gNodeBs in the system supplied whenever receiving a request from VNPT. VNPT can adjust or the Bidder supports without any conditions.

II.1.2.4.2 Feature requirement

- Bidder must provide full features as specified in Appendix 1 – Feature list and these features are available for all offered gNodeBs in this procurement package regardless deploying option, with more detail clarification below:
 - + Besides features listed in Appendix I – Feature list, Bidder must provide all features which are stated as basic ones by Bidder.
 - + In case, Bidder's features have another name to features listed, Bidder must describe features in detail for VNPT's evaluation.
 - + 4G/5G SA interworking features will be fully provided on the 4G network (for 1,920 4G cells), including idle mode mobility, service continuity, coverage fallback, and voice fallback (EPS fallback and/or VoNR fallback), to ensure seamless mobility, uninterrupted service experience, and full service availability across heterogeneous coverage areas.
 - + RAN slicing features must support the deployment of multiple network slices, with a minimum of 32 slices.
- Bidder shall provide a unique identifier for each software feature that will be managed and followed by VNPT throughout the software product lifecycle.
- Feature description and feature identifier will be included in Bidder's proposal or contract document.
- In case, features listed in Bidder's BoQ have another name to features in Bidder's technical proposal, Bidder must point out the relationship between these features.
- Bidder should provide full features as technical requirements (section II.2 – Other technical requirements).
- Bidder is required to list all the features (Including basic and advanced features). Each feature must be clearly specified whether it is a basic feature or advanced feature.
- Bidder shall supply a list of compliance to the 3GPP Technical Specifications and state what version of the 3GPP Technical Specification Bidder complies. Any departures from the 3GPP recommendations shall be explicitly noted in Bidder's Statement of Compliance.
- All components, elements, functions and facilities of the System, shall be implemented as defined in the relevant 3GPP recommendations. Any errors or omissions not in compliant with 3GPP recommendations must be corrected by Bidder, either via input of proposed corrections to the appropriate 3GPP Association's body or by temporary proprietary corrections. Bidder shall ensure that any such temporary corrections shall not cause any external incompatibility in terms of inter-working with systems from other manufacturers or inter-working with other PLMNs.

II.1.2.4.3 Mapping Software and Rights to use

Bidder must comply with the Software and Rights to use mapping requirements of VNPT as follows:

- In contract negotiation process: Bidder must provide the Software and Rights to Use and Feature mapping samples;
- In delivery time: The Software and Rights to use mapping will be listed and added detail information;
- In Acceptance Test Procedure: in case the actual information does not match the information according to the Mapping, bidder is responsible for mapping content completion.

The mapping form is described below:

The information of Software Right to Use at BoQ/Annex of the contract						The information of Software/Right to Use on the system						
No	Name of supplies	Product Code/Part Number/Item Number____(ID)	Manufa cture	Unit	Volume in BoQ	Name of supplies	Product Code/Part Number/Item Number____(ID)	Expired date	Unit	Volume	Testcase	Note (conversion method)
A	B	1	2	3	4	5	6	7	8	9	10	11
1												
2												
3												

VNPT and Bidder shall sign the Software and Rights to Use mapping table at stage of supplies delivery.

Software and Rights to Use are included but not limited to:

- 1) Software/Rights to Use is attached to the Card: Because Software/Rights to Use can be shown or cannot be shown, Bidder have to fill in the card name, part number ... according to BoQ
- 2) Software/Rights to Use is attached to the Box: According to the whole box, or according to the control card / attached to the physical server, or the hard drive of the Box ..., write the name of the Box / station / hard drive / server (name or serial).
- 3) Software/Rights to Use is attached to the management system: attached to OSS, ..., write the name of the management system.

4) Software/Rights to Use to mount the equipment system: write the device system name.

5) In cases Software/Rights to Use cannot be displayed on the Card, Box, management system..., bidder must provide confirmation and guarantee.

II.1.2.5 Implementation and services

Implementation and services are required under this procurement package include:

- Transportation and Insurance:
 - + The Bidder is responsible for transportation (include loading/unloading and warehouse), insurance thereof for the Hardware, Spare Parts from the Vietnam port/airport to the VNPT's Site.
 - + Insurance for Hardware during installation, integration and commissioning to the date of PAC.
- Site survey (location survey, electrical survey, existing RAN survey...), network design, installation (hardware/software), database setting, commissioning and integrating, put into service, Optimization and Fine tuning, KPI management for offered gNodeBs (including RF parameters re-design/planning/setting for 4G existing system).
- Site survey, network design, installation (hardware/software), database setting, commissioning and integrating, put into service for OSS and other core elements.
- Other related services (if any).

During the equipment installation process, the contractor must be responsible for and comply with measures to ensure occupational safety and hygiene (OSH), fire and explosion prevention and fighting, and general regulations on safety working at height according to provisions of Vietnamese law.

The entire requirement on implementation Service as follow:

1) Service for Management system (OSS and other core element)

- Expanding OSS or new OSS and other core element (depend on Bidder's technical solution) will be installed at Hanoi/Da Nang City. Bidder shall be responsible for implementing the site survey, installation, database setting, commissioning, integrating, and put in service.

2) Service for gNodeB

- In the network design documents, Bidder should provide the map of 5G coverage and services after deploying this procurement package.
- The design of frequency planning and system parameter must comply with the following requirement:
 - + There is no interference between radio system/ satellite system and offered system that affect the quality of service.
 - Site survey, installation, database setting, commissioning, integrating, put into service, fine tuning and optimization, for all gNodeBs under this package.
- Integration to VNPT existing mobile network must be included in the scope of Bidder's implementation construction service. The integration must cover all kind of existing network equipment in order to ensure that customer will have access to all kind of services available in existing network without any restriction.
- Bidder must have professional experience working at VNPT to implement the network integration, monitor the quality and coordinate resources during the project implementation.
- **Detail network design includes**
 - 5G Radio network design: network planning, cell design, radio frequency planning, PCI planning, coverage prediction, traffic simulation and dimensioning, power/transport requirement, etc.
 - 1800MHz/2100MHz/900MHz frequency band will be the 5G anchoring, so anchoring band must be included in the network design as detail:
 - + Multi-anchor band 1800MHz/2100MHz/900MHz.
 - + Dynamic anchoring carrier selection.
 - Network integration plan.
- **Integration**
 - Integration to VNPT existing mobile network must be included in the scope of Bidder implementation construction service:
 - + MSS system provided by Ericsson.
 - + UTRAN/E-UTRAN 900/1800/2100 system provide by Ericsson, Huawei, ZTE, ALU or Nokia.
 - + GPRS/EPC system provided by Ericsson, Nokia.

- + And the other elements.
- Bidder accepts and takes all responsibilities for integration of its supplied radio system equipment to existing 3G/4G network of VNPT without any condition.
- Bidder must be fully responsible and by its own cost to design system, negotiate, arrange the working with other existing equipment supplier in order to have integration successfully done.
- Bidder is requested provide a reference list of successful integration with other supplier's equipment and specify the software version corresponding:
 - + MSC Server/MGW (Soft switch) with Iu-CS interface.
 - + GPRS with Iu-PS interface.
 - + EPC with S1 interface.

The reference list must include the address (premise, telephone, fax and email) of contact person.

▪ **Radio Network Optimization and Fine tuning**

Radio optimization and fine tuning must include but not limit to:

- Measurement, access, monitoring and analysis.
- Parameter design and planning for new 5G sites to cover interworking between layers (4G/5G layer), between bands (900/1800/3700MHz...) and between technologies (4G/5G).
- The KPI target after Radio Network Optimization and Fine tuning is in the following table (Bidder shall state compliant to each item in the following KPI table), any criteria of KPI exclusion will not be accepted and will be considered as not compliant with the RNO requirement.
- Main KPI:
 - + Determine the area to evaluate KPI:
 - ✓ *For the sites group within the project implementation scope: a single area containing project sites.*
 - ✓ *For sites in areas with project sites: including project sites and neighbour sites (if the same vendor) within 2 layers of project sites.*
 - + Filter Criteria: medium KPI at cell level during 7 consecutive days.

- + Province 5G KPIs (OSS) shall be achieved with KPI list as following:

No	Network	KPI name	Unit	Threshold
1	5G	SgNB Addition Success Rate	%	≥ 99
2	5G	SgNB Abnormal Release Rate	%	≤ 1
3	5G	Intra-sgNodeB PSCell Change Success Rate	%	≥ 99
4	5G	Inter-sgNodeB PSCell Change Success Rate	%	≥ 95

- + User Downlink Average Throughput and User Uplink Average Throughput for single sites shall be achieved as following:

STT	KPI name	Unit	Threshold
1	User Downlink Average Throughput	Mbps	≥ 300Mbps
2	User Uplink Average Throughput	Mbps	≥ 50Mbps

■ Acceptance Test and Commissioning

- After finishing installation and integration, Bidders must take responsibility in carrying out the acceptance test and commissioning. The acceptance test procedure and plan must be agreed between VNPT and Bidder before implementation on the site. The acceptance test needs to be carried out with the attendance of VNPT representative. The acceptance test and commissioning must cover:
 - gNodeB.
 - Management system.
- Bidder must use his own test equipment (protocol analyser, 4G/5G handset, SIM cards, installation tools, etc) during the installation and commissions as well as tools for Bidder's experts to do Optimization and Fine tuning.
- Some contents specified in item Optimization and Fine tuning will be included in the Acceptance Test Documentation of new gNodeB (PAT) as follow:
 - + Measuring the coverage and the services map.

- + 5G main target KPIs, etc.
- + Bidder's recommendation for existing sites around new sites under the tender (azimuth, tilt tuning, power/parameter change...).

II.1.2.6 Warranty

II.1.2.6.1 Warranty period

For all the equipment supplied under this procurement package, VNPT request for 24 months of warranty from the date of issuing each Final Acceptance Certificate (FAC). 24 months of warranty period is applied for all hardware, software, features, functionalities and capacity purchased under this package.

II.1.2.6.2 Technical Support during Warranty Time

All Bidders must provide on-site supervision for all the nodes supplied under this procurement package. The on-site supervision will be conducted during trial-run period (stipulated in GCC 21.1 (3. Trial – run period of each PO) of Chapter VII - Specific Conditions of Contract) and the time specified under SLA in warranty period.

For all Bidders, during the warranty period, the technical support for equipment purchased must have been included in the procurement package price with the following items:

- Customer Service Request (CSR) Handling.

Under its CSR Handling service, Bidder must provide at any time a proper follow-up of the different service requests sent by VNPT to Bidder.

- Emergency Support and Severity Level 1 Support.

If the defect, problem and/or disturbance is of such a nature that VNPT cannot remedy the defect, problem and/or disturbance and get the System back in operation and Commercial Service by following instructions given by Bidder through Telephone Support, or Bidder, for reasons attributable to Bidder, cannot provide VNPT with a temporary solution enabling VNPT to put the System back into operation and Commercial Service without visiting the relevant Site, Bidder must provide On-Site Support. Bidder's System expert must in such a case is on Site.

- Severity Level 2 and 3 Support. VNPT must notify Bidder of a Severity Level 2 or 3 defects or a problem related to the System through a call to Bidder. Bidder must, within a maximum time period of one (01) hour (for Level 2) and twenty-four (24) hours (for level 3)

calculated from the moment VNPT has made the above mentioned call to the appointed telephone numbers, make a call back to VNPT in order to receive all information related to the defect, problem and/or disturbance from VNPT necessary in order for Bidder to find a temporary solution and provide VNPT with instructions. Relevant data regarding Hardware/Software or Documentation must be submitted by VNPT to Bidder separately in writing. A CSR will be opened and Bidder will respond with an answer within the time-limit set forth below with appropriate information about the reported defect or problem.

- Consultations and Technical Requests. The Consultations and Technical Requests service – for non-emergency questions – allows the VNPT to ask questions on operation and maintenance. All requests will be taken care of during normal working hours.
- Software Update. Bidder must continuously provide the Purchaser with Software Updates and Software Corrections approved from the design department within Bidder.
- Hardware Repair, Return and Replacement service.

For the warranty period, components that are broken during the operation must be replaced, faulty parts including the 3rd party's (if there is) have to be repaired and returned to Vietnam on time. The duration of Hardware Repair shall not exceed 60 days from the dispatch to the time when VNPT receive the repaired-hardware back and the repaired-hardware returned to VNPT is at least 90% within this time.

All fees for Hardware Repair, Return and Replacement service for equipment equipped under this procurement package must be included in the price of this procurement package for 2 years of warranty time.

- Definition on Severity Levels:

- + Severity Level 1: A serious defect in the System which is causing the System or a major feature therein, to become inoperative or severe performance degradation in relation to such System or such a major feature or situations that may result in emergencies. Major problems or disturbances that require immediate action.
- + Severity Level 2: A serious defect in the System or a major feature therein, to become disturbed or frequently interrupted or a performance degradation, service degradation or loss of capability in relation to such System or such major feature therein. Such serious defect could also result in operation and maintenance affecting faults that prohibits proper operation or maintenance or results in a lower level of System performance that may result in customer complaints or significantly increased workload on VNPT's maintenance staff.

- + Severity Level 3: A minor defect in the Initial System or the relevant System Expansion not affecting the performance, service or operation and maintenance of the Initial System or the relevant System Expansion (but however resulting in a deviation from the System Specification) or minor documentation errors not affecting operation and maintenance of the Initial System or the relevant System Expansion, as appropriate.
- + The CSR support which shall also include supporting integration the new equipment with VNPT existing mobile network shall be required as below:

		SLA			
1	Help Desk/ Consultations and Technical Requests	5*8			
2	Information sharing	website, email, post			
	Request severity	Availability	Call back	Remedy	Restoration
	Emergency and Severity Level 1	98%	15 minutes (24x7)	4 hours (24x7)	24 hours (24x7)
		100%	15 minutes (24x7)	12 hours (24x7)	48 hours (24x7)
	Severity Level 2	98%	1 hour (working time)	48 hours (working time)	1 week
		100%	1 hour (working time)	72 hours (working time)	2 weeks
	Severity Level 3	98%	24 hours (working time)	3 weeks	5 weeks
		100%	24 hours (working time)	4 weeks	6 weeks

II.1.2.7 Origin of equipment

Equipment supplied under this Concentrated Procurement and Procurement package to VNPT must be 100% new and is the latest production of Bidder.

The certificate of origin of the equipment supplied in this Procurement package must be clearly stated by Bidder.

II.1.2.8 Spare parts

- Spare parts: must be dimensioned at least to 2.6% of total hardware value proposed for gNodeB, as follows:
 - + At least 1.8% of total hardware value: spare part for RF module (AAU, including optical cable and connector).
 - + At least 0.8% of total hardware value: spare part for remaining part (baseband parts: Processing card, interface card, power card, ...; OSS - if necessary ...).
- Spare part of the above equipment must be enumerated on a detailed list for each one.
- Spare part must include the main cards listed in the BoQ of the main equipment with the same unit price.

II.1.2.9 4G requirements for new eNodeBs (used to run ENDC)

If Bidder must provide new eNodeB to run ENDC with new gNodeB, the equipment must meet the following requirements:

II.1.2.9.1 General requirements

- The provided equipment must be compliant with 3GPP release 15 specifications.
- The provided equipment must be compliant with Vietnam regulation: QCVN 110:2023/BTTTT (National Technical Regulation on E-UTRA Base Station).
- Licensed frequency band is:
 - + UL: 1710-1730MHz and DL 1805-1825MHz
- The eNodeB must support Multi Standard Radio to switch multi-technology modes by software.
- The eNodeB must support all variable RF cell bandwidths follow 3GPP standard.
- VNPT can deploy eNodeB with variable RF cell bandwidths (such as 5/10/15/20MHz per cell) without any limitation from Bidder (without any changing/adding/upgrading hardware/software)
- Bidder must carefully survey VNPT's existing 2G/3G/4G radio systems in order to provide a design, features, and functionalities that are compatible with VNPT's current network status.
- Equipment supplied must be 100% new and is the latest production of Bidder.

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- Equipment supplied is warranted as specified in II.1.2.6 - Warranty

II.1.2.9.2 Radio Unit (RRU):

- RRU Dualband 1800MHz/2100MHz 4T4R (Band 1/3) support at least total power of 320W/RRU (4T4R/160W for each band), IBW 75MHz on band 1800MHz and IBW 60MHz on band 2100MHz, at least 01 3G WCDMA cell and 03 4G LTE cell simultaneously and 20MHz bandwidth/cell (02 LTE cells on band 1800MHz and 01 LTE cell on band 2100MHz).
- RRU singleband 1800MHz 4T4R: hardware supports at least total power of 160W/RRU, IBW 75MHz, at least 02 4G LTE cell carrier and 20MHz bandwidth/cell carrier
- One RRU pole kit must be included in one RRU.
- The RRU offered shall support 3GPP TS 36.101 V10.0.0.

II.1.2.9.3 Base band Unit (BBU)

- BBU must meet the minimum capacity requirements for new eNodeB (used to run ENDC) as specified in item 3 – Scope and requirement for 4G/5G ENDC.
- BBU hardware can be expanded to support at least 3 bands (LTE 1800, 2100, 900MHz) by adding functional cards, software and licenses without changing BBU hardware.
- BBU hardware can be expanded to support carrier aggregation for 3 bands (LTE 1800/2100/900...), 4T4R/MIMO 4*4 and 20MHz bandwidth per cell.
- BBU hardware can be expanded to support 5G SA and NSA.

II.1.2.9.4 Spare parts

- Spare parts are at least 2.6% of total RRU, BBU hardware value (including optical cable and connector).

II.1.2.9.5 Software, rights to use and feature.

- Latest software version: For all supplied eNodeB and OSS, Bidder must state clearly with latest software version available.
- All the RTU for hardware, software, features and capacity must have been included in the total bid price for this bid package.
- The Bidder commit to adjust licenses/RTU/features:

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- Power License, hardware activation code, RRC_Connected_User, VoLTE, DL/UL throughput, 4G bandwidth (step 5MHz between 5/10/15/20MHz), among supplied eNodeBs whenever receiving a request from VNPT.
 - VNPT can reuse these 4G licenses to other LTE frequencies (same band or different band) without any restriction of hardware/software/license/RTU...
 - Licenses/features adjustments are not limited to the eNodeBs of this bid package.
- Bidder must provide full features as listed in Appendix 2. In case, the Bidder's features have another name to features listed, Bidder must describe features in detail for VNPT's evaluation.
- All features offered in BoQ will be listed in Bidder's Technical Proposal.
- In case, features listed in the Bidder's BoQ have another name to features in the Bidder's technical proposal, Bidder must point out the relationship between these features. Bidder is also required to map new features as specified in II.1.2.4.3 – Mapping software and rights to use.
- The Bidder should provide sufficient features in software version will be offered for E-UTRAN system (at the time of signing the contract) whose purpose of these features to:
- + Increase efficiency equipment (eNodeB).
 - + Reduce power consumption of eNodeB, UE battery saving.
 - + Optimize the eNodeB resources, bandwidth of S1 interface.
 - + Ensure load sharing, load balancing.
 - + Support the deployment of end to end QoS in access network E-UTRAN.
 - + Support the smoothly inter-working between 2G/3G/4G; improve the quality of the handover.
 - + Improve the quality of PS and CS services.
 - + Increase DL/UL coverage.
 - + Support operator in the operation, maintenance and optimization of system.
- (Bidder is required to describe these features in detail)

- Bidder is required to list all the features (Inc. basic and advanced features). Each feature must be clearly specified whether it is a basic feature or advanced feature, and whether it is countable feature or uncountable feature in VNPT's Network.
- In addition to the features necessary for 4G operation, the bidder is required to offer advanced features (or any) used for improving KPI as indicated in the solution of the network planning and design part.

II.1.2.9.6 Implementation and services

- Bidder is responsible for carrying out all services under this bid package including:
 - + Transportation and Insurance:
 - The Bidder is responsible for transportation (include loading/unloading and warehouse), insurance thereof for the hardware, spare parts from the Vietnam port/airport to the VNPT's site.
 - Insurance for Hardware during installation, integration and commissioning to the date of PAC.
 - + Site survey (location survey, electrical survey, existing RAN survey,...), network design, installation (hardware/software), database setting, commissioning and integrating, put into service, optimization and fine tuning, KPI management for offered eNodeB (including RF parameters design/planning/setting).
 - + Expansion service for OSS and other core element.
 - + Other services (if any).

During the equipment installation process, the contractor must be responsible for and comply with measures to ensure occupational safety and hygiene (OSH), fire and explosion prevention and fighting, and general regulations on safety working at height according to provisions of Vietnamese law.

- After deploying new eNodeB, Bidder must comply with the following requirements:
 - + The quality of service and coverage of existing 4G radio network is not allowed to decrease.
 - + The main KPIs of the bid packages's sites shall meet KPI requirements as following:
 - Determine the area to evaluate KPI:
 - ✓ *For the sites group within the project implementation scope: a single area containing project sites.*
 - ✓ *For sites in areas with project sites: including project sites and neighbour sites (if the same vendor) within 2 layers of project sites.*

- Filter Criteria: medium CQI/KPI at cell level during 7 consecutive days.
- Province 4G KPIs shall be reported using following KPIs:

No.	KPI name	Unit	Threshold
4G	RRC Connection Establishment Success Rate (All service)	%	≥ 99
4G	ERAB Setup Success Rate	%	≥ 99
4G	Data Call Setup Success Rate	%	≥ 99
4G	Call drop rate	%	≤ 1
4G	Intra Frequency HO Success Rate	%	≥ 99
4G	Inter Frequency HO Success Rate	%	≥ 98
4G	Inter-RAT HO Out Success Rate (LTE to UMTS)	%	≥ 90
4G	VoLTE ERAB Setup Success Rate	%	≥ 99
4G	VoLTE Call drop rate	%	≤ 1
4G	VoLTE Intra Frequency HO Success Rate	%	≥ 98
4G	VoLTE Inter Frequency HO Success Rate	%	≥ 97

+ “poor CQI 4G cells” threshold of 4G network will be based on below threshold:

Configuration	CQI Threshold value of “poor CQI 4G cells” (CQI: Channel Quality Index)	Requirement for Ratio of “poor CQI 4G cells” of the bidding package (%)
4G 4T4R band 1800MHz	≤ 9.00	≤ 5% of bidding package's cells
4G 4T4R band 900MHz	≤ 8.00	

II.2 Other technical requirements

II.2.1 General requirements

II.2.1.1 Roadmap and Network Evolution

- 1) Bidder must submit the Roadmap for upgrade the RAN system both hardware and software at least up to 2027 Roadmap document will include detail information about software releases (pre-commercial and commercial), architectural changes, enhancements, interfaces supported, new features.
- 2) Bidder shall provide its roadmap highlighting the main features of each evolution step. A short technical description shall be provided in order to describe in an exhaustive way the content of each evolution step.
- 3) For each release, provide a short product description for each available product, including the available configurations and dimensions, transport network interfaces, output power, and indoor/outdoor installation capability.
- 4) Bidder shall provide the evolution phases within the next three years of the architecture of RAN covering also underlying transmission and transport networks as well as evolution to All-IP architecture. Explain in detail the impact (software and hardware) of all the upgrade steps to perform towards the evolution of the RAN following evolution in supported features as well.
- 5) Software
 - Bidder shall provide software product roadmap covering all 5G RAN related software releases and features.
 - All 5G NR software releases, patches will be downloaded from the OSS system to all network elements. Bidder will detail the impact or effect (eg. KPI, quality of service, coverage, etc) on the network during loading and/or activating new software.
 - Upgrading software to next or higher version will be implemented without hardware changing otherwise specified in Bidder's roadmap document.
 - If software downloads, patches or fault corrections affect the system's normal operation, Bidder shall state and provide solution to minimize downtime for all software downloads, patches or fault corrections.
 - Bidder shall provide synchronization between 4G and 5G software roadmaps to provide a fully coherent solution.

- Bidder shall provide 5G radio system software roadmap towards Cloud RAN architecture follow Open RAN/Open Fronthaul standards.

II.2.1.2 gNodeB architecture and configuration

- 1) Bidder shall provide multi-technology/multi-mode base station (gNodeB as 3GPP definition) solution which can switch between technologies at the same frequency by software without any hardware replacement.
Bidder is also required to indicate the number of modes that offered gNodeB supports in terms of both single mode and mixed mode/dual mode and describe the steps and procedures related to these migration in detail for both RF module and baseband module.
Multi-technology/multi-mode will be covered both RRU/AAU and BBU, at least 4G/5G.
- 2) Bidder shall propose distributed gNodeB with MCPA technology.
- 3) Bidder shall provide the radio products portfolio and roadmap for all SDR (Software Defined Radio) related modules including both base band unit and RF unit. State clearly the general available dates of all modules
- 4) Bidder shall provide the CE certificate of the SDR product proposed.
- 5) As a new technology, the proposed SDR gNodeB type shall obey correlative standards (like ETSI, etc) and state the certification.
- 6) Bidder shall specify the number of RF unit needed to support 2*2MIMO, 4*4MIMO, and clearly describe its MIMO solution.
- 7) Bidder shall support IP Clock function without GPS for synchronization, and should provide commercial application reference.
- 8) Base Band Unit and Remote radio unit shall support CPRI, eCPRI or OBSAI protocol.
- 9) gNodeB power requirements DC input supply: -38 VDC to -57VDC.
- 10) Bidder is required to describe how to simulate and specify the Low load/Medium Load/Busy hour Load/Full load power consumption in normal working environments (25°C) follow ETSI ES 202 706-1:

Configuration	Load	Baseband unit Power consumption (W)	Radio Unit Power Consumption (W)
Configuration 1	Low load		
	Medium load		

	Busy hour load		
	Full load (<i>for reference</i>).		
			

- Bidder then calculate Site Average Power Consumption based on Load level durations for daily average calculation as below and formula follow ETSI ES 202 706-1 (must be shown in submission document).

	Low Load	Medium Load	Busy hour Load
Value/Day	6 (hours)	10 (hours)	8 (hours)

Configuration	Site Average Power Consumption (W)
Configuration 1	
...	
....	
...	

- 11) The offered gNodeB shall support MML and allow the LMT to localized access for the operation, management and maintenance. Bidder shall describe in detail.
- 12) The offered gNodeB should have the mechanisms for temperature control and protection, Bidder shall state in detail. Besides, Bidder shall provide document to show environment condition, such as operating temperature, Ingress protection (IP) rating, etc.
- 13) The offered gNodeB should be supported to check and test the VSWR by command or automatic measurement software.
- 14) The offered gNodeB shall support 2-way and 4-way RX diversity on the Uplink.

II.2.1.3 RAN Design and Upgrade

- 1) The RAN system shall be modular in design. The RAN system shall be upgradeable to a higher software release with minimal impact to the normal system operation.
- 2) The system shall be able to produce copies of the system program and data and load them automatically triggered by a restoration or recovering process.
- 3) Bidder shall state how the backup files are used and how the data integrity is ensured.
- 4) The RAN shall be capable to handle signaling and traffic overloads in an orderly and controlled manner.
- 5) The system shall detect overload condition and produce report and alarm information to the OMC. Calls in progress shall not be affected under overload conditions and particular attention must be given to ensure that the mobility management is not impaired due to any overload condition.
- 6) Bidder's gNodeB shall have at least 8 external alarms interfaces, to install and define flexibly.
- 7) Bidder shall provide physical details of all proposed equipment (Weight, Dimension).

II.2.1.4 Inter-working Function

- 1) Bidder's equipment shall support 3G-4G-5G interworking.
- 2) Bidder shall show 3G-4G-5G interworking case-study in 3G/4G/5G interworking network and specify the IOT certificates, if any.

II.2.1.5 RAN Transport

- 1) The transport network shall support any RAN topology: cascading, star configurations or combinations hereof without any external transport equipment.
- 2) The offered system must support Co-transmission solution for LTE-A/NR multi-mode.
Bidder shall provide a common transmission network solution that could be used for 4G and 5G traffic.
- 3) The connections between nodes over the cellular access transmission network may go via "dark fiber", microwave, and/or copper, via a SDH/PDH backbone, via leased lines or via an Ethernet network.
- 4) Bidder shall support native IP transport for the following interfaces:

- O&M.

- S1, X2.

- 5) Bidder shall support Quality of Service separation using DiffServ Code Point (DSCP) for QoS tagging on Layer 3 (IP). The flexible DSCP value setting per Scheduling Priority Indicator must be provided.
- 6) Bidder shall support P-bit for QoS tagging on Layer 2 (Ethernet). The flexible P-bit – DSCP mapping must be provided.

II.2.1.6 Synchronization

- 1) Network Synchronization using frequency synchronization provided through an external clock source based on GPS PPS protocol shall be supported. The solution shall also be able to provide frequency synchronization.
- 2) The system shall support synchronization source over NTP in order to allow the gNodeB to be time synchronized to a standard Network Time Protocol (NTP) server.
- 3) The system shall support IEEE 1588 frequency synchronization based on ITU-T G.8265.1 telecom profile and IEEE 1588 phase synchronization based on ITU-T G.8275.1 and G.8275.2 profile.
- 4) The system shall support IEEE 1588 time and phase synchronization in order to provide the capability to recover time/phase synchronization from a PTP Grand Master. Packet-based synchronization and the Precision Timing Protocol (PTP) shall be used.
- 5) The system shall support Network Synchronization from GNSS (Global Navigation Satellite System) with frequency as well as with time & phase synchronization.
- 6) The system shall support the selection of synchronization source (i.e PTP or GNSS) for primary and secondary reference.
- 7) The system shall support synchronization support for synchronous Ethernet according to ITU-T G.8262/Y.1362.
- 8) The system shall comply with the IEEE 1588-2008 (v2) (PTP) standard for a grandmaster, ITU-T G.8265.1 defines the Precision Time Protocol telecom profile for frequency synchronization.
- 9) The system shall comply with ITU-T G.8275.1 that defines the Precision Time Protocol telecom profile for phase/time synchronization with full timing support from the network, G.8275.2 that defines Precision Time Protocol Telecom Profile for time/phase synchronization with partial timing support from the network.
- 10) Bidder shall declare holdover time detail of every synchronization solution.

II.2.1.7 IOT (interoperability tests)

- 1) Bidder shall organize interoperability tests (IOT) with other Bidders on Purchaser's request. These IOT will be supported and performed by the other Bidders and Bidder in their premises.
- 2) Bidder should provide detailed procedure and troubleshooting together with other Bidders. In case of incompatibility, Bidder should provide regular IOT cooperation channel with other Bidders to guarantee Purchaser benefit, for example periodic (monthly) conference between IOT team of different Bidders to negotiate Supplier's IOT requirements and IOT planning, troubleshooting together, etc.
- 3) Bidder must provide IOT program joint statement with at least other 2 Bidders in order to prove a long-term, bilateral IOT cooperation, which can ensure the purchase's benefit and investment.
- 4) Bidder commits to performing IOT tests on any interface will be deployed in this project with purchaser's legacy suppliers before introducing a new RAN Product/Release in purchaser networks.
- 5) Bidder is invited to list the RAN Bidders that Bidder maintains long-term IOT cooperation with for interoperability activities in supplier's IOT Lab.
- 6) The provided equipment must be IOT to the other Bidder follows to the 3GPP specifications, including but not limited to:
 - IOT with GSM/UMTS/LTE system.
 - Bidder will provide the IOT test report (between 3 parties: Bidder - Bidder - Operator) and IOT permission for provided equipment with existing equipment VNPT's network.
- 7) The system shall support interworking between FDD and TDD.

II.2.1.8 Self-Optimizing Network (SON)

- 1) Bidder shall propose solution for SON.
- 2) Bidder shall provide detailed information on the performance management aspects of O&M system.
- 3) Bidder shall describe its Self-Organizing-Network (SON) features and time of availability. The SON features include:
 - Self-configuring features: eNodeB Auto connectivity, eNodeB Auto configuration...

- Self-optimizing features: Automatic neighbor relation, PCI resolution as specified by 3GPP
 - Self-healing features: Load balancing...
 - Other features.
- 4) A description of the LTE-A SON functionality in the initial release as well as improvements planned for the coming releases.
 - 5) Bidder shall describe the Architecture of proposed SON solution.
 - 6) The proposed SON solution should be based on existing proven technology platform.
 - 7) Bidder should comply with Configure & optimize the network automatically/remotely.
 - 8) Bidder shall describe how Automatic data alignment for all neighbor nodes is achieved.
 - 9) The time at Site for installation, commissioning and integration shall be minimized.
 - 10) Bidder shall provide a Standard SW Management Solution which allows remote SW management of the network elements.
 - 11) Bidder's eNodeB shall be On-Air for commercial operation following the first Site visit
 - 12) Bidder shall describe how neighbor cell list is optimized in the network.
 - 13) Bidder shall describe how power optimization and scheduling of frequencies is done in downlink with minimal operational effort.
 - 14) Bidder shall describe how Service related problems in the network are detected and alarmed
 - 15) Bidder shall support MRO function and give detailed description.
 - 16) Bidder shall support Inter RAT Neighbor Relationship optimization.
 - 17) Bidder shall support RACH optimization through SON.
 - 18) Bidder shall support Cell specific neighbor relation/PCI handling
 - 19) Bidder shall support UE based Inter-frequency ANR.
 - 20) The system shall support automated PCI configuration, conflict reporting and conflict resolution.
 - 21) The system shall be able to automatically reconfigure the antenna system from MIMO to SIMO mode and back based on traffic load in the eNodeB in order to lower the power consumption.

- 22) The system shall support advanced monitoring of the antenna system in order to be able to indicate problems related to the antenna system, e.g. mismatched antenna pair Rx diagrams, swapped or disconnected feeders and loss in RF path.
- 23) The system shall support automated mobility optimization in order to reduce the need for manual tuning of handover parameters for individual cells. This should also lead to improved handover performance.
- 24) The system shall support the possibility to generate artificial cell load to a desired value in the DL. Power shall be transmitted over the air on the associated allocations in DL. It shall be possible to mix real UEs with the artificially generated load.
- 25) The system shall support advanced monitoring of the antenna system in order to be able to indicate problems related to the antenna system, e.g. mismatched antenna pair Rx diagrams, swapped or disconnected feeders and loss in RF path.
- 26) The system shall be able to provide E-CID, including timing advance values, in trace result in order to determine the location where individual events in trace occurred.
- 27) The system shall enable the Operator to configure own specific UE measurements for different objects and configurations in order to e.g. to test certain thresholds before they are applied for traffic functionality.

II.2.1.9 Environmental Requirements

- 1) Environmental Condition addresses the conditions under which the equipment is subjected during transport, installation and operation.
- 2) The equipment shall be designed to meet the requirements according to ETSI Standard EN 300 019-1-2 "Environmental conditions and environmental tests for telecommunications equipment – Transportation".
- 3) Bidder shall support EN 60950-1 Safety of Information Technology Equipment.
- 4) Bidder shall support IEC 60529 Degrees of Protection Provided by Enclosure, (IP code).
- 5) If the equipment is for indoor use, for OPERATION (in-use) it shall be designed to meet at least the requirements according to ETSI Standard EN 300 019-1-3 "Environmental conditions and environmental tests for telecommunications equipment.
- 6) Bidder shall declare any performance degradation caused by exceptional conditions. Unless declared, no degradation occurs. In any case there shall be no irreversible failures when normal operating conditions have been restored.

- 7) The equipment shall comply with the requirements which Operator imposes on telecommunication equipment with regard to the emission of electromagnetic interferences and the immunity to such interferences. These requirements are mentioned in the ETSI Standard ETS 300 386-1 "Telecommunication network equipment Electro-Magnetic Compatibility (EMC) requirements" inclusive corrigendum.
- 8) Bidder shall support humidity & climatic tests against ETSI EN 300-019-2-4 V2.2.2, Class T4.1.
- 9) Bidder shall support Vibration test cases against ETSI EN 300-019-2-4 V2.2.2, Class T4.1 (IEC class 4M5).
- 10) The partner shall provide details of environmental characteristics of all type of proposed equipment clearly highlighting variations (if any) across its various models. The environmental characteristics should include but not limited to operational temperature range, electromagnetic radiations, Relative humidity during operation, Lightning/surge protection ratings, IP (Ingress Protection) classification.

II.2.2 5G-NR RAN requirement

II.2.2.1 gNodeB hardware requirements

II.2.2.1.1 General

- 1) The offered system must be compliant with 3GPP Release 17 specifications or higher version.
- 2) The offered system shall be compliant with the 3GPP 38.xxx series for 5G-NR.
Bidder should state the specifications number that it is following (such as TS38.104, 38.141-1, 38.141-2, etc).
- 3) Besides 38.xxx series for 5G-NR. Bidder should state other 3GPP specifications supported in the offered system (32.xxx series – OAM&P and charging, 33.xxx series – security aspects, etc).
- 4) Bidder is required to provide an overview description of the gNodeB portfolio for commercial gNodeB.
- 5) Bidder shall provide its roadmap for all commercially available radio products, including all gNodeB types and associated sub-unit products (i.e. RRU, AAU, BBU etc), frequency bands and bandwidth, antennas, tower mounted amplifiers, external power/battery backup solutions, RET products, etc. Roadmap document will include detail information about software releases (pre-commercial and commercial), architectural changes, enhancements, interfaces supported, new features.
- 6) Bidder shall describe its strategy to secure a future proof HW platform and the overall gNodeB architecture.

- 7) The gNodeB shall support combinations of GSM, WCDMA, LTE, and/or 5G-NR in the same cabinet. State options for gNodeB in bidder's portfolio and shall state if fully, partially or not comply with 3GPP.
- 8) Describe gNodeB hardware expansion paths.
- 9) Describe the gNodeB software capacity upgrade possibilities.
- 10) The system shall support up to 15 km long optical fiber CPRI/eCPRI/OBSAI link between the radio and baseband.
- 11) State bidder's hardware life cycle plan and state valid proof points on how legacy equipment has been capable or could be modernized to meet future enhancements.
- 12) Bidder is requested to submit development plans of how LTE-A FDD, LTE-A TDD, 5G-NR FDD and 5G-NR TDD could use the same gNodeB elements and platform.
- 13) The system shall provide support Carrier Aggregation for at least 2 carriers of inter or intra band in the same BBU or different BBUs. Bidder shall detail Carrier Aggregation in the same BBU or different BBUs and maximum Carrier Aggregation will be supported.
- 14) gNodeB software is designed to support function split, virtualization and cloudification.

II.2.2.1.2 Baseband

- 1) The offered BBU support 5G-NR FDD& TDD simultaneously.
- 2) Bidder shall provide document to show maximum DL/UL throughput and maximum connected users, maximum cell number shall be supported in 5G single mode or 4G/5G mix-mode. Bidder shall describe BBU capacity in detail.
- 3) Bidder shall specify baseband pooling mechanisms.
- 4) Bidder shall specify the pooled sustained maximum aggregate bitrate supported per BBP.
- 5) Bidder to state type of resource allocation implemented on bidder system (static/pooling/dynamic) from HW and SW point of view. If pooling is supported, bidder to state the layer level of pooling support (L1/L2/L3).
- 6) In cases where the base band solution is implemented in different board, bidder to state how pooling across individual boards is handled and what kind of resources that could be brought into pool.
- 7) Bidder must clearly specify how a "Connected User" (CU) is defined in the gNodeB.
- 8) Bidder shall provide a solution in which the CU capacity licensing is pooled across all cells and sectors connected to one base band.

- 9) The BBU capacity in terms of CU shall be SW controlled. The solution should enable a flexible grace period, allowing VNPT to expand the capacity without invoking a hard lock of CU capacity.
- 10) Transport module should be integrated all-in-one for multi-technology in which a single transmission port is used for both S1/X2 Interface. Describe the available transmission interfaces and capabilities of the gNodeB product portfolio.
- 11) The BBU is expandable to supports mix-mode between 5G and 3G - 4G.
Bidder shall specify capacity (cells, connected user, DL/UL throughput, etc) when using dual-mode and multi-mode.
- 12) Bidder shall specify the base band capacity roadmap in terms of Connected Users, DL/UL throughput (5G only, 4G/5G Dual Connectivity), number of 5G cells in massive MIMO, Number of CPRI/eCPRI/OBSAI interfaces, etc.

II.2.2.1.3 Radio Units

- 1) The AAU/RRU supplied must be newest commercial product in terms of both hardware and software version based on the product roadmap officially issued by Bidder.
- 2) Bidder shall provide technical parameters as required below:
- PA output power.
 - Number of MCPA in each RF unit.
 - Size and weight of unit.
 - Power consumption (The typical and maximum power consumption for various configurations shall be stated).
- 3) Bidder shall state the nominal output power of the MCPA when configured for one carrier.
- 4) Bidder shall state the nominal output power of the MCPA for all different carrier configurations, not limited to carrier configured at the edge of IBW.
- 5) Bidder shall state the maximum IBW for each AAU/RRU offered.
- 6) Bidder shall state if there is any back off in output power for the temperatures higher than 30°C.
- 7) Bidder shall state the MCPA PAR (Peak to Average Ratio). PAR shall be declared for Radio with all different carrier configurations within the whole IBW and transmitting with maximum output power.

- 8) Bidder shall state the EVM (Error Vector Magnitude). EVM shall be declared for Radio with all different carrier configurations within the whole IBW and transmitting with maximum output power.
- 9) Bidder shall state the MCPA aging marginal taken into the consideration in the design.
- 10) Bidder shall state the MCPA Filter loss compensation marginal taken into the consideration in the design.
- 11) Bidder shall state the MCPA Temperature drift marginal taken into the consideration in the design.
- 12) Bidder shall state the MCPA power accuracy.
- 13) State the total TX power constantly available at full load at the RF connector.
- 14) The proposed RRU shall support VSWR measurement/monitoring to detect faults in the antenna system.
- 15) Proposed radio unit should support eCPRI/CPRI/OBSAI interface. Bidder shall specify number and type of interface supported by each proposed radio unit.
- 16) Bidder should state the number of antenna element in AAU and how that number effects AAU coverage.
- 17) Bidder should provide the coverage pattern for integrated antenna array used in bidder's AAU.
- 18) Bidder should state the cooling mechanism used in 5G AAU and RRU.
- 19) Bidder should state the process of chipset currently used or in the roadmap or bidder's 5G Radio Unit.
- 20) Bidder should state the roadmap to support 5G multi band AAU.

II.2.2.2 5G-NR functionality requirements

II.2.2.2.1 Architecture

- 1) The gNodeB must be ready for both NSA and SA architecture.

+ With NSA architecture:

- Bidder must declare the combination between LTE frequency band and 5G frequency band could be supported.
- Bidder shall indicate the key innovations that are supported for efficient resource utilization between LTE and NR.

+ With SA architecture:

- Bidder shall indicate the key innovations that are supported for efficient reuse of available spectrum, considering optimized performance from UL/DL capacity and coverage.

- + For each NSA and SA architecture, Bidder will provide solution, data split mode, pros and cons of the options and the ecosystem readiness for the proposed architecture.
 - + Bidder shall propose solution for SA/NSA hybrid mode
- 2) Bidder shall highlight the migration path from NSA to SA architecture by reusing the existing HW (Radio and Baseband), addressing UL/DL balancing issues, advantages/disadvantages of the different alternatives, proposed SW features and how they could apply to VNPT network based on VNPT spectrum allocation.

II.2.2.2.2 Software Functionalities

- 1) Bidder should have the features to support following mixed mode configurations in radios.
 - + NR FDD configurations: NR + LTE, NR + NR, NR + LTE + IoT.
 - + NR TDD configurations: NR TDD+LTE TDD.
- 2) NSA mode:
 - + Bidder solution shall support eNodeB - multiple connected gNodeB, gNodeB - multiple connected eNodeBs. Bidder shall state maximum number of connections supported per case.
 - + Bidder should allow ENDC usage with FR1 bands for UEs with NR Restriction.
 - + Bidder solution shall support periodic NR search thereby providing the UE multiple chances to establish ENDC connection.
 - + Bidder should support ENDC-Triggered Handover at incoming handover.
- 3) SA mode:
 - + In case the NR RAN is not ready to provide voice services Bidder should support feature that can trigger a redirect to LTE or NSA to setup a VoLTE call in LTE using a blind redirect to a predefined LTE carrier, while NR will still be used for data calls.
 - + Bidder should support relative priority controlled scheduling so that Operator can choose different scheduling strategies for each traffic type.
 - + Bidder should support Enhanced Cell ID (ECID) positioning.
 - + Bidder should support for Location service.
 - + Bidder should support for Reduced Capability (RedCap).

- + Bidder should support Capability aware Pcell Selection.

4) High band

- + Bidder's high band solution shall support major high bands 24/26 GHz (n257, n261), 39GHz (n260).
- + Bidder should support NR Downlink Carrier Aggregation for Intra-band contiguous carriers and non-contiguous carriers with Maximum aggregated bandwidth up to 800 MHz (8x100) MHz.
- + Bidder should support Dynamic Component Carrier Management for dynamic activation and de-activation of SCells for UEs that use downlink carrier aggregation.
- + Bidder should support NR Uplink Carrier Aggregation wherein up to four component carriers could be aggregated with a total aggregated bandwidth of 400 MHz.
- + Bidder should support the mechanism that prevents high-band devices from overheating by using CQI based UE energy efficiency enhancement.
- + Bidder should support enhanced beam management in High band.
- + Bidder should support high speed UEs in High band for UEs moving at speeds up to 100 kmh.
- + Bidder should support beam failure recovery in High band.

5) Mid band

- + Bidder should support improved propagation delay coverage in mid band by adding support for PRACH preamble format 0.
- + Bidder should support improved uplink coverage and superior interference suppression in all types of radio environments via high performing Physical Uplink Shared Channel (PUSCH) receiver based on instantaneous UL channel estimations in mid band.
- + The NR solution should have the option for monitoring and regulating transmit power of an AAU Massive MIMO radio.
- + Bidder M-MIMO solution should have solution to combat CSI-RS interference due to pilot contamination.
- + Bidder should support downlink Multi-User MIMO Mid-Band to support up to 16 layers.
- + Bidder should support Uplink Multi-User MIMO Mid-Band to support up to 4 layer UL MU-MIMO for PUSCH transmission.

6) Low band

- + Bidder should support extended propagation delay support in low band.

- + Bidder should support up to 4 DL MIMO layers for increased network capacity and performance, excellent end user performance with low latency and high peak rates.

7) Physical layer

- + Bidder shall indicate which numerologies are supported for low band, mid band and high band.
- + Bidder shall propose the feasible number of MIMO Layers in its equipment (in combination with patterns of SU-MIMO/MU-MIMO and UL/DL), for a typical commercial network traffic.
- + Bidder shall provide details of the beam management support in the NR products for high band (mmWave).
- + Bidder shall support a solution where in spectrum for LTE and NR can coexist in the same carrier using Time division.

8) Performance

- + Bidder shall provide its views on the current and roadmap features to improve Coverage, Capacity, Peak Rate and Latency.
- + Bidder shall propose solution for the UL/DL decoupling to have optimal coverage in the mix of low, mid and high band deployments.
- + Bidder shall state its capability to support static and dynamic spectrum sharing between LTE and NR along with timelines.
- + Bidder shall state its capability to enhance Massive MIMO performance.
- + Bidder shall state its capability to support Aggregation of Carriers between component carrier of Low band/Mid band with different numerologies.

9) Energy efficiency

- + Bidder shall provide details about the energy efficiency features currently supported in NR RAN solution as well as future plans.
- + Bidder shall support energy efficiency features such as Massive MIMO sleep mode, Deep sleep mode, discontinuous transmission and reception, traffic steering, traffic aware, etc.
- + Bidder shall support energy metering feature.

10) Automation and Orchestration

- + Bidder shall provide roadmap to support SON functions (Auto Healing/Configuring/Optimizing).

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- + Bidder shall state the SON functionalities currently supported as well as those part of the NR roadmap.
- + Bidder shall provide solution and roadmap to support RAN resource orchestration and E2E network slicing.
- + Bidder is required to provide detail roadmap of OSS evolution to support Open RAN/Cloud RAN (O-RU/O-CU/O-DU, SMO/RIC platform and other analytic tools by utilizing AI/ML).

11) Network Operations

- + Bidder shall support minimization of drive test feature.
- + Bidder shall support Cell trace functionality.
- + Bidder shall support UE trace functionality.
- + Bidder shall support Site Diagnostic functionalities which support various aspects of the deployment and maintenance activities.
- + Bidder shall support efficient fault management whereby the time and effort needed to identify and troubleshoot a problem is minimized.

II.2.2.2.3 Open RAN and Cloud RAN

- 1) Bidder to provide its views on Open RAN ecosystem and O-RAN specification and Cloud RAN:
 - + Open Fronthaul Interface.
 - + Cloud RAN follow Cloud Native architecture.
 - + Evaluation about massive MIMO performance through Open Fronthaul.
 - + Hardware Acceleration solution for L1.
- 2) Bidder to specify bidder's roadmap (product, software) for:
 - + Open RAN/Open Fronthaul support.
 - + Cloud RAN support, follow Cloud Native architecture, with detail information about platform used to deploy RAN applications.
 - + RAN Intelligent Controller (RIC), Service Management and Orchestration (SMO) solution.
- 3) Bidder to provide reference about Open RAN and Cloud RAN commercial deployment.
- 4) Bidder to provide reference about third party O-RU support on bidder's O-CU/O-DU.

5) Offered AAU hardware by Bidder shall support Open RAN.

II.2.2.2.4 Interworking with LTE

- 1) Bidder shall provide details of support of the inter-RAT Dual Connectivity functionality, ENDC, i.e. ENDC connected to the EPC, as defined in 3GPP TS 37.340.
- 2) Bidder shall propose ENDC solution, by considering the different operating bands and the characteristics of the different types of terminals that access the network simultaneously, in order to offer the most appropriate carrier combination for each of them.
- 3) Bidder shall provide the details on the use of MCG bearers, split bearers and SCG bearers in ENDC with EPC.
- 4) Bidder shall provide the details of features requirements on LTE and NR system for efficient interworking across technologies.

II.2.2.2.5 Voice over NR

- 1) Bidder shall propose the recommended strategy to support voice services with 5G deployments.
- 2) Bidder shall support VoNR.
- 3) Bidder shall support VoNR to VoLTE handover.
- 4) Bidder shall support EPS fallback for voice.
- 5) Bidder shall describe the voice emergency procedures supported in the NR RAN solution.
- 6) Bidder should support features to enhance voice quality such as ROHC.

II.2.2.2.6 RAN Slicing

- 1) Bidder shall state its views on the implementation of RAN slicing and its benefits for the different use cases.
- 2) Bidder shall state available and planned characteristics of 5G RAN slicing solution.
- 3) Bidder's slicing solution shall support Slice-aware QoS mapping in the RAN.
- 4) Bidder's slicing solution shall support Slice-aware NG-based handover in the RAN.
- 5) Bidder's slicing solution shall support Slice-aware Core Network instance selection in the RAN.
- 6) Bidder shall support Slice Aware Scheduler.
- 7) Bidder shall state number of slices supported per cell and UE in its RAN slicing solution.

8) Bidder shall support dynamic radio resource partitioning in RAN.

9) Bidder shall support Observability per-slice.

10) Bidder shall state if the RAN slicing is supported in RAN sharing scenarios.

11) Bidder shall support ability to do Network Slicing in SA mode, to support 5G services.

II.2.2.2.7 RAN Sharing

1) Bidder shall state its solution maturity to support MORAN/MOCN and the deployment options supported.

2) Bidder to specify MOCN deployment support for both LTE and NR (NR in NSA mode or SA mode).

3) Bidder to specify MORAN deployment support for both LTE and NR (NR in NSA mode or SA mode).

4) Bidder shall support RAN sharing within one baseband unit.

5) Bidder shall support up to 3 PLMNs in gNodeB for both SA and NSA.

6) Bidder to specify RAN sharing capability to support mixed NSA/SA mode.

7) Bidder shall support fair sharing of gNodeB resources/capacity between Operators in a shared network solution (MOCN). Describe in detail how the proposed functionality works.

8) Bidder shall support performance monitoring of PDCP SDU user DL/UL data volume per PLMN-ID.

9) Bidder shall support transport separation for RAN sharing in NSA/SA mode in gNodeB.

II.2.2.2.8 Dual Connectivity and Carrier Aggregation

1) Bidder to provide its views on the recommended band combinations for end to end performance, standardization and ecosystem.

- + Dual Connectivity
- + Carrier Aggregation.

2) Bidder shall elaborate the Dual Connectivity and Carrier Aggregation features available to achieve high capacity.

3) Bidder shall support NR Downlink Carrier Aggregation between TDD FR1 and FDD.

4) Bidder shall support NR Uplink Carrier Aggregation between TDD FR1 and FDD.

- 5) Bidder shall support NR Downlink Carrier Aggregation for Intra-band contiguous carriers and non-contiguous carriers with aggregated bandwidth up to 200 MHz (2x100) MHz in FR1, TDD mode.
- 6) Bidder shall support NR Downlink Carrier Aggregation for Intra-band contiguous carriers and non-contiguous carriers with aggregated bandwidth up to 800 MHz (8x100) MHz in FR2, TDD mode.
- 7) Bidder shall support NR Downlink Carrier Aggregation for 02, 03 FDD CC.
- 8) Bidder shall elaborate the carrier aggregation features available to achieve coverage extension, utilizing secondary carrier FDD to leverage TDD mid-band coverage.

II.2.2.2.9 Dynamic Spectrum Sharing

- 1) The offered system shall support LTE-NR Dynamic Spectrum Sharing on the same spectrum allocation.
- 2) Bidder shall be required to provide LTE-NR Dynamic Spectrum Sharing mechanism in uplink and in downlink in detail.
- 3) Bidder shall provide its roadmap plans to support LTE-NR Dynamic Spectrum Sharing for SA and NSA modes. Bidder shall support NSA+SA architectures in a DSS cell.
- 4) Bidder to specify NR and LTE bands that are supported with Dynamic Spectrum Sharing.
- 5) Bidder to specify MBSFN and CRS Rate Matching based Dynamic Spectrum Sharing.
- 6) Bidder to specify resource coordination speed (1ms or 10ms) in Dynamic Spectrum Sharing.
- 7) Bidder to specify if there is any performance impact towards NR and LTE while operating in Dynamic Spectrum Sharing mode.
- 8) Bidder shall support Carrier Aggregation in a DSS Cell.

II.2.2.2.10 MIMO and beamforming

- 1) Bidder shall support digital beamforming.
- 2) Bidder shall support PMI-based and SRS-based Beamforming configuration. Bidder shall elaborate if bidder support dynamic PMI and SRS Beamforming switching for optimal throughput of UE under 5G Cell site.
- 3) Bidder's Massive MIMO Radio Unit shall support vertical and horizontal beamforming. Bidder is required to elaborate supported configuration related to number of beams in horizontal and vertical in PMI-based beamforming configurations.
- 4) Bidder shall support flexible pairing between SSB and beam refinement in high band.

- 5) Bidder shall state support SSB beamforming for idle mode control channels. Bidder is to elaborate the advantages of SSB beamforming for idle mode and application scenarios.
- 6) Bidder shall support DL MU-MIMO and UL MU-MIMO. Bidder is required to elaborate solution and required license/feature to deploy MU-MIMO, and recommend to VNPT suitable deployment scenarios.
- 7) Bidder is required to proposed bidder's proprietary solution about directional interference mitigation, which is the capability to create spatial null steering horizontally and vertically towards a configurable direction, for better co-exist between gNodeB and Satellite stations other interference sources.

II.2.2.2.11 QoS Management

- 1) Bidder shall describe the QoS model that could be implemented in the network for various deployment options.
- 2) Bidder shall describe how the 5G traffic classification and QoS will be done in transport and access network for NSA and SA.
- 3) Bidder shall support relative priority controlled scheduling so that Operator can choose different scheduling strategies for each traffic type.
- 4) Bidder shall support multiple DRB per session.
- 5) Bidder shall support QoS flow management function in 5G RAN solution.
- 6) Bidder shall support the standardized QFIs as defined in 3GPP TS 23.501.
- 7) Bidder shall support dynamic modification of QoS properties of an established PDU session.
- 8) Bidder shall support DSCP Mapping Based on 5QI and QCI.
- 9) Bidder shall support DSCP Marking based on QCI + ARP.
- 10) Bidder shall support and describe QoS consideration for RAN Sharing.
- 11) Bidder shall support QoS aware traffic differentiation & prioritize in downlink Carrier Aggregation traffic.
- 12) Support UE Grouping Framework: Define UE Group based on the UE related parameters provided by the Core Network (SPID or RFSP, QCI or 5QI, ARP, PLMN, S-NSSAI, Masked IMEI-SV, IMEI-TAC, IMEI-SVN, RedCap UE...). Mobility, Carrier Aggregation, Load balancing features are configured differently according to each group of UEs.

II.2.2.2.12 Security architecture and procedure

- 1) The offered system shall be compliant with 3GPP TS 33.501 - Security architecture and procedures for 5G System.
- 2) Bidder shall provide details to understand ciphering & integrity protection support for SA Option 2 and NSA Option 3x.
- 3) Bidder shall state compliance for the following ciphering algorithms for C-plane:
 - NULL (NEA0)
 - SNOW 3G (NEA1)
 - AES (NEA2)
 - ZUC (NEA3)
- 4) Bidder shall State compliance for the following integrity protection algorithms for C-plane in NSA Option 3x:
 - NULL (NIA0)
 - SNOW 3G (NIA1)
 - AES (NIA2)
 - ZUC (NIA3)
- 5) Bidder shall state compliance for the following ciphering algorithms for U-plane:
 - NULL (NEA0)
 - SNOW 3G (NEA1)
 - AES (NEA2)
 - ZUC (NEA3)
- 6) Bidder shall support Integrity Protection of U-Plane in SA.
- 7) The solution shall support ciphering of RRC signaling.
- 8) Bidder to state the generation of security event logs of equipment shall be enabled for all the accesses (local or remote), so that it will be possible to know actions taken on the equipment, and the accesses made to it.

9) Bidder shall provide description for account management on gNodeB.

10) Bidder shall provide details on the OAM Transport Layer Security (TLS 1.3) Support on gNodeB.

11) The solution shall support authentication and access control in order to prevent unauthorized access to resources and information.

12) Bidder must describe in detail the access control mechanism and user account management supported on gNodeB.

13) Bidder must describe how their solution is designed to minimize the threat of unauthorized or malicious access from any RAN node towards its related OSS platform and the operator management network.

14) Bidder shall state the security protection adopted on the gNodeB for protection of the OS and application layers from attack or modification. This should include a mechanism to cryptographically validate a version of software being used.

15) Bidder shall describe any security testing process used during the software development cycle

16) Bidder shall describe all possible ways to protect the Network from 'denial of service' attacks on gNodeB interfaces.

17) Bidder shall state possible ways to protect the Network from 'spoofing' attacks on 5G (including O&M) interfaces.

18) Bidder shall provide a mechanism to avoid exhaustion of resources by one device that could be compromised, Platforms, Resources and Traffic flow must be Isolated.

19) Bidder shall describe the possibility to protect core network or other individual subscriber mobiles from IP packet 'flood attacks' via gNodeB interfaces

20) Bidder solution shall provide a mechanism to filter and control the source IP addresses that can access the components of the solution. Filtering methods like ACL and Solution IP controls (including host firewalls or Host IPS).

21) Bidder shall support of Access Control List (ACL) or filters to limit administration and other protocols access only from certain source IP addresses ranges is required. It must be able to configure multiple disjoint ranges specified by IP network and mask.

22) Bidder shall describe in detail how connections, updates, patches, operations, etc. are being applied to the gNodeB from a security perspective.

23) Secure tunnelling IPsec shall be available on Interfaces towards the core network for 5G (N2, N3, Xn, etc).

24) Bidder offered gNodeB shall have the capability for automatic IPsec tunnel establishment between eNodeB and gNodeB via ANR in option 3x deployment (direct X2 IPsec).

- 25) Bidder offered gNodeB shall have the capability for automatic IPsec tunnel establishment between gNodeB and gNodeB via ANR in option 2 deployment (direct Xn IPsec).
- 26) Bidder offered gNodeB shall be capable of preventing X2 link setup for an unwanted eNodeB in option 3x deployment mode
- 27) Bidder offered gNodeB shall have capability to support 3GPP certificate with RSA key length of 2048-bit and 4096-bit and able to block RSA key length shorter than 2048-bit on demand.
- 28) Bidder shall provide document to specify security requirements supported gNodeB.
- 29) Bidder shall provide necessary monitoring means in the RAN network to identify signaling attacks, DoS attacks or physical attacks.

II.2.3 Operation and maintenance centre

II.2.3.1 Functional requirement

II.2.3.1.1 General requirement

- 1) The Operation and Maintenance Centre shall provide all the operation and maintenance functions for the RAN network elements. O&M functions shall be provided by the OSS and by LMT (Local maintenance terminal).
- 2) All the functions should provide a Graphical User Interface that is the most facilities for operating.
- 3) All data related to FM (Fault management), PM (Perform management), CM can export to txt, xml...file format and 3rd party could be used.
- 4) OSS system should support the CORBA protocol at north bounce interface to connect to NMS system.

II.2.3.1.2 Configuration Management

1) Overview:

- The following Configuration functions shall be provided by the OSS:
 - + Administration of network resources.
 - + Administration of network changes (updates and upgrades).
 - + Support of installation and recovery action.
 - + Provision and display of network information status.

- The configuration management shall be based on managed objects. The creation, modification and deletion of these objects shall be possible from OSS and LMT.
- 2) Command log files: All configuration commands have to be logged, stored in dedicated log file. Log files could provide information such as:
 - Date and time of command this was done.
 - User.
 - Commands.
 - System's response.
- 3) Handling of NE expansion: For system expansion, the activation of new boards in the RAN network elements and the installation of new gNodeB in a RAN area shall not cause any system outage.

II.2.3.1.3 Database Handling

- 1) The change of network element configuration parameters in the database shall be executed by entering single command script files.
- 2) The OSS system shall provide database engineering capabilities, including plausibility checks and generation of command files or object coded database files. Furthermore, the generation of delta databases for each new SW release has to be supported.

II.2.3.1.4 Software Management

- 1) Overview
 - The OSS and LMT shall both provide the functions to introduce new SW loads in the network elements.
 - Bidder shall state the SW download time from OSS to gNodeB for a complete SW load and clearly indicated download SW process supervised by OSS.
 - The OSS should be done simultaneously the database download to different RAN. Bidder shall indicate whether several download jobs to different RAN could be controlled in parallel.
 - In OSS, the network elements shall offer the possibility to store at least 03 different SW versions for O&M backup, upgrade purposes.

2) SW changes and upgrades:

- The OSS shall provide the possibility of the SW changes and upgrade by SW download or by patch file.
- The downloading of the application SW shall be executed independently for all call processing to avoid performance impact during SW downloading.
- During software download activities, no outages shall occur. Network elements outages due to SW activation procedures shall be minimized. Bidder shall clearly state the download process, the SW changes.
- In the process of changing the SW, HW, parameters, the OSS and RAN should be updated automatically the changes to the relative elements

II.2.3.1.5 Fault Management

1) Overview

- The Fault Management includes all the required measurements to detect and repair faults in the mobile communication network.
- Hardware faults shall be isolated to a particular module (fault isolation).
- The OSS shall state the detailed information about the probable cause of the fault.
- On-line maintenance documentation shall be provided by the OSS to be easily fault handling.

2) RAN Fault detection mechanisms in the RAN network elements

- The RAN network elements shall provide the automatic tests to supervise the consistency operation of HW devices and software.
- Furthermore, the OSS has to provide at least the Tx/Rx path fault detectors such as:
 - + TX/RX frequency supervision.
 - + Antenna supervision (VSWR).
 - + TX output power supervision.

- The OSS should supervise the RAN external alarm. Bidder shall clearly state the connection, define, EAS process at OSS and RAN.

3) Alarm surveillance

- Alarm surveillance includes:
 - + Alarms/Events reporting function.
 - + Alarms/Events log function.
- The link to/from the OSS and between the network elements shall be supervised.

4) Alarm filtering: The OSS should provide the intelligent alarm filtering algorithm.

5) Alarm Logging

- All alarms and alarm cease messages shall be logged in a dedicated log file. The information shall be retrievable by the searching functions. The size of the log files shall be administrable. The log file shall be uploading able for post-processing purposed.
- Bidder shall describe in detail which log files are provided in the OSS.

6) Alarm Reporting:

- The system must guarantee that all necessary information of the detected fault is indicated at the LMT and the OSS. The required information comprises the state/status change and the alarms of all objects.
- In case of failure of the link between the network elements and OSS, the system should update automatically the alarms information which will be stored in RAN after reconnecting
- Furthermore, each alarm has to be qualified by a probable cause giving more detail information about the nature of the fault and by the respective alarm severity (minor, major, and critical).
- The diagnostic functionality has to be provided to check the function of hardware unit.

7) Fault Recovery

- Fault Recovery for RAN has to be autonomously performed by OSS.

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- Different system recovery levels have to be provided in every network element.
- Bidder shall state the different outage times for every network element in case the recoveries are executed.

II.2.3.1.6 Performance Management

1) Overview: The performance management tasks include the monitoring of the traffic load/ performance of the network.

2) Handling

- Operator shall be able to initiate measurements, to start and stop measurements, to schedule measurements (daily and weekly) and to retrieve the current measurement values at any time within the measurement period.
- The measurement must be indicated in different levels: gNodeB, CELL, and CARRIER.
- The measurements shall be set to the different values according to the measurement type.
- Bidder shall describe in detail which the measurements are supported in the system and which output values are delivered as the measurement results.
- The Operator shall be able to retrieve the measurement data from the Graphical User Interface. Bidder shall describe the interfaces and the types of measurement display.
- The measurement result shall be stored to files and easily export to other format such as ASCII, EXCEL.
- All the measurement data must be stored and long-term post processing (at least 1 year).

3) Data measurement

The OSS system must be designed to support system performance management under table and graphical form:

- Raw statistics.
- Indicator statistics.
- Key performance statistics.
- The measurement data are displayed as:

- Traffic measurements including statistics on attempts, success, congestion, failure etc.
- Handover performance: attempt, successes, failure, reasons etc.
- The measurement of system load.
- Furthermore, the below statistical measurement relating to radio interface must be included:
 - Interference on Idle, Bit error rate, Frame error rate etc.
 - Uplink/Downlink signal strength, uplink/downlink signal quality.
 - Timing Advanced.
 - Power level.
 - Path balance.

Bidder shall describe in detail to meet the above requirements.

II.2.3.1.7 Quality Management

- 1) The OSS system shall be able to generate, display and update the QoS alarms in detail following thresholds which shall be defined by the Operator for every hour for all network elements. Real-time monitoring tool should be used as optional
- 2) The OSS system shall include recommendations for causing and solving the QoS alarms of the network.
- 3) The Trace Call feature according to Cell, LAC, RAC and IMSI... shall be provided in OSS application. Bidder shall describe in detail.
- 4) Bidder shall provide solutions in which network's KPI parameters could be viewed on maps in order to support Operator in monitoring, evaluating network quality including but not limited to RSCP, RSRP, blind spots, hot spots...

II.2.3.2 Hardware requirement

II.2.3.2.1 Functional architecture.

- 1) The OSS shall be composed of the following subsystems:
 - OMTs: Operation and Maintenance Terminal.
 - OMPs: Operation and Maintenance Processor.

- 2) The OMT shall be operated either at the OSS site or remotely. The connection between local OMTs and OMPs shall be performed via LAN based upon IEEE 802.3 and 802.3 and OMT remote via Intranet, leased line with TCP/IP protocol.

II.2.3.2.2 Hardware architecture

- 1) The hardware shall be based on commercial hardware components available on the world market.
- 2) Bidder shall specify the HW platform used for the OSS in detail (computer model, memory, modem, hub, CPU...). All the equipment should use AC 220V power supplier.
- 3) Bidder shall describe the OSS configurations in detail (offered, minimum, standard, maximum configuration):
 - The number of OMP, OMT, X-Terminal units (at least 01 monitor or laptop for server supervision).
 - The auxiliary equipment (Printer, storage devices CD-ROM, Tape, etc).
 - The maximum number of NE management (Sites, Cells, etc).
 - The maximum number of TRX management.
 - The number of links for providing (X.25, LAN).
 - The number of transactions with the elements per second.

II.2.3.3 Software requirement

II.2.3.3.1 Software Architecture

- 1) The software version of OSS (Operation and Applications SW) must be the last version of supplier. All features and services must be described and included in the proposal.
- 2) The SW products must be integrated and used as a system. The OSS application SW shall be designed to allow flexibly activating the features and upgrading the SW.

II.2.3.3.2 Security Management

- 1) Overview.
 - The OSS shall provide the access control and the authorization management functions to prevent the unauthorized access into the database and system.

- The OSS shall supervise the activities of LMT while the LMT are accessing into the system.
 - Different authorization profiles shall be available. The OSS shall provide means to allow only authorized staff to perform operations on the system. It shall be possible to assign network element specific permissions. This mean, that the management capabilities for a certain user could be restricted to defined network elements only.
- 2) The accesses, operations of users shall be logged in the log files which will be stored in the system.
- The OSS shall be flexibly backup and recovery.
 - The OSS shall manage the activities of each element in OSS system.
 - Bidder is required to provide solutions to guarantee the security of the whole network (internal and external). All licenses related to security solution should be provided and clearly explain in documentation.

II.2.3.3.3 Interfaces and Connections

- 1) The OSS shall provide the Graphical User Interface to allow user friendly applications easy network functions overview and other relative elements. Online OSS documentation and UTRAN customer documentation
- 2) Connection to network elements: For the connection between the OSS and the RAN network elements either X.25 connection through PSPDN or IP Ethernet shall be used.
- 3) Connection to Network Management Centre (NMC): In order to provide centralized operation of a regionalized network hierarchy, a standard interface to a NMC or a dedicated OSS for the connection of several regional OMCs has to be provided.

II.2.3.3.4 Upgrade and Expansion

- 1) The OSS shall be modularly expandable in steps. Bidder shall state the maximum number of the equipment provided in the proposal:
 - The maximum number of terminals.
 - The maximum number of processors.
 - The maximum number of auxiliary equipment.
- 2) Bidder shall state the mechanism to upgrade, expand the offered configuration and the impact to the normal system operation must be described in detail.

- 3) Bidder shall state the possibility upgrading the HW, SW to new technology or capacity.

II.2.3.3.5 Redundancy and Reliability

- 1) The OSS shall be installed in stand-alone or redundancy (standby).
- 2) The OSS shall be provided the hot redundancy for hard disk and CPU.
- 3) Bidder shall state the MTBF figures of all components.

II.2.3.4 Other Requirements

- Bidder shall state the power supply for OSS system in detail.
- Bidder shall state the environment conditions of the OSS equipment.

APPENDIX I – 5G FEATURES

Bidder is required to offer the following features for both RAN and OSS. Bidder must specify features used for RAN, features used for OSS, features used for both RAN and OSS.

Feature List 1 (4G/5G NSA/SA Interworking)	
#	
1	NSA Option 3x Support
2	ENDC Connectivity Support
3	Capability-Aware Idle Mode Control
4	ENDC-Triggered Handover during Connected Mode
5	ENDC-Triggered Handover during Setup
6	Enhanced NR Restriction
7	Optimized UE Distribution for ENDC
8	Incoming/Outgoing NR IRAT Reselection/Handover (4G – 5G SA)

Feature List 2 (5G)	
No.	Content
1	Network Architectures Option 3/3a/3x Support LTE-NR Dual Connectivity Option 2 Support NSA/SA Hybrid mode Support Basic Physical Layer Support SC-OFDM
2	Radio Feature and Functionality Downlink Modulation Schemes (BPSK/QPSK/16QAM/64QAM/256QAM) Uplink Modulation Schemes(BPSK/QPSK/16QAM/64QAM) Subcarrier Spacing(15/30/120KHz) PRACH with Long/Short Sequence Long PUCCH/Short PUCCH Slot Format Configuration

		Dynamic Scheduling UL/DL HARQ
		System Information Broadcasting Synchronization Random Access Procedure Radio Access Bearer Management Interface Management (S1-U/X2/Xn/F1) Idle mode procedures Data bearer setup/release procedures RRC Inactive State
3	Connection Management	SN Change Procedure in NSA Intra-MN Hand Over without SN Change in NSA Intra-MN Hand Over with SN Add/Release/Change in NSA Inter-MN Hand Over without SN Change in NSA High speed UE support in FR1 TDD UE Grouping Framework PSCell Change to Higher Priority User- and Service-Specific Mobility
4	Mobility Management	Radio Admission Control Congestion Control Load Control Load Balancing Dynamic Resource Allocation Frequency Synchronization Support Phase and Time Synchronization Support BTS Grandmaster support Synchronization holdover support (SyncE, 8275.2....) Voice EPS fallback Legacy Standard QCI E2E QoS Guarantee
5	Radio Resource Management	Confidentiality protection Integrity Protection
6	Synchronization	
7	Voice support	
8	QoS Management	
9	Security	

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		gNodeB setup and configuration Key management inside the gNodeB Secure environment in gNodeB IPSec Support for N2/N3... interface MAC PDU and Functions RLC PDU and Functions PDCP PDU and Functions Robust Header Compression (RoHC) Massive MIMO Support (32T32R, 64T64R) 8/16 DL Layer Support 4 UL Layer Support Single-User Massive MIMO Support Multi-User Massive MIMO Support Control Beam Forming Dynamic Configuration Support Service Beam Forming Dynamic Configuration Support SRS-based Beamforming Support
10	User Plane Process	Downlink Carrier Aggregation up to 3 CC Uplink Carrier Aggregation up to 2 CC
11	Massive MIMO	Carrier Aggregation Support between FR1-FR1 Carrier Aggregation Support between TDD-FDD Carrier Aggregation for Coverage Extension User- and Service-Specific Carrier Aggregation RAN Feature to support Network Slicing (Radio Partition, Resource reserve...)
12	Carrier Aggregation	QoS Control in RAN Slicing EN-DC RAN Slicing NR Delay-Controlled Scheduling DTX/DRX Support
13	RAN Slicing	MIMO Sleep Support Radio Deep Sleep Support Downlink Data and DMRS Multiplexing Modulation-Aware Power Control Uplink Data and DMRS Multiplexing
14	Energy Efficiency	
15	Performance	

16	OSS/SON	MDT (Minimal Drive Test) for NSA
		ANR
		PCI Conflict Detection and Resolve
		Zero Touch/Plug-Play
		PCMD support for Operation Solution
		Network Technologies Base Package
		Automatic ID Management
		Event Based Statistics
		Uplink Spectrum Analyzer
		Dynamic CM NBI
		Analytic Session Record
		Network Assurance Data Store
		Network Performance Reports
		Historical Network Analytics



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APPENDIX II – 4G FEATURES

- Bidder is required to offer the following features for both RAN and OSS. Bidder must specify features used for RAN, features used for OSS, features used for both RAN and OSS:

Feature List 1 (LTE-A)	
I.	RAN Feature
1	16-QAM Uplink
2	64-QAM Uplink
3	64-QAM Downlink
4	256-QAM Downlink
5	LTE Basic
6	LTE Basic FDD
7	Cascade Radio Units
8	Cross-Sector Antenna Sharing Redundancy
9	Efficient DRX/DTX for Connected UE (Signaling Storm & Terminal Battery Life Saving
10	Emergency Call Prioritization
11	RRC Connection Re-establishment
12	SIB16 Time Information Broadcast
13	Support for 15km CPRI Link
14	Uplink Frequency-Selective Scheduling
15	System Information Modification

16	S1-flex
17	Contention Free Random Access
18	VSWR Antenna Supervision
19	Basic Admission Control
20	Basic Load Management
21	Cell ID Based Location Support
22	Clock Source over NTP
23	IEEE1588v2 Frequency Synchronization
24	Intra-LTE Handover
25	Inter-Frequency Session Continuity, Coverage-Triggered
26	Coverage-Triggered Inter-Frequency Handover
27	Data Forwarding at Intra-LTE Handover
28	Packet Forwarding at S1 Handover
29	S-GW relocation at X2 handover
30	CSFB to GSM
31	CSFB to UMTS
32	Redirect with System Information (RAN Information Management for WCDMA)
33	WCDMA Session Continuity, Coverage-Triggered
34	WCDMA IRAT Handover, coverage triggered
35	Downlink Frequency-Selective Scheduling (Adaptive Resource Allocation)
36	Fractional Path loss Power Control
37	Interference Rejection Combining(UL Interference Rejection Combining)
38	ICIC - Autonomous Resource Allocation
39	Dual-Antenna Downlink Performance Package
40	Mobility Control at Poor Coverage
41	Egress IP Traffic Shaping
42	IP and SCTP Transport PM Enhancements
43	Jumbo Frames

44	Dynamic QoS modification
45	Multiple Radio Bearers per User
46	Pre-scheduling
47	CQI Adjustment
48	Active Queue Management (AQM)
49	Priority Paging
50	QoS-Aware Scheduler
51	TCP optimization
52	Support for 3GPP Compatible RET Antennas
53	Support for 3GPP Compatible TMA
54	Support for Cascading of 3GPP Compatible RET Antennas
55	Session admission control
56	Usage based PDCCH adaptation
57	4x2 Downlink MIMO
58	4x4 Downlink MIMO
59	Carrier Aggregation 10MHz/15MHz/20MHz
60	Dynamic SCell Selection for Carrier Aggregation
61	Supplementary Downlink for Carrier Aggregation
62	Inter-site Aggregation
63	Uplink Carrier Aggregation
64	4-Way Receiver Diversity
65	Advanced Differentiation for resource fair scheduling
66	Differentiated Admission Control
67	Minimum Rate Proportional Fair Scheduler
68	Relative Priority Scheduling
69	IEEE1588 Frequency Synchronization
70	Synchronous Ethernet
71	Mixed Mode Radio LTE RAN

72	Coverage-Adapted Load Management
73	Inter-Frequency Load Balancing
74	Adaptive RLC Poll-Retransmission
75	Dynamic Load Control
76	Dynamic UE admission control
77	Enhanced PDCCH Link Adaptation
78	PDCCH Power Boost
79	Prioritization of VoLTE in Access Barring
80	Prioritized SR Scheduling
81	Release Inactive UE at High Load Handover
82	Variable SR and CQI Periodicity
83	SRVCC to WCDMA
84	VoLTE
85	Dynamic GBR Admission Control
86	Multi-Target RRC Connection Re-Establishment
87	PHICH Group Spreading
88	TTI Bundling
89	VoLTE Frequency Hopping
90	UL CoMP
91	High Speed UE
92	Multi-Layer Service-Triggered Mobility
93	Service or Priority-Triggered Inter-Frequency Handover
94	Service Triggered Mobility
95	Admission-Triggered Offload
96	IP Flow Monitoring
97	Transport Path Characteristics Monitoring
98	TWAMP Initiator
99	Two-Way Active Measurement Protocol Responder

100	MIMO sleep mode	
101	IEEE1588 Time and Phase Synchronization	
102	Assisted time holdover	
103	RAN Grand Master	
104	Self-Organizing Networks/ Auto-Integration	
105	Self-Organizing Networks/PCI Selection	
106	Self-Organizing Networks/PCI Collision Resolution	
107	Self-Organizing Networks/RAN Power Saving	
108	Self-Organizing Networks/ANR	
109	Self-Organizing Networks/ANR Support for IRAT	
110	IPv6	
111	Lean Carrier	
112	Network-Assisted CRS IC	
113	Antenna System Monitoring	
114	Bidirectional Forwarding Detection	
115	CPRI Compression	
116	Measurement-Based CSFB Target Selection	
117	PSHO-Based CS Fallback to UTRAN	
118	Downlink CoMP	
119	Dynamic uplink resource allocation	
120	RAN Data Collection	
121	Dynamic PUCCH	
122	PUCCH Over-dimensioning	
123	Minimization of Drive Tests (MDT)	
II.	OSS Feature	
1	Self-Organizing Networks/ Auto-Integration	
2	Self-Organizing Networks/PCI Selection	

3	Self-Organizing Networks/PCI Collision Resolution
4	Self-Organizing Networks/RAN Power Saving
5	Self-Organizing Networks/ANR
6	Self-Organizing Networks/ANR Support for IRAT
7	Minimization of Drive Tests (MDT)
8	Load Management Control
9	LTE Real Time KPIs in Network Status Display
10	Configuration Profiles
11	Consistency Check – User defined
12	Export File Editor
13	Fallback Area
14	Inter Radio Access Technology Handover Manager WCDMA-LTE
15	Undo Plan
16	Advanced MO Scripting, Node Checker
17	Uplink Interference sample file collection
18	LTE-WCDMA Mobility Support
19	Network Surveillance Expert
20	Network Maintenance Support (Call trace, cell trace, trace file export...)
21	Standard Interfaces Support (For NMS, CEM application)
22	Network Maintenance Support (Following VNPT Requirement)
23	Advanced Working Set
24	RAN Data Collection
25	Network Technologies Base Package
26	Automatic ID Management
27	Event Based Statistics
28	Uplink Spectrum Analyzer
29	Dynamic CM NBI
30	Analytic Session Record

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31	Network Assurance Data Store
32	Network Performance Reports
33	Historical Network Analytics

APPENDIX III - TIME SCHEDULE

Time frame of contract execution (sample)

No.	Content	T0	W1	W2	W3	W4	W5	W6	W7	W8	...	Wn
	Contract coming into force	▲										
	<i>Detailed Time Schedule</i>											
1	Goods manufacturing and ex-works ready											
2	Shipping and Delivery of goods (arrive at VN custom)											
3	Custom Clearance											
4	Goods delivery to site, system installation and configuration...											
5	Provisional Acceptance Test Certificate (PAT)											

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6	Provisional Acceptance Certificate (PAC)																			
7	Trial-run period																			
8	Final Acceptance Certificate (FAC)																			

Note:

Bidder shall state clearly:

- Work and Responsibility of Bidder.
- Work and Responsibility of VNPT (if any).
- Time of Delivery: Within 70 days from the PO signing date. Time of delivery shall not include the duration of Buyer doing customer clearance for the Supplies.
- Installation and commissioning and integrating..... and put into service for all equipment are within 180 days from the issuance date of each PO.
- The Trial-run 60 days from issuance date of the PAC of each PO.

PART III- CONDITIONS OF CONTRACT

CHAPTER VI. GENERAL CONDITIONS OF CONTRACT

1. Definitions	For the purposes of this Contract, the following words and expressions shall have the meanings hereby assigned to them: 1.1. "Investor" means the entity as specified in the SCC; 1.2 "Contract" means the agreement between the Investor and the Contractor, expressed in writing, signed by both parties, including appendices and attached documents; 1.3. "Contractor" is the successful bidder (which may be an independent contractor or in partnership) and is specified in the SCC; 1.4. "Subcontractor" means an organization or individual that signs a contract with a contractor to participate in performing related services; 1.5. "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto; 1.6. "Contract Price" means total amount charged for supply of the Goods and Related Services as specified in the Contract Agreement. The Contract Price must include all taxes, duties, levies, fees and charges (if any); 1.7. "Day" means day of the calendar year; "year" means the calendar year consisting of 365 days; 1.8. "Goods" includes includes machinery, equipment, raw materials, fuel, materials, supplies, and spare parts; product; vehicle; consumer goods; drugs, chemicals, testing supplies, medical equipment; commercial software; 1.9. "Related Services" includes services incidental to the supply of the Goods, such as installation, initial maintenance, repair, insurance thereof or other after-sales services, e.g. training, technology transfer, etc.; 1.10. "Completion" means the fulfillment of the Related Services by the Contractor in accordance with the terms and conditions set forth in the Contract; 1.11. "Project Site (or Final Destination)" means the place
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	named in SCC. 1.12. "Contract implementation period" is calculated from contract effective date until the parties have completed obligations under the signed contract.
2. Contract Documents and Order of Priority	2.1. All documents specified in Section 2.2 SCC (including parts of the documents) will constitute the Contract to form a unified whole, be compatible, supplement and explain each other. 2.2. The documents constituting the Contract are arranged in the following order of priority: a) Contract Agreement, enclosing <i>Annexes</i> thereto; b) Minutes of Contract Negotiation (if any), Minutes of Contract Finalization; c) Letter of Acceptance of Bid and Contract Award; d) Decision to approve the contractor selection results; e) SCC; f) GCC; g) Bid and written Bid clarifications submitted by the Bidder; h) BD and Documentary Evidence of BD Modifications or Addenda (if any). i) Other Documents specified in SCC.
3. Governing Law and Language	3.1 Governing Law: The contract shall be governed by and interpreted in accordance with the laws of the Socialist Republic of Vietnam. 3.2. Applicable language: The Contract shall be made in English. All other letters and documents related to this Contract shall be made in that language and Vietnamese (if any).
4. Notification	4.1. Any notification sent by one party to the other party related to the contract must be in writing, at the address specified in SCC. The term "in writing" means the form of communication of information in written form and there is evidence of receipt of the information.

	4.2. A party's notification will be deemed effective from the date it is received by the other party or the effective date stated in the notification, whichever is later.
5. Performance Security	5.1. Contract performance security must be submitted to the Investor no later than the date specified in the Bidding Acceptance Letter and contract award. Contract performance guarantees are made in one or more of the following methods: a) Deposit by Security Check for contract performance security with a value of less than 50 million VND and the validity period of the Security Check is consistent with the time of implementation of the bidding package; b) Submit a letter of guarantee from a domestic credit institution or foreign bank branch established under Vietnamese law; c) Submit the certificate of guarantee insurance from a domestic non-life insurance enterprise or a branch of a foreign non-life insurance enterprise established under Vietnamese law. The contract performance guarantee according to the provisions of Points b and c of this Clause is an unconditional guarantee (paid upon request), according to the form specified in Part III or another form approved by the Investor. 5.2. Ensuring the implementation of a valid and effective contract as stipulated in SCC. 5.3. The performance bond will be paid to the Employer to compensate for any loss arising from the Contractor's failure to fulfill its contractual obligations. 5.4. The contract performance guarantee refund period is as prescribed in SCC.
6. Subcontractors	6.1. The contractor may sign contract with the subcontractors named in list of subcontractors as specified in the SCC to carry out related service stated in the RFP. The use of subcontractors shall not change any of Contractor's obligations. The Contractor shall be responsible to the Purchaser for the volume, quality, schedule and other obligations regarding the work items performed by the subcontractors.

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	Replacement or supplementation of subcontractors outside the list of subcontractors in Proposals or changing the subcontracting content stated in the E-Bidding Documents can only be done when approved by the Investor; The use of subcontractors must be consistent with the contractor's needs in contract performance; the subcontractor must meet the capacity and experience requirements of the contractor. 6.2. The Contractor is responsible for paying the subcontractor in full and on time according to the terms agreed between the Contractor and the subcontractor.
7. Settlement of Disputes	7.1. The Investor and the Contractor 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. 7.2. If, within the period specified in SCC following the day on which the dispute arises, the parties have failed to resolve their dispute by such mutual consultation, then either party may require that the dispute be referred for resolution to the formal mechanisms specified in the SCC.
8. Scope of Supply	The Goods and Related Services to be supplied shall be as specified in Chapter V.
9. Schedule of Delivery of Goods, Completion of Related Services (if any) and Documents	The Delivery of the Goods, Related Services shall be in accordance with Section 1 Chapter V. The Seller shall provide invoices and/or other documents prescribed in the SCC.
10. Contractor's Responsibilities	The Contractor shall supply all the Goods and Related Services (if any) included in the Scope of Supply in accordance with Article 8 – GCC, and the Schedule of Delivery and Completion of Related Services as per Article 9 – GCC.
11. Types of Contract and Contract Price	11.1. Contract type shall be as specified in the SCC. 11.2. The Contract Price specified in the SCC includes all costs and expenses for completion of supply of the Goods and Related Services in the procurement as indicated in the Contract Price Schedule on a basis that the schedule of supply

	and requirements concerning quality of the Goods and Related Services are satisfied.
12. Taxes, Duties, Fees or Charges	12.1. The Contractor shall be entirely responsible for all taxes, duties, levies, fees or charges imposed until the Goods have been delivered to the Investor. 12.2. If any tax exemptions, reductions, allowances or privileges may be available to the Contractor, the Investor shall use its best efforts to enable the Contractor to benefit from such incentive policies. 12.3. Tax adjustment shall be subject to the regulations laid down in the SCC.
13. Advance Payment	13.1. The Investor shall provide the Bidder with the advance payment specified in the SCC after the Contractor have furnished the Advance Payment Security equivalent to the advance sum. The Advance Payment Security shall be issued by a credit institution or foreign bank branch constituted under Vietnam's domestic law. 13.2. The Advance Payment shall be used by the Contractor for performance of the Contract. The Contractor shall establish that the Advance Payment has been used to serve correct purposes and objectives by submitting copies of invoices, payment documents or other relevant documents to the Investor.
14. Payment	14.1. The written Payment Request, enclosing the invoice including description of the Goods already delivered and Related Services already executed, together with documentary evidence submitted under Article 9 - GCC, shall be notified and sent to the Investor upon completion of other obligations specified in the Contract. 14.2. Payment shall be made as per the SCC. 14.3. Payment currency: Payment currency of this Contract shall be calculated in US Dollars (USD) and Vietnamese Dong (VND).
15. Copyright	15.1. The copyright in all drawings, documents, and other materials containing data and information furnished to the Investor by the Contractor shall remain vested in the Contractor. If they are furnished to the Investor directly or

	through the Contractor by any third party, the copyright in such materials shall remain vested in such third party. 15.2. Other copyright is stipulated in SCC.
16. Utilization of Documents and Information Related to the Contract	16.1. The Investor and the Contractor 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 Contractor may furnish to its Subcontractor such documents, data, and other information it receives from the Investor to the extent required for the Subcontractor to perform its work under the Contract, in which event the Contractor shall obtain from such Subcontractor an undertaking of confidentiality of these materials. 16.2. The Investor shall not use such documents, data, and other information received from the Contractor for any purposes unrelated to the Contract. Similarly, the Contractor shall not use such documents, data, and other information received from the Investor for any purpose other than the performance of the Contract. 16.3. The obligations of the Investor and the Contractor under Section 16.1 and 16.2 - GCC, however, shall not apply to information that: a) the Investor or the Contractor need to share with the competent authority; b) now or hereafter enters the public domain through no fault of either the Investor or the Contractor; 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; d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality. 16.4. The above provisions of Article 16 – GCC 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 of the Goods and Services. 16.5. The provisions of Article 16 – GCC shall survive completion or termination, for whatever reason, of the Contract.
17. Specifications and Standards	Goods and related services to be provided under the Contract shall comply with technical specifications and standards as prescribed in Chapter V – Scope of Supply and Technical requirements. Provided that Chapter V fails to address an applicable specification and/or standard, the specification and standard which is equivalent to or higher than the current specifications in country or territory of Goods origin shall be applied.
18. Packing	18.1. The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their project site (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, means of transport, handling facilities, etc. from the place of departure to the project site (final destination). 18.2. 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 Investor.
19. Insurance	Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in the manner specified in the SCC.

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20. Transportation and Incidental Services	20.1. Transportation and other requirements shall be in accordance with the SCC. 20.2. The Contractor may be required by the Investor to provide any or all of the following services, including additional services, if any, specified in the 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) operation 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 Contractor of any warranty obligations under this Contract; - dd) training of the Contractor's personnel in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods. 20.3. Prices charged by the Contractor 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 Contractor for similar services.
21. Inspections and Tests	21.1. The Contractor shall at its own expense and at no cost to the Investor carry out all such tests and/or inspections of the Goods and Related Services as are specified in the SCC. 21.2. The inspections and tests may be conducted on the premises of the Contractor or at point of delivery, and/or at the project site (final destination) or in another place as specified in the SCC. Subject to Section 21.3 – GCC, if conducted on the premises of the Contractor or others, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Investor. 21.3. The Investor or its designated representative shall be entitled to attend the tests and/or inspections referred to in Section 21.2 – GCC, provided that the Investor 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.

21.4. Whenever the Contractor is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Investor. The Contractor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Investor to attend the test and/or inspection.

21.5. The Investor may require the Contractor 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 requirements of the Contract, provided that the Contractor'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 Contractor's performance of its other obligations under the Contract, due adjustments will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

21.6. The Contractor shall provide the Investor with a report of the results of any such test and/or inspection.

21.7. The Investor 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 Contractor shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Investor. Then the Contractor shall repeat the test and/or inspection, at no cost to the Investor, upon giving a notice pursuant to Section 21.4 – GCC.

21.8. The Contractor agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Investor or its designated representative, nor the issue of any report pursuant to Section 21.6 – GCC, shall release the Contractor from any warranties or other obligations under the Contract.

22. Sanctions and Damages	Sanctions for any breach of the Contract and payment of damages shall be in accordance with the SCC.
23. Warranty	23.1. The Supplier warrants that all the Goods are new or unused according to the specified proposal. 23.2. The Contractor further warrants that the Goods shall be free from defects arising from any act or omission of the Contractor or arising from design, materials, and workmanship, under normal use in the conditions prevailing in Vietnam. 23.3. Warranty validity period and place where the warranty is applied shall be as specified in the SCC. 23.4. The Investor shall give notice to the Contractor stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Investor shall afford all reasonable opportunity for the Contractor to inspect such defects. 23.5. Upon receipt of such notice, the Contractor shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Investor. 23.6. If having been notified, the Contractor fails to remedy the defect within the period specified in the SCC, the Investor may proceed to take within a reasonable period such remedial action as may be necessary, at the Contractor's risk and expense and without prejudice to any other rights which the Investor may have against the Contractor under the Contract.
24. Patent Indemnity	24.1. The Contractor shall, subject to the Investor's compliance with Section 24.2 – GCC, indemnify and hold harmless to the Investor 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 Investor 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 Contractor or the use of the Goods in Vietnam;

b) the sale 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 Contractor, pursuant to the Contract.

24.2. If any proceedings are brought or any claim is made against the Investor arising out of the matters referred to in Section 24.1 - GCC, the Investor shall promptly give the Contractor a notice thereof, and the Contractor may at its own expense and in the Investor's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

24.3. If the Contractor fails to notify the Investor within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Investor shall be free to conduct the same on its own behalf.

24.4. The Purchaser shall, at the Contractor's request, afford all available assistance to the Contractor in conducting such proceedings or claim, and shall be reimbursed by the Contractor for all reasonable expenses incurred in so doing.

24.5. The Investor shall indemnify and hold harmless the Contractor and its employees, officers, and SubContractor 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 Contractor 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 Investor.

25. Change in Laws and Regulations	Unless otherwise specified in the Contract, if after the date of 28 days prior to the date including the Bid closing time, any law or regulation is enacted, promulgated, abrogated, or changed in Vietnam 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 Contractor 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 Article 11 – GCC.
26. Force Majeure	26.1. The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages or sanctions, 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. 26.2. If a Force Majeure situation arises, a party's failure to carry out any of its obligations shall not be deemed breach or default of the Contract provided that the affected party: (a) has taken all reasonable, prudential and necessary alternative actions, all of which serve for the purpose of performing the terms and conditions of this Contract, and (b) continues to perform its obligations under the Contract to the extent that such performance is reasonable and realistic. 26.3. For purposes of this Contract, "Force Majeure" means an event or situation beyond the control of parties that is not foreseeable, is unavoidable, and causes impossibility of performance of contract not because of negligence or lack of care on the part of any party. Such events may include, but not be limited to, wars, riots, strikes, fires, floods, epidemics, quarantine restrictions, freight embargoes, or regulatory regulations or policies. 26.4. If a Force Majeure situation arises, the affected party shall promptly notify the other party in writing of such condition and the cause thereof within fourteen (14) days from the day of occurrence thereof. Simultaneously, it shall send

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	thw written confirmation of such force majeure event issued by a body having jurisdiction at the occurrence place. - The affected party shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance in order to contain consequences thereof. 26.5. The period during which a party must complete a work under this Contract is extended by a period as long as the time that the party is unable to perform the work due to a force majeure event.
27. Contract Amendments	27.1. The Investor may order the Contractor 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 Investor; b) the method of shipment or packing; c) the place of delivery; d) the Related Services to be provided by the Contractor. e) schedule of execution of the Contract as indicated in Article 28 – GCC. 27.2. If any such change within the scope of contract as indicated in Section 27.1 - GCC causes an increase or decrease in the cost of, or the time required for, the Contractor'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 by both parties. Any claims by the Contractor for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Contractor's receipt of the Investor's change order. 27.3. Where the Contractor supplies a new version of goods that is made by the same manufacturer, is of the same origin as; has technical features, configurations, parameters, etc. equivalent to or better than, the version of the goods proposed by the Contractor in its Bid; and that meets the BD requirements, the Contractor must notify in advance in writing

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	to the Investor to seek its approval. In this case, after considering its demand, the Investor may approve the Contractor's proposal provided that the unit price and other conditions of the contract remain unchanged. 27.4. In case where it is necessary to perform the related services not mentioned in this Contract, the Investor and the Contractor shall enter into the negotiation on the unit price which is aligned with the market price. 27.5. The Investor and the Contractor will conduct the negotiation to serve as a basis for signing contract appendices or addenda in case of contract modifications and amendments. 27.6. During the contract performance, the Contractor may propose cost-efficient solutions, including but not limited to the following: a) Actions to be taken and explanations for differences from the requirements set forth in the signed contract; b) Comprehensive analysis of the costs and benefits of each solution, including description and estimation of the costs (including life cycle costs) that may be incurred to the Investor if the Investor approves the Contractor's proposal; c) Impacts of each solution on contract performance. 27.7. The Investor may approve the Contractor's proposal if it demonstrates one of the following benefits without prejudice to the necessary functions of the Goods: a) Shortened delivery time; b) Reduced Contract Price or Life Cycle Cost to be paid by the Investor; c) Improvements in quality, effect and sustainability of the Goods to be supplied under this Contract; d) Any other benefits to be enjoyed by the Investor. If the Contractor's proposal is approved by the Investor and reduces the Contract Price, the Investor shall pay the Contractor according to the reduced amount of Contract Price at the rate specified in the SCC.
28. Extensions of Time	28.1. If at any time during performance of the Contract, the Contractor or its subContractor should encounter conditions impeding timely delivery of the Goods or completion of

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	Related Services pursuant to Article 9 – GCC, the Contractor shall promptly notify the Investor in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Contractor’s notice, the Investor shall evaluate the situation and may at its discretion extend the Contractor’s time for performance, in which case the extension shall be ratified by the parties through their negotiation by amendment of, appendices or addenda to the Contract. 28.2. Except in case of Force Majeure event or situation specified in Article 26 – GCC, a delay by the Contractor in the performance of its Delivery and Completion obligations shall render the Contractor liable to the imposition of liquidated damages pursuant to Article 22 – GCC.
29. Contract Termination	29.1. Termination for Default a) The Investor, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Investor, may terminate the Contract in whole or in part: (i) if the Contractor fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Investor pursuant to Article 28 – GCC; (ii) if the Contractor fails to perform any other obligation under the Contract; (iii) if the Contractor, in the judgment of the Investor, has engaged in the prohibited acts or practices, as defined in Article 16 in the Law on Bidding, in competing for or in executing the Contract. b) In the event the Investor terminates the Contract in whole or in part, pursuant to subparagraph a of this Section, the Investor 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 Contractor shall be liable to the Investor for any incremental costs for such similar Goods or Related Services. However, the Contractor shall continue performance of the portion of Contract to the extent not terminated. c) Others are specified in SCC.

	29.2. Termination for Insolvency The Investor may at any time terminate the Contract by giving notice to the Contractor if the Contractor becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Contractor, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Investor.
30. Export Restriction	Any export restrictions attributable to trade regulations from a country supplying those products/goods that substantially impede the Contractor from meeting its obligations under the Contract shall release the Contractor from the obligation to provide deliveries or services, always provided, however, that the Contractor can demonstrate to the satisfaction of the Investor that it has completed all required formalities, including applying for permits, authorizations and licenses necessary for the export of the Goods and Related Services specified under the Contract. In this event, termination of the Contract on this basis shall be inflicted by the Investor on the Contractor.

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CHAPTER VII. SPECIFIC CONDITIONS OF CONTRACT

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GCC 1.1	Investor (End-User): VNPT Net Corporation. Address: No. 30, Pham Hung Street, Tu Liem Ward, Hanoi, Vietnam.
GCC 1.3	The Supplier (Contractor) is:
GCC 1.11	Project Site(s) /Final Delivery Site(s) are: (The details are specified in the PART II – CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS)
GCC 2.2	The following documents are integral parts of the contract: - This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above. - The annexes of the contract including: <i>Annex 1 - Price List</i> <i>Annex 2 - Statement of Compliance for Scope of Supply and Technical Requirements</i> <i>Annex 3 - Solution description and Service Description</i> <i>Annex 4 - Implementation Schedule</i> <i>Annex 5 - Responsibility Matrix</i> <i>Annex 6 - Acceptance Procedure</i> <i>Annex 7 - Technical supporting documents</i> <i>Annex 8 - List of installation materials</i> - Other documents as agreed by the Parties (if any)
GCC 4.1	For notices, the Investor's address shall be: Attention: VNPT Net Corporation. Address: No. 30, Pham Hung Street, Tu Liem Ward, Hanoi, Vietnam.
GCC 5.2	<u>1. Performance Security</u> - Form of Performance Security: The Performance Security shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End user/Buyer issued in Vietnamese and English language by way of an unconditional and irrevocable bank

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	guarantee in a form acceptable to the End user/Buyer, using the Form 18 of Part IV - Contract Forms). All costs in respect of such guarantee shall be borne by the Supplier and the Supplier shall indemnify the End user/Buyer from and against such costs. - The amount of the Performance Security: 10% of the Total Contract Price. - Effectiveness of Performance Security: This Performance Security shall indicate Investor as beneficiary and shall take effect from the issued date of the Performance Security and valid up to thirty (30) days after the date of the last Final Acceptance Certificate (FAC) of the Contract.
GCC 5.4	Deadline for refunding Performance Security: The Performance Security will be discharged by the End User/Buyer and returned to the Contractor not later than thirty (30) days after the date of Final Acceptance Certificate (FAC) of the last PO.
GCC 6.1	List of Subcontractor: <i>[insert the List resembling the one specified in the Bid]</i>.
GCC 7.2	Time period for conciliation: within 60 days. Settlement of disputes: - Any disputes or discrepancies which may arise out of this contract shall be settled smoothly, amicably, based on mutual benefit and understanding; - If an attempt at settlement has failed, all disputes arising out of or in relation to this contract shall be finally settled by the Vietnam International Arbitration Centre in accordance with its Arbitration Rules. - The place of arbitration shall be carried out in Country of Vietnam; - The arbitrary award shall be substantiated in writing. The decision of the arbitration shall be final and binding for both parties; - All expenses in connection with the arbitration shall be born by the losing party; - The language for the arbitration shall be English or Vietnamese.
GCC 9	9.1. Time and Destination of delivery For Contract/POs, all shipments to the End-User's sites shall be made no later than 70 days from the PO signing date. Time of delivery shall

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	not include the duration of Buyer doing customer clearance for the Supplies. For the Foreign Part: 9.1.1. The Foreign Part shall be delivered (including all the Hardware, Spare Parts, Software and Software RTU supplied by Foreign Seller) of this Contract on the basis of DAP End-User's Sites in Vietnam in accordance with the terms and conditions of INCOTERMS 2010 in which: - The Foreign Seller shall supply the Supplies as referred in the Annex 1- Price List on the basis of DAP to Vietnam seaport/airport in accordance with the terms and conditions of INCOTERMS 2010; - The Seller shall be responsible for transportation (include loading/unloading and warehouse) for the Foreign Part from the Vietnam port/airport to the End-User's Sites where they are to be installed. Time of delivery: All Supplies shall be delivered as specified in each Purchase Order (PO). <i>The Seller shall be responsible for obtaining Type Approvals, Test Reports... for importation of the Supplies. The Seller shall, at least seven (07) working days before the estimated time of arrival in Vietnam of the first shipment of the PO under the Contract, be responsible for providing to the Buyer, so that the Buyer can do the customs clearance for the Supplies:</i> - <i>All relevant documents, technical specification in English including descriptions, user's guide, image of products.</i> - <i>Notarized copies of Type Approvals and all relevant Test Reports issued by the Ministry Information and Communication of the S.R. Vietnam for the Supplies and other necessary documents which are required for importation of the Supplies supplied by the Seller under the Contract.</i> <i>The Foreign Seller shall check the equipment list of the Contract/PO and co-ordinate with the related parties to prepare all the necessary conditions to apply the import license and other necessary licenses for the Supplies in order not to affect implementation schedule of the Contract/PO</i> In case the Seller delays in providing to the Buyer of Type Approvals and all other relevant documents for doing customs clearance of the

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	Supplies, all arising costs for importation at Vietnam port/airport of the shipments (except import tax, VAT) and other related costs (if any) shall be borne by the Seller. Port of loading: any ports/airports outside Vietnam. Seaport/Airport of discharge: NoiBai International Airport, and/or seaport in HaiPhong city Vietnam. Although the delivery term for Hardware is DAP to End-User's sites under Incoterms 2010, Delivery Acceptance Certificate ("DAC") of the Hardware shall be signed by the Parties when Foreign Part are all delivered to designated warehouses. The Seller shall remain responsible, at its own cost and risk, for transporting the Foreign Part from the warehouse to End-User's sites. Title of Hardware and Spare Parts of Foreign Part supplied by Foreign Seller shall pass to the Buyer/End-User upon the Foreign Seller's transfer of the Hardware and Spare Parts to the Buyer/End-User at the arrival airport/seaport in Vietnam. Foreign Seller shall be responsible for the Foreign Part and shall bear the risk of loss and damage thereto in accordance with the Incoterms used. The seller shall bear the risk of loss and damages of Foreign Part from arrival airport/seaport to End-User's Sites in Vietnam. For the Local Part: 9.1.2. Local seller will deliver the Supplies of this Contract on the basis of DDP to End-User's sites in accordance with the terms and conditions of INCOTERMS 2010. Time of delivery: All Supplies shall be delivered as specified in each Purchase Order (PO). Although the delivery term for Hardware is DDP to End-User's sites under Incoterms 2010, Delivery Acceptance Certificate ("DAC") of the Hardware shall be signed by the Parties when Local Part supplied by Local seller are all delivered to designated warehouses. Title of the Hardware of Local Part shall pass from Local Seller to Buyer at the time of DAC. Local Seller shall issue the VAT invoice to Buyer at the time of DAC (i.e. upon transfer of title at the warehouses) Local Seller shall remain responsible, at its own cost and risk, for transporting the Local Part from the warehouse to End-User's sites. Such transportation shall not affect the timing of the transfer of title or

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	the issuance of VAT invoices. 9.2. All parties shall strictly follow the Project Schedule of the following scopes according to Project/Implementation schedule as mentioned in Annex 4– Implementation Schedule. Package performance period shall be 365 days from Contract Effective Date.<i>Installation and commissioning requirement:</i> The Supplies shall be installed and commissioned as follows: Installation and commissioning and integrating..... and put into service for all equipment are 180 days from the issuance date of each Purchase Order. Within fourteen (14) days from the issuance date of each Purchase Order, the Buyer/End- User shall confirm in writing the ready-to-install sites. 9.3. The delivery plan shall be stated in the Annex 4- Implementation Schedule to this Contract. Customs clearance is excluded from Implementation Schedule. In case there is any change in End-User’s plan on receiving Supplies and/or implementation sites, the End-User/Buyer shall inform Seller the revised plan on receiving Supplies and/or implementation sites within twenty one (21) days since the effectiveness of Purchase Order, so that the Seller will adjust the delivery plan accordingly. In case the value of the shipments exceed the Contract Price Net of Foreign Part supplied by foreign seller as reference in the Annex 1 - Price List, the Foreign Seller shall bear all the cost and expenses arising from receiving the exceeding goods, including but not limited to the import tax, VAT. Number of shipments of each PO shall be no more than six (06) shipments. In case the number of shipments exceeds number of shipments of each PO as stipulated in this Article for the reason solely attributable to Foreign Seller, all arising costs for importation in Vietnam for the exceeding shipments (except import tax, VAT) shall be borne by Foreign Seller. The shipment of the Supplies shall be carried out by the Sellers on DAP End-User’s Sites, Vietnam and by Local Seller on DDP to End-User’s warehouse in accordance with the terms and conditions of INCOTERMS 2010.

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	9.4. If the Buyer finds out that all losses, goods missing with respect to the invoices and packing lists at the international airport/seaport, Vietnam and/or at Project Sites, the Buyer shall inform the status of cargos to the Seller and the Seller shall immediately request the Insurance company to make a report on site. This report shall be legal evidence in case of disputes in defining equipment/goods status and shall be a basic for complaining. If deficiencies or missing of the goods is solely attributed to Seller's responsibility, the Seller must replace the shortage and remedy the Hardware and Spare Parts and Software without delay at his own costs. 9.5. If the minor loss, shortage, missing of Supplies is due to transport, the Seller will set immediately complaining letter requiring the Insurance company to compensate. If deficiencies or goods missing are only attributable to the Seller, the Seller shall be responsible for replacing, remedying without delay at the Seller's costs or such costs shall be paid by bank transfer from the Seller to the Buyer /End-User's account within 30 days from the date of Buyer /End-User's payment request. 9.6. Equipment hand over at warehouse and Delivery Acceptance of each PO Local Seller shall submit original VAT invoices for the Hardware supplied by Local seller after completion of delivery of the said Supplies to designated warehouses. Upon the availability of the Foreign Part and Local Part of the PO at designated warehouses, the Seller and the End-User shall check the supplies and sign Equipment Hand over record at warehouse for the PO. Based on: (i) full set of Equipment Hand over record of at warehouse the PO and; (ii) One (01) original of Insurance Certificate for the Foreign Part supplied by Foreign Seller in favor of the End-User, of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk occurred in transportation from discharge seaport/airport in Vietnam (including loading/unloading) to warehouses.

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	(iii) One original of Insurance Certificate for Foreign Part supplied by Foreign seller and Local Part supplied by Local seller, in favor of the End-User of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk during: (i) storage of Foreign Part and Local Part in warehouses and: (ii) transporting Local Part and Foreign Part from designed warehouses to End-User's sites and: (iii) the process of installation, integration and commissioning of Local Part and Foreign Part from the arrival date of the first delivery of the Supplies by seller at the End-User's sites until the date of issuance of Provisional Acceptance Certificate by the Parties; The Foreign Seller; Local Seller; Buyer and End-User shall sign the Delivery Acceptance Certificate (DAC) for both Foreign Part and Local Part of each PO within fifteen (15) days from the date of submission of the full set of the above mentioned documents by the Sellers. Delivery Acceptance Certificate (DAC) for both Foreign Part and Local Part of each PO shall be made in fifteen (15) originals, and signed by the Sellers, the End-User and the Buyer. 9.7. Equipment hand over record at Project Sites Upon the availability of the Foreign Part supplied by Foreign seller and Local Part supplied by Local seller for the PO at Project Sites, the seller and the End-User shall check the supplies and sign Equipment Hand over record at Project Site for the PO. Based on full set of Equipment Hand over record at Project Site of the PO, the Local sellers and End-User shall sign the Confirmation of Delivery completion at Project sites for both Foreign Part and Local Part of each PO within fifteen (15) days from the date of submission of the full set of Equipment Hand over record at Project Sites. Confirmation of Delivery completion at Project sites for both Foreign Part and Local Part of each PO shall be made in fifteen (15) originals, and signed by the Sellers, the End-User and the Buyer.
GCC 11.1	Type of contract: Fixed unit-price contract.
GCC 11.2	Contract Price: Fixed
GCC 12.3	Tax adjustment: Allowed.

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	During performance of the Contract, if, at the time of payment, there is any change (increase or decrease) in taxes; and the contract prescribes that tax adjustment is allowed; at the same time, the contractor can furnish documents on determination of the tax amounts incurred, the difference in tax amounts payable between tax regulations will be handled by necessary adjustments made under terms and conditions of the Contract.
GCC 13.1	1. Advance Payment Guarantee of each PO: + Time of submit: Supplier shall submit to Buyer the Advance Payment Guarantee no later than ten (10) working days after the issuance date of each Purchase Order. + Form of Advance Payment Guarantee: The Advance Payment Guarantee shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End-user/Buyer issued in Vietnamese and English language by way of an unconditional and irrevocable bank guarantee in a form specified in Form No. 19 Part IV - Contract Forms. In case the Advance Payment Guarantee submitted to the End user/Buyer expires and the Delivery Acceptance Certificate has not duly signed by Parties, the Supplier has obligation to extend the Advance Payment Guarantee by suitable period of time. All costs in respect of such guarantee shall be borne by the Supplier and the Supplier shall indemnify the End user/Buyer from and against such costs. + Advance Payment Guarantee shall cover 10% of Price Net of each PO. + Validity of Advance Payment Guarantee: The validity period of the Advance Payment Guarantee shall be extended until the Investor has fully recovered the advance payment or until the advance payment has been fully deducted at any payment stages of each PO. 2. Advance Payment of each PO is following the Article 14.2
GCC 14.2	The following method of payment shall be applied to the contract The Purchase will pay for Contractor the amount of each Purchase Order (PO) following below method of payment. 1. Payment for Foreign Part supplied by Foreign Seller: Payment currency to the Foreign Seller shall be denominated in US Dollars (USD).

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	1.1. Advance Payment of 10% of Price Net of each PO for Foreign Part supplied by Foreign Seller by T/T 10% of Price Net of each PO for the Foreign Part supplied by Foreign Seller will be paid by bank transfer within fifteen (15) days after the Buyer's receipt of the following full and correct document set from Foreign Seller: • Commercial invoice for 10% of the Price Net of each PO for the Foreign Part supplied by Foreign Seller of each PO in three (03) originals; • Performance Security for Foreign Part supplied by Foreign Seller as stipulated in the SCC 5.2 in one (01) original for Purchase Order 1, or in one (01) copy for any subsequence Purchase Order; • Advance Payment Guarantee for the Foreign Part supplied by Foreign Seller as stipulated in the SCC 13.1 of each PO in one (01) original; Despite of the provisions herein above, the Advance payment will not be made until the Advance Payment Guarantee and Performance Security have been provided in compliance with SCC 5.2 and SCC 13.1 herein. The payment shall be remitted to foreign seller's bank accounts as follows: - Bank name: - Bank address: - Account number: - Beneficiary: - Swift code: 1.2. Payment of 90% of the Price Net of each PO for Foreign Part supplied by Foreign Seller by L/C 90% of the Price Net of each PO for Foreign Part supplied by Foreign Seller shall be paid by an irrevocable and confirmed Letter of Credit (L/C) at sight, will be issued within ten (10) working days from: (i) the signing date of each PO and; (ii) the Buyer/End-User's receiving date of Performance Security from the Foreign Seller and valid till thirty (30) days after Final Acceptance Certificate date of each PO. The L/C shall be issued in favour of Foreign Seller and Foreign Seller shall inform the information of the advising bank of the L/C (bank name, bank address and SWIFT code) in written notice to the Buyer within three (03)

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	working days from the receipt of issuing bank information from the Buyer. The Letter of Credit shall be issued by a bank which is approved by the Foreign Seller. The L/C shall be issued after the Foreign Seller submission of Performance Security to the Buyer. All L/C costs; charges and other fee relating to this Letter Credit arising inside and outside Vietnam shall be borne by Foreign Seller. All Letter of Credit amendment fees shall be borne by the requesting Party. The L/C of each PO shall be paid as follows: 1.2.1. Payment after Delivery completion for each PO Forty percent (40%) of the Price Net of the Hardware of each PO will be paid to Foreign Seller upon the delivery completion of all shipments, against Foreign Seller's presentation to the bank of the following documents, within the validity of the L/C: • Three (03) originals of signed commercial invoices showing 40% of Price Net of the Hardware of the PO, the Contract number, PO number and L/C number; • One original of dated Delivery Acceptance Certificate (DAC) for each PO to be duly signed by the Buyer, Foreign Seller; local seller and the End-User; • One (01) original of Insurance Certificate for the Foreign Part supplied by Foreign Seller in favor of the End-User, of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk occurred in transportation from discharge seaport/airport in Vietnam (including loading/unloading) to warehouses. • One original of Insurance Certificate for Foreign Part supplied by Foreign seller and Local Part supplied by Local seller, in favor of the End-User of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk during: (i) storage of Foreign Part and Local Part in warehouses and; (ii) transporting Local Part and Foreign Part from designed warehouses to End-User's sites and; (iii) the process of installation, integration and commissioning of Local Part and Foreign Part from the arrival

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	date of the first delivery of the Supplies by seller at the End-User's sites until the date of issuance of Provisional Acceptance Certificate by the Parties. • Shipping document of all shipments, each shipment includes: - Signed shipping invoices for each shipment showing one hundred percent (100%) of the value of each shipment (including Hardware, Software and Software to use fee) and corresponding CIT portion (corresponding CIT portion will not be paid on Advance Payment and under L/C of each PO. Corresponding CIT portion will be withheld by the Buyer for tax payment on behalf of Foreign Seller to the Vietnam state budget) in three (03) originals. The invoice must show Contract number, PO number, L/C number; - One (01) original of Clean Airway Bill (AWB) for each shipment showing "airport of discharge NoiBai airport Hanoi city", showing consignee as..... showing flight number, flight date, Contract number, PO number, L/C number and marked "Freight Prepaid" and notify, and/or - 2/3 originals of Clean shipped-on-board Bill of Lading (B/L) for each shipment showing discharge port in HaiPhong city, showing consignee as(name of buyer) and marked "Freight Prepaid"; showing on board date, Contract number, PO number, L/C number and notify(name of buyer). - General Packing List for each shipment showing shipment number and/or Invoice number, Contract number, PO number and L/C number in three (03) originals; - Certificate of Insurance covering ALL RISKS, WAR and SRCC for one hundred and ten percent (110%) of invoice value (including FOC and/or Discount value, if any) showing contract number, PO number, shipment number and/or invoice number and claim payable in Vietnam in the currency of the invoice in one (01) original; - Certificates of Origin showing the Contract number, PO number, L/C number and shipment number and/or invoice number issued by the Chamber of Commerce of the manufacturer's country and/or Foreign Seller's country in one (01) original;

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	- Certificate of Quality issued by the manufacturer and/or Foreign Seller showing the manufacturing year of production, Contract number, PO number, shipment number, and End-User as VNPT Net Corporation; - Beneficiary's certificate certifying that one (01) full set of original shipping documents has been sent to the Buyer by express courier within three (03) working days from the date of AWB and/or within five (05) working days from the date of B/L. 1.2.2. Payment after Provisional Acceptance Certificate (PAC) for each PO 30% of the Price Net of the Hardware and 70% of the Price Net of the Software and Software Right To Use of each PO shall be paid to Foreign Seller, against Foreign Seller's presentation of the following documents, within the validity of the L/C: • Provisional Acceptance Certificate of each PO, duly signed by the Buyer, Foreign Seller, local seller and the End-User in one (01) original; • Software Licence Certificate issued by Foreign Seller certifying that the End-User (VNPT Net corporation) is granted with the right to use all the supplied Software listed in Appendix 1 of corresponding PO to this Contract in three (03) originals; • Signed Commercial invoice for 30% of the Price Net of the Hardware and 70% of the Price Net of the Software and Software Right To Use of each PO showing payable amount, Contract number, PO number and Letter of Credit number, signed by Foreign Seller in three (03) originals. 1.2.3. Payment after Final Acceptance Certificate (FAC) for each PO 20% of the Price Net of each PO for Foreign Part supplied by Foreign Seller shall be paid to Foreign Seller, against Foreign Seller's presentation of the following documents, within validity of the L/C: • Final Acceptance Certificate of each PO, duly signed by the Buyer, Foreign Seller, local seller and the End-User in one (01) original; • Signed Commercial invoice for twenty percent (20%) of the Price Net of each PO for Foreign Part supplied by Foreign Seller of each PO showing payable amount, Contract number, PO

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	number and Letter of Credit number, signed by Foreign Seller in three (03) originals. 2. Payment for Local Part supplied by Local seller Any and all payments for Local Part supplied by local seller will be made by telegraphic transfer (T/T), in Vietnamese Dong into the bank account of local seller as follows: Bank name: Bank's address: Beneficiary: Swift code: Account No: 2.1. Advance Payment of each PO's Local Part supplied by local seller by T/T Advance payment of ten percent (10%) of the Price Net of each PO for the Local Part supplied by local seller (excluding VAT) will be made within fifteen (15) days after the Buyer's receipt the following full and correct document set from local seller: • Payment request signed by local seller in three (03) originals; • Performance Security for Local Part supplied by local seller as stipulated in Article 16 in one (01) original for Purchase Order 1, or in one (01) copy for any subsequent Purchase Order; and • Advance Payment Guarantee for Local Part supplied by local seller of each PO as stipulated in Article 16 in one (01) original. On the receiving date of each the PO's Advance Payment Amount, local seller shall issue the VAT Invoices for the Advance Payment of Services' value for Local Part supplied by local seller of each PO as stipulated by applicable laws and regulations. For the avoidance of doubt, the total value of VAT invoice is equal advance payment value of Service portion received by local seller and already included its corresponding VAT. Despite of the provisions hereinabove, the Advance Payment will not be made until the Performance Security and the Advance Payment Guarantee has been provided in compliance with Articles 16 of the Contract. 2.2. Payment after Delivery completion of each PO Forty percent (40%) of the Price Net of the Hardware of each PO for the

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	Local Part supplied by local seller (excluding VAT) and fifty percent (50%) of respective VAT amount will be paid within thirty (30) days from the date of the local seller's submission of the following full and correct document set to the Buyer (the payment request date): • Payment request signed by local seller in three (03) originals; • VAT Invoice for one hundred percent (100%) of the Price Net of Hardware for Local Part supplied by local seller of the PO in one (01) original and one (01) certified true copy; and • Delivery Acceptance Certificate (DAC) of each PO, duly signed by the Buyer, Foreign Seller, local seller; and the End-User in one (01) original. • One (01) original of Insurance Certificate for the Foreign Part supplied by Foreign Seller in favor of the End-User, of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk occurred in transportation from discharge seaport/airport in Vietnam (including loading/unloading) to warehouses. • One original of Insurance Certificate for Foreign Part supplied by Foreign seller and Local Part supplied by Local seller, in favor of the End-User of all types according to insurance conditions ALL RISKS, WAR, SRCC covering 110% of the Hardware (including FOC and/or Discount value, if any) payable in Vietnam with respect to every risk during: (i) storage of Foreign Part and Local Part in warehouses and; (ii) transporting Local Part and Foreign Part from designed warehouses to End-User's sites and; (iii) the process of installation, integration and commissioning of Local Part and Foreign Part from the arrival date of the first delivery of the Supplies by seller at the End-User's sites until the date of issuance of Provisional Acceptance Certificate by the Parties. In case the Supplies are made in Vietnam: • Certificate of Quality issued by the manufacturer showing the manufacturing year of production as specified in Annex 1- Price List in one (01) original and one (01) copy. In case the Supplies are imported Supplies: • Customs declaration for the imported Supplies in two (02)

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	copies; • Certificate of Origin issued by the Chamber of Commerce of the manufacturer's country as specified in Annex 1 in two (02) copies; and • Certificate of Quality issued by the manufacturer showing the manufacturing year of production as specified in Annex 1, and the End-User as VNPT Net Corporation in one (01) original and one (01) copy. <i>(All copies of the above-mentioned documents must be certified and officially stamped by the manufacturer or the importer)</i> 2.3. Payment after Provisional Acceptance Certificate (PAC) of each PO The payment after Provisional Acceptance Certificate (PAC) of each PO for the Local Part supplied by local seller including: (i) Thirty percent (30%) of the Hardware's Price Net and respective VAT amount and; (ii) Seventy percent (70%) of the Services' Price Net and up to eighty percent (80%) of respective VAT amount (excluding the Warranty Services' price) of each PO for Local Part supplied by local seller will be paid within thirty (30) days from the date of the local seller's submission of the following full and correct document set to the Buyer (the payment request date):: • Payment request signed by local seller in three (03) originals; • VAT Invoice for the remaining Services' value (excluding the Warranty Services' price) for Local Part supplied by local seller of each PO (after deducting the VAT corresponding invoiced portion at the Advance Payment as stipulated in article 2.1.) in one (01) original and one (01) certified true copy; • VAT Invoices for the Advance Payment of Services' value for Local Part supplied by local seller of each PO as stipulated in Article 2.1 in one (01) certified true copy; • VAT Invoice for one hundred percent (100%) of the Hardware's Price for Local Part supplied by local seller of each PO in one (01) certified true copy; • Provisional Acceptance Certificate of each PO duly signed by the Buyer, Foreign Seller, local seller and the End-User in one (01) original; • Confirmation of Delivery completion at Project sites duly signed

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	by the sellers and End-User in one (01) original; One (01) original of Insurance Certificate issued by Insurance Company showing the Contract number; PO number; Foreign Part's invoice value and Local Part's financial invoice value by which guarantees for Foreign Part and Local Part of the PO during storage at designed warehouses is covered ALL RISKS for one hundred and ten percent (110%) of the Foreign Part's invoice value and Local Part's financial invoice value (including FOC and/or Discount value, if any). 2.4. Payment after Final Acceptance Certificate (FAC) for each PO The payment after Final Acceptance Certificate (FAC) of each PO for the Local Part supplied by local seller: Twenty percent (20%) of the Hardware's Price Net and respective VAT amount; ninety percent (90%) of the Warranty Service's Price Net; twenty percent (20%) of all other Services' Price Net and the remaining VAT amount of Warranty Service and other Services of each PO for Local Part supplied by local seller will be paid within thirty (30) days from the date of the local seller's submission of the following full and correct document set to the Buyer (the payment request date): • Payment request signed by local seller in three (03) originals; • Warranty bond of each PO as stipulated in Article 16 in one (01) original; • Final Acceptance Certificate of each PO signed by the Buyer, Foreign Seller, local seller and the End-User in one (01) original; • VAT Invoice for the remaining Services' value (excluding the Warranty Services' price) for Local Part supplied by local seller of each PO (after deducting the VAT corresponding invoiced portion at the Advance Payment as stipulated in article 2.1.) in one (01) certified true copy; • VAT Invoices for the Advance Payment of Services' value for Local Part supplied by local seller of each PO in one (01) certified true copy; • VAT Invoice for one hundred percent (100%) of the Price Net of Hardware for Local Part supplied by local seller of the PO in one (01) certified true copy; • The A-B Final Settlement of the Project of each PO in one (01) original.

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	Minutes of meeting for overall project implementation of each PO in one (01) original; On the receiving date of remaining Warranty Service's amount of each the PO, local seller shall issue the VAT Invoices for the remaining Warranty Service's value for Local Part supplied by local seller of each PO (after deducting the VAT corresponding invoiced portion at the Advance Payment as stipulated in article 2.1.).
GCC 15.2	Other copyright : Not applicable
GCC 18.2	Shipping documents, packing and marking 1. Shipping documents for Foreign Part supplied by Seller 1.1. Foreign Seller shall notify the Buyer before shipment and five (05) working days before the shipment send out the Buyer following documents: (i) Official Invoice; (ii) Official detailed Packing List. 1.2. On the first flight date shown on Airway Bill of each shipment by air and/or on the shipped on board date shown on Bill of Lading of each shipment by sea Foreign Seller shall send to the Buyer the following documents by e-mail: (i) Official Airway Bill or Bill of Lading; (ii) Letter of notification for estimated date of arrival; (iii) Official Invoice and the soft copy of the detailed Packing List. 1.3. Foreign Contractor sends to the Purchaser the scanned copy of original shipping documents by email within one (01) working day after shipment (Airway Bill date or Bill of Lading date) and the original shipping documents by DHL or express courier service within three (03) working days from Airway Bill date or five (05) working days from Bill of Lading date. 1.4. Shipping documents shall include: a) Clean Bill of Lading (B/L) showing seaport name of discharge: "seaport in HaiPhong city Vietnam" in one (1/3) original and/or Clean Airway Bill (AWB) in one (01) original showing airport name of discharge: "NoiBai airport HaNoi city Vietnam." showing flight number, flight date/on board date, L/C number, Contract number, PO number, notify, consignee as and marked "Freight Prepaid", in one (01) original and two (02) copies for each shipment. b) Invoice for 100% of the Price Net of each PO of the delivered Foreign Part's Hardware; Software and Software Right To Use supplied by Foreign Seller showing the Contract number, PO number, L/C number and the corresponding CIT amount in three

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	(03) originals. c) General Packing List in three (03) originals. d) Certificate of Origin showing the Contract number, PO number, L/C number and shipment number and/or invoice number issued by the Chamber of Commerce of Manufacturer's country and/or Foreign Seller's country in one (01) original and two (02) copies. e) Certificate of Insurance showing the Contract number, PO number, Letter of Credit number, shipment number and Invoice number, by which Foreign Seller guarantees the Hardware, Software and Software RTU of each shipment is covered ALL RISKS, WAR and SRCC for one hundred and ten percent (110%) of invoice value of Foreign Part (including FOC and/or Discount value, if any) f) Certificate of Quality issued by the Manufacturer and/or Foreign Seller showing the manufacturing year of production, Contract number, PO number, shipment number and/or Invoice number and End-User as VNPT Net Corporation in one (01) original and two (02) copies. g) Software Licence Certificate issued by Foreign Supplier in three (03) originals. * Description of Supplies in General packing list of each shipment shall be in conformity with the material list of each PO. * The detailed Packing List and container information shall also be sent to the Buyer by E-mail upon Buyer's request. 1.5. Foreign Seller shall bear all costs (if any) accrued due to the delay of sending shipping documents mentioned in the Article 1 for the reason solely attributable to Foreign Seller. 2. Packing: shall be made in accordance with the export packing standard. Equipment shall be packed in customary export cases. Information needs to be specified on the outside of the cases: + Shipper's name; address... + Consignee's name; address... + Contract No... + PO No.... + Dimensions of cases... + Gross/net weight + Instructions for loading and unloading, transportation...

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	3. Detailed invoice shall be in conformity with the detailed prices in Annex 1 and Appendix 1 of the Contract and Appendix 1 the PO. The Supplies name in the invoice shall be in full name, not be abbreviated and be the same in the Contract/PO. 4. Description of Supplies in Packing Lists shall be in full name, not in abbreviated. In Packing Lists Supplies shall be listed separately for each case. 5. In case of air shipment of the Foreign Part supplied by Foreign Seller, all equipment of each shipment shall be delivered to the airport of destination in full in accordance with the shipping document of each shipment. Clean Airway Bill (AWB) has no remark "Dangerous goods or DG". 6. All shipping documents of shipments under this Contract presented by the Seller should show the Contract number, LC number (for Foreign Part supplied by Foreign Seller), name of Buyer, name of Seller. 7. The Foreign Seller shall provide the End-User/Buyer with the list of Part Number for all the Supplies under this Contract before shipments and serial number upon Buyer's receipt of the Supplies
GCC 19	The Foreign Bidder shall be responsible for insurance of goods of all types according to insurance conditions ALL RISKS, WAR, SRCC, covering 110% of invoice value (including FOC and/or Discount value, if any) showing Contract number, shipment number and/or invoice number and payable in Vietnam with respect to every risk occurred in international transportation to the port of discharge.
GCC 20.1	- Transportation: Goods of contract shall be delivered and handover at specified place (HaiPhong seaport/Noibai airport for Foreign Part and End-user's warehouse in Vietnam for Local Part (if any)). All related costs and expenditure are born into supplier's transportation and included in total value of contract. - Other requirements: The Contractor shall bear the Terminal Handling Charges (THC), container imbalance charge (CIC) or equipment imbalance surcharge, the lift on/lift off charges, container cleaning fees and other port/airport charges (except arising charges due to the fault of Purchaser) at the airport/seaport of destination in Vietnam. The Contractor shall pay storage fees which is only due to the Contractor's fault arise at the sea/airport of destination in Vietnam.

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GCC 20.2	Services include: The details are specified in the PART II , CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS
GCC 21.1	1. Factory Inspection of Foreign Part supplied by Factory inspection and Test of the Supplies shall be conducted by the Manufacturer before shipments to ensure a successful performance when installed. Certificate of Quality issued by Manufacturer shall be sent to the Buyer together with the shipping documents. 2. Acceptance Certificate of each PO Before installation for 5G Radio System Equipment the End-User shall prepare the sites location, necessary permissions for installation and carry out civil works, energy, and environmental tasks based on the Implementation Schedule. The End-User must guarantee of the Seller's interests based on each phase of service providing, all permissions to go in and out the sites to perform duties according to regulation in this contract. The Seller has permission to check and certify that each site is ready or not. 2.1. Acceptance Test Certificate (ATP) of each PO Three (03) days after the sites are put into service, the Sellers must send a letter to the End-User confirming that the sites are ready for operation and acceptance. The acceptance tests will then be carried out by the Sellers and End-User according to the agreed-upon procedures and forms. If the acceptance tests are not completed within fifteen (15) days from the notification letter, and the delay is not due to the fault of the Sellers, the implementation schedule will be adjusted accordingly. If the test results indicate compliance with the Technical Specifications, and the Buyer/End-User is satisfied minor defects/deficiencies (if any) will not affect operation of the sites, the Buyer and End-User, then, issue the Provisional Acceptance Test Certificates (ATP) to the Seller. A site will not be put into commercial use until the ATP is granted by both parties. The Seller will send their technical experts to co-ordinate with the End-User to test all Spare parts which specified in the Equipment List/Price List of the signed Contract/PO. Acceptance tests for Spare parts supplied under the Contract shall be under the Buyer /End-User's responsibility with support from the Seller. Acceptance Test for Spare parts shall be carried out and completed no

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	later than 28 days from the date Spare parts are delivered to the warehouse. Acceptance tests for Spare parts must be carried out before delivering to sites for installation. If the test results for Spare parts indicate compliance with the Technical Specifications, Technical Test Acceptance Certificate shall be issued and signed by the Sellers, Buyer and the End-User within 14 days the completion date of the test. 2.2. Provisional Acceptance Certificate of each PO Provisional Acceptance Certificate (PAC) shall be signed by the Sellers, the Buyer and the End user for each PO. i) If the test results indicate compliance with the Technical Specifications, and the Buyer/End-User is satisfied and outstanding minor defects/deficiencies (if any) will not affect operation of the system, and basing on: (i) all the ATPs and; Technical Test Acceptance Certificate for Spare parts submitted by the Seller, Provisional Acceptance Certificate (PAC) of each PO shall be signed by the Sellers, Buyer and the End-User within twenty (20) days from the submission date of all the ATPs and Technical Test Acceptance Certificate for Spare parts; ii) A list of any minor defects or deficiencies (if any) not affecting the operation of the system shall be attached to PAC of each PO and shall be corrected by the Contractor, at no cost to the Buyer/End-User, prior to Final Acceptance Certificate Date; iii) In case the above-mentioned test results indicates the compliance of the system to the Technical Specifications and the Buyer acknowledge that any outstanding minor defects or deficiencies do not affect the operation of the system, but the Buyer/End-User does not issue the PAC for any PO within 30 days after the completion of acceptance tests due to reasons beyond the Sellers' control, the PAC of each PO shall then be considered to be issued. In case of any delay in equipment delivery or services, the Parties agree to jointly review the implementation progress and sign a Minutes of meeting for project implementation of each PO and settle all delay penalties (if any) pursuant to the Contract prior to the signing of the Provisional Acceptance Certificate (PAC) of each PO. Each Purchase Order (PO) has 01 (one) PAC; The PAC for each (PO) Purchase Order shall be made in fifteen (15)

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	originals, and signed by the Sellers, the End-User and the Buyer. 3. Trial run period of each PO The trial run period for each PO shall commence on the issuance date of the PAC and shall be considered to be completed if within 60 days from issuance date of the PAC of each PO if the system is in continuous operation and well operation and the minor defects stated in the PAC have been corrected/adjusted; The Seller shall make their experts available during the whole trial run period to remedy faults, at no cost to the Buyer/End user. Within thirty (30) days from the expiry date of the trial run period, provided that the system is in continuous and well operation and the minor defects stated in the PAC have been corrected/adjusted, the trial run period completion Certificate shall be signed by the Parties in ten (10) originals. 4. Final Acceptance Certificate (FAC) of each PO FAC for each PO shall be signed by the Sellers, the Buyer and the End-User when the trial run period has been finished as strictly specified in the Contract and PAC, provided that Foreign Seller and Local Sellers have submitted to End-User/Buyer: (i) Provisional Acceptance Certificate (PAC) and; (ii) the Warranty Bond as stipulated in SCC 23.3, 23.5, 23.6. The FAC shall be made in fifteen (15) originals, and signed by the Sellers, the End-User and the Buyer.
GCC 21.2	The inspections and tests shall be conducted at: The details are specified in the PART II, CHAPTER V - SCOPE OF SUPPLY AND TECHNICAL REQUIREMENTS
GCC 22	- The maximum penalty value applied to a breach of contract or the total value of penalties shall not exceed 8% value of the contract part damaged: + Penalty for delayed delivery of goods: 1% of the value of the goods delayed in delivery per each delayed week. + Penalty for delayed delivery of services (installation, testing, acceptance...): 1% of the value of the service delayed in deployment per each delayed week. In case of delay in service provision (installation, testing, acceptance...) affecting the contract in whole or in part, the

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	penalty is 1% of the value of the service plus the value of the goods affected by the delay per each delayed week. + In case of weeks with odd days, it is calculated as follows: Number of delayed weeks = $t + (\text{odd number of days} / 7)$. Where t is the delayed week in units of 7 days per week. + Penalty for delayed extension of the performance guarantee: 1% of the value of the performance guarantee for each day of late submission. The maximum penalty is 8% of the value of the respective guarantee. - The amount of penalties for breach of contract shall be deducted from the most recent payment due to the Contractor or the Contractor may chose to transfer the amount into the account specified in the contract.
GCC 23.3 GCC 23.5 GCC 23.6	The Seller shall warrant that the Supplies under this Contract/PO are brand new, unused, not end of sale and end of life, quality assurance and manufacturing standards will not have defects lead to disadvantages arising during use, in compliance with Technical Specifications, ensuring compatibility, synchronization, complete, compatible with the current system of VNPT Net. The 5G Radio System Equipment shall be offered with the latest Hardware, Software release (tested, approved and commercialized), free from defects and in accordance with the Technical Specifications set forth under the Contract. Supplies will be provided with full documentation attached including but not limited to the design, catalogs, drawings, charts, manuals and installation instructions, maintenance and safety instructions as applicable. 1. The Warranty Period The Warranty Period for each PO shall be 24 months from the issuance date of the FAC of each PO. During the Warranty Period, notwithstanding that the Work has been accepted by the Buyer/End-User, the Seller shall warrant that the system shall operate in accordance with the Technical Specifications under the Contract including the installed software which will perform in accordance with the Associated Documentation. During the Warranty Period if any defects or failures occur, the Buyer/End-User shall notify the Seller immediately of such defects and failures and the Seller shall, without undue delay, and without any charge to the Buyer, replace and repair in order not to affect commercial

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	operation of the End-User. If the Seller shall not remedy such defects within the mutually agreed time frame from the date of defect notification in accordance with the Service Level Agreement (SLA) specified in the Bidding Document and Bidding proposal, the Seller shall bear all costs arising from the End-User's commercial operation interruption. Such SLA shall be the sole and exclusive liability of the Seller for failure to abide by such SLAs. In case the Supplies should be repaired and/or replaced, within seven (07) days from date of notification, the Seller shall inform the Buyer of the estimated period for repair/replace, which shall not be later than 60 days from the dispatch to the time when End-User receive the repaired-hardware back and the repaired-hardware returned to End-User is at least 90% within this time. All fees related to the repair and replacement shall be at the Seller's cost including but not limited to items as following: a) Transportation charge from the End-User's Site to the Manufacturer's repair Center. b) Repair/replacement costs c) Cost necessary for shipping out the repaired parts from Manufacturer's repair site to the End-Use's Site. d) Other related costs for repair/replacement including export and import taxes. In case the Supplies dispatched for repair/replacement shall not be returned within the stipulated time, the Seller shall bear all arising costs, expensed and delay penalty as specified in Article 22 due to this delay. The Seller warrants that any replacement or repaired Supplies provided under warranty period shall be warranted for 180 days from the date of repair of replacement or the expiry date of the Warranty period, whichever comes later. The Seller shall not be liable for any defect or damage caused by faulty or inadequate operation of the Buyer/End-User. The Seller may, at any time, with the Buyer's written consent in advance, introduce into the System technical modifications which become necessary due to changes in technology and/or availability of components, provided that the performance of the replaced Supplies is functionally equivalent or better than the performance of Supplies specified in this Contract, and compatible with it;

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	If at the expiry of Warranty Period after repair and/or replacement the Supplies do not conform to the Technical Specifications, the Buyer shall return the Supplies to the Seller and the Seller shall reimburse the paid amount and related fees upon the invoices presented by the Buyer/End-User. Such amount shall be paid by bank transfer from the Sellers to the Buyer's account within 30 days from the date of Buyer's Payment request. This method of payment by T/T shall be the first priority by the Parties. If the Seller fails to transfer the funds within 30 days from the date of the claim will the Buyer/End-User deduct the amount from any security deposited by the Seller with the Buyer/End-User under the Contract. Inferior supplies or defective work: If at any time before the expiry date of the Warranty Period, if the Buyer finds that any Supplies of System are inferior or defective, the Buyer have the right to reject such Supplies notwithstanding before that, the Buyer may have been satisfied and accepted these Supplies and that payment may have been settled in respect of such Supplies. In this case the Seller shall replace the inferior or defective Supplies with supplies that meet the relevant specifications under this Contract. 2. Warranty Bond: + Time of submit: Supplier shall submit the Warranty Bond of each PO to Buyer before the date of Final Acceptance Certificate of each PO. + Form of Warranty bond: The Warranty bond shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End user/Buyer by way of an unconditional and irrevocable bank guarantee specified in Form No. 20 Part IV - Contract Forms. All costs in respect of such guarantee shall be borne by the Supplier and the Supplier shall indemnify the End user/ Buyer from and against such costs. + Warranty bond shall cover: 10% of Total price of PO. + Validity of Warranty bond of each PO: This Warranty bond shall be valid up to thirty (30) days after the expiry date of Warranty period. + The return of Warranty bond: The Warranty bond will be discharged by the End User/Buyer and returned to the Contractor not later than thirty (30) days following the expiry date of Warranty period.

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GCC 27.7 (d)	In case the proposal of a cost-saving solution is approved by the Investor and helps to reduce the contract price, the Investor shall pay the Contractor 0% of the discount value contract.
GCC 29.1 (c)	The Buyer/End-user has the right to terminate the Contract, without the Contractor's prior written consent, in case: - In case the penalty value is exceeding 8% of total Contract price, the Buyer/End-User shall have the right to terminate the Contract. - The Contractor delays in delivering Supplies for more than eight (08) weeks (equivalent to 56 days) from the last shipment's delivery date specified in the contract or Contractor is unable to continue supplying equipment and the Buyer/End-user shall be entitle to withdraw the money under the bank guarantees which the Contractor has submitted to Buyer/End-user under the contract.

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PART IV: CONTRACT FORMS

This Chapter includes the forms that are integral parts of the Contract upon completion. Forms of Performance Security and Bank guarantee for Advance payment shall be filled by the successful Bidder after it is awarded the Contract.

Form No. 16. Notification of bid acceptance and contract award

Form No. 17. Contract Form

Form No. 18. Performance Security

Form No. 19. Advance payment Guarantee

Form No. 20. Warranty Bond

NOTIFICATION OF BID ACCEPTANCE AND CONTRACT AWARD

[Location] _____, [date] _____

To [insert name and address of Bid winner], herein after referred as "Bidder"

Subject: *Notification of Bid acceptance and Contract award*

Pursuant to the Decision No....date....month...year of the Investor [insert name of the Investor], (herein after refer as "Investor"), on approval of the bid selection result for Bid Package No...., the Project Management Unit II informs that the Investor has accepted the Bid and awarded the contract to Bidder for the implementation of Bid Package No....[should the BP contain different parts, insert name of those part that the Bidder win] with the Contract price of...[insert Bid-winning price stated in Decision on Bid selection result] and the implementation period is ...[insert Bid package implementation time stipulated in Decision on Bid selection result]

It is request that the legally representatives of the contractor proceed with the finalization and signing of the contract with the Investor according to the following schedule:

Contract finalization time: _____[insert date of contract finalization]____
at _____[insert place of contract finalization]_.

Estimated Contract signing time: _____[insert date of Contract signing] at _____
[insert place of Contract signing].

Bidder is required to submit Performance Security in Form No.18 Part IV – Contract Forms of Bidding Document with the value of _____ and validity _____ [insert value and validity period as stated in SCC 5.2 of Bidding Document]

This document is an integral part of Contract Document. After receiving this letter, Bidder shall finalize, sign the contract and submit Performance bond as requested above. Should the Investor detect that current capability of Bidder did not satisfy requirements of performing Bid Package, the Investor shall refuse to finalize and sign Contract with Bidder.

If, by date ____ month ____ year ____, should Bidder fails or refuse to finalize and sign Contract or fails to submit Performance Bond as required above, Bidder shall be disqualified and shall not have its bid security returned.

On behalf of the Investor

[insert name, title, sign and stamp]

CONTRACT

Contract No.

Procurement Package:

of Project:

This Contract is made and entered into this date by and between:

....., a company established under the laws of Vietnam and having its registered office at (hereinafter called “**Purchaser**” or “.....”).

VNPT NET CORPORATION a company incorporated in Viet Nam and having its principal/registered office at 30 Pham Hung Street, Tu Liem Ward, Hanoi, Vietnam, (hereinafter referred to as “VNPT Net” or “End-User”), represented by

And the Consortium of:

.....

And;

..... andare hereinafter jointly referred to as “Contractor” in which is responsible for the main equipments;is responsible for and accessories and related services; is responsible for accessories and related services in accordance with Annex 6 - Responsibility Matrix.

The Purchaser, the End-User and the “Contractor” shall be collectively referred to as “Parties” and individually referred to as “Party” as the context may require.

WHEREAS the Purchaser desires to purchase and the “Contractor” desires to sell equipment and services for the package “.....” of the project: “.....”.

NOW THE DETAILS OF THIS AGREEMENT ARE AS FOLLOWS:

1. Definition and interpretation

The words set forth herein below shall have the following meanings, unless otherwise stated:

“Purchaser” means

“Contractor” means, andas applicable.

“End-User” means VNPT Net Corporation.

“Manufacturer” means,,and/or other manufacturers of related Supplies.

“Contract” means this Contract concluded between Purchaser, End-User and Contractor including all Purchase Orders and annexes in accordance with Article 30- Entire agreement as well as any Contract amendment.

“Purchase Order” or **“PO”** means the orders placed by Purchaser/End-User to the Contractor under this Contract including all the POs covering the Bill of Quantity (BoQ) of this Contract signed by all Parties within the agreed time plan.

“Delivery Acceptance Certificate - DAC” means the document signed by the Purchaser, End-User and each Contractor certifying that the Contractor has successfully delivered Supplies as specified in Article 9.1 and other related annexes.

“Overall Delivery Certificate - Overall DAC” means the document signed by the Purchaser, End-User and Contractors certifying that the Contractors has successfully delivered Supplies of Foreign Part and Local Part as specified in Article 9.3 and other related annexes.

“Provisional Acceptance Certificate - PAC” means the document signed by the Purchaser, End-User and Contractors certifying that the Contractors has successfully fulfilled his obligations as specified in Article 10.2 and related annexes.

“Final Acceptance Certificate - FAC” means the document signed by the Purchaser, End-User and Contractors certifying that Contractors has successfully fulfilled his obligations as specified in Article 12 and related annexes under this Contract.

“Foreign Part” means the Hardware, Firmware, Software, License, Services as well as other works to be performed by and/or imported by Purchaser as further specified in the Annex 1- Price List and Annex 5 - Responsibility Matrix hereto and in any other part of this Contract.

“Local Part” means the Hardware, Firmware, Software, License, Services as well as other works to be performed by and/oras further specified in the Annex 1 - Price List and Annex 5 - Responsibility Matrix hereto and in any other part of this Contract.

“Total Contract Price” shall include the Contract Price Net plus FCWT (Corporate Income Tax part) as specified in the Annex 1- Price List to this Contract.

“Contract Price Net” means the total price payable in full by Purchaser to Contractor under this Contract, exclusive of any interest on the retention payment, and any penalty amounts (if any). Contract Price Net does not cover any taxes, duties, levies, fees, or other expenses arising inside Vietnam at the present or in the future in connection with the execution of this Contract.

“Contract Price of Foreign Part” means the Contract Price Net for the Foreign Part payable in full by the Purchaser to the Contractor under the Contract.

“Contract Price of Local Part” means Contract Price Net for the Local Part payable in full by the Purchaser to the Contractor under the Contract.

“Foreign Contractor Withholding Tax” or **“FCWT”** means a tax covering the Corporate Income Tax (CIT) part and the Value Added Tax (VAT) part, in accordance with and subject to Tax Regulations under Vietnamese Law. As defined in this Contract, the FCWT shall cover only the CIT part. This CIT is specified as an extra item of the Price List and shall be withheld and paid by the Purchaser directly to Vietnamese Tax Office on behalf of The VAT part, which is excluded from the FCWT of this Contract, shall be paid by the Purchaser with the Purchaser’s own budget to Vietnamese Tax Office in accordance with Vietnamese applicable laws and regulations.

“Firmware” means the set of readable instructions licensed to Purchaser by Contractor on solid state devices or other similar media to be provided by Contractor and which are necessary for the control, operation and performance of the system in accordance with the requirements of the specifications of this Contract.

“Software” means the sets of computer programs in machine-readable code provided on magnetic tape or other storage media, intended to be loaded into the memory of the system’s processing units for purpose of operating and maintaining the system.

“Hardware” means all equipment and items (other than Firmware, Software” designed, developed and manufactured by Manufacturer and required to complete a system performing in accordance with the system specification.

“Spare Parts” means such replacement items of the Hardware as specified in Annex 1 - Price List.

“License” means the license/Software Right to Use received and accepted by End-user under which End-user is granted the right to operate its RAN system mobile telephone system throughout the Area where the system will be installed and operated.

“Area” means the territory of Social Republic of Vietnam.

“Supplies” means the common terms for all Hardware, Firmware and Software to be purchased and licensed, as appropriate, by Purchaser/End-user from Contractor under this

Contract with facilities and functions as described herein. The System has a developmental element and thus refers to the System at each particular phase in its development from the System (which constitutes Purchaser's initial, and only commitment hereunder) to its final configuration at the end of the Term of this Contract.

"Related services" means the services incidental to the supply of the equipment, such as insurance, installation and initial maintenance and other such obligations of the Contractor under this Contract.

"Sub-Contractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the equipment to be supplied or execution of any part of the related services is subcontracted by the Contractor.

"Associated Documentation" means operating manuals, user's manuals, programming manuals, modification manuals, flow charts, drawings and software listings which are designed to assist or supplement the understanding or application of Software.

"Project site" where applicable, means the actual location where the System is to be installed.

The Contractor shall be responsible for obtaining and maintaining necessary permits, licenses and visas etc. that may be required for Contractor's personnel to travel and stay in Vietnam in order to implement this Contract in accordance with the Vietnamese Government's Decree 219/2025/NĐ-CP.

2. Scope of the Contract

2.1. Responsibilities of the Contractor:

2.1.1. The detailed responsibilities of and are defined in the Annex 5 - Responsibilities Matrix and Annex 3 - Solution Description.

2.1.2. The Contractor shall supply the equipment and service as referred in the Annex 1- Price List on the basis of DAP to discharge seaport/airport in Vietnam in accordance with the terms and conditions of INCOTERMS 2010 for Foreign Part supplied by, and upon the completion by the Purchaser of customs clearance for importing the goods at discharge port/airport in Vietnam, will be responsible for taking the goods from discharge port/airport and transporting the goods to End-User's Sites; and DDP to End-User's Sites in Vietnam for Local Part supplied by in accordance with the terms and conditions of INCOTERMS 2010. The Seller shall be responsible for loading and/or unloading the goods into End-User's Sites to be ready for goods installation at Sites.

2.1.3. The Contractor shall provide the technical services as stipulated in the Scope of Work.

2.1.4. The Contractor shall ensure the interconnection of the supplied system to the existing nodes of End-user's network in compliance with related technical specifications.

2.1.5. The Contractor shall conform to the Statement of Compliance attached hereto as Annex 2 - Statement of Compliance for Scope of Supply and Technical Requirement and implement successfully all system functions as described in Annex 3 - Solution Description.

2.1.6. The Supplies delivered shall be brand new, free of defects and complied with the Technical Specifications of the Contract.

2.1.7. shall be responsible for insurance of the shipment under Foreign part supplied by according to insurance condition ALLRISKS and WAR and SRCC with respect to transportation to the port of discharge.

2.1.8. The Seller shall be responsible for obtaining Type Approvals, Test Reports... for importation of the Supplies. The Seller shall, at least seven (07) working days before the estimated time of arrival in Vietnam of the first shipment of the PO under the Contract, be responsible for providing to the Buyer, so that the Buyer can do the customs clearance for the Supplies:

- All relevant documents, technical specification in English including descriptions, user's guide, image of products.
- Notarized copies of Type Approvals and all relevant Test Reports issued by the Ministry of Science and Technology of the S.R. Vietnam for the Supplies and other necessary documents which are required for importation of the Supplies supplied by the Seller under the Contract.
- The Seller shall check the equipment list of the Contract/PO and co-ordinate with the related parties to prepare all the necessary conditions to apply the import license and other necessary licenses for the Supplies in order not to affect implementation schedule of the Contract/PO.

2.1.9. shall bear the Terminal Handling Charges (THC), container imbalance charge (CIC) or equipment imbalance surcharge, the lift on/lift off charges at port/airport/container yard, container cleaning fees and other port/airport charges (except arising charges due to the fault of Purchaser) at the airport/seaport of destination in Vietnam. shall pay these fees to the related third party.

..... shall pay storage fees which is solely due to the fault of Contractor and/or freight forwarder of Contractor arising at the seaport/airport of destination in Vietnam. shall pay these fees to the related third party.

2.1.10. Within one (01) working day since the Purchaser's notification informs that customs declaration at the seaport/airport of destination have been completed and the Hardware, Spare Parts, Software and Software Right To Use are ready for local transportation, will send their representative to the seaport/airport of destination and co-ordinate with the Purchaser's representative to pay directly all the fees mentioned in Articles 2.1.9 to the related third parties.

.... shall bear all costs accrued due to the delay of sending their representative to pay

the related fees as mentioned in articles 2.1.9 at the seaport/airport of destination.

2.1.11. At least 10 (ten) working days before the presentation date by: (i) to the Purchaser (for the down payment) as defined Article 4.1.1 and (ii) to advising bank (for the letter credit payment) as defined Article 4.1.2 of the necessary documents for each payment, the shall provide relevant Invoices of CIT part of FCWT (which issued and signed by the) in three (03) originals to the Purchaser.

2.1.12. shall provide the End-User/Purchaser with two copies of notarized Vietnamese translation of this main contract and of each Purchase Order within one (01) week from the Contract/Purchase Order signing date for reference.

2.1.13. The Contractor shall cooperate with the Purchaser/End-User to sign the certificate of project completion and the A-B final settlement for the Contract upon Purchaser/End-User's request.

2.1.14. The Contractor shall be responsible for providing the Power of Attorney (PoA) for Contractor's personnel who authorized to sign the concerned documents within implementation period of this Contract.

2.1.15. Before the first shipment date of each PO, the shall be responsible for providing the Mapping of Commercial Product Code, label (which specified in the Annex 1- Price List of this Contract and Appendix 1 - Price list of each PO) and Delivery Product Code for Foreign Part supplied by

2.2. Responsibilities of the Purchaser

2.2.1. The Purchaser shall execute all procedures necessary for the payment stated in the Article 4 Term of Payment.

2.2.2. The Purchaser shall be responsible for customs clearance for the Foreign part supplied by within seven (07) working days from the Purchaser's receipt date of the correct full set of shipping documents as defined in the Articles 8.1.4 and the arrival notice by transport agents of each shipment. The Purchaser shall be responsible for hand-over the Foreign Part to the End-user at the destination port/airport in Vietnam, so that the End-user will implement the local transportation for the Foreign part supplied by

2.2.3. The Purchaser shall be responsible for paying import tax, VAT and all related fees during import procedure (exclude fees as stated in the 2.1.9 above).

2.2.4. The Purchaser/End-user shall be responsible for site readiness (all sites conditions should be ready with respect of DC power requirements site preparations such as lifted floor and air-conditioner and material's availability such as feeder ladder, tower lightning support, and connector on the transmission) and the installation except the sample sites to be installed by the Contractor in accordance with Annex 4 - Implementation Schedule.

2.2.5. In case of failure or delay of the Purchaser/End-User to fulfill these above obligations, the Implementation Schedule shall be extended accordingly. In case site readiness is delayed more than three (03) months in comparison with the originally contractual date, the Parties shall discuss to find out a solution for the case.

2.2.6. The Purchaser shall be responsible for obtaining type approval, import license to import the equipment as per Annex 5- Implementation Schedule.

3. Total Contract Price

3.1. The Total Contract Price shall be fixed on basis DAP to seaport/airport/border gate in Vietnam for Foreign Part supplied by and DDP to End-User's Sites in Vietnam for Local Part supplied by in accordance with the terms and conditions of INCOTERMS 2010. And upon completion by the Purchaser of customs clearance for importing the Foreign Part supplied by at discharge seaport/airport in Vietnam, will be responsible for taking the goods from discharge seaport/airport in Vietnam, warehousing for the goods during the time before the goods delivered to End-User's Sites and transporting the goods to End-User's Sites (including loading/unloading). will be responsible for the insurance of the Foreign Part supplied by during transportation of the goods from discharge seaport/airport in Vietnam to End-User's Sites (including loading/unloading) and during storage in warehouses before the goods delivered to End-User's Sites.

3.2. The Total Contract Price including (i) Contract Price Net (ii) Corporate Income Tax portion of the Foreign Contractor Withholding Tax excluding Value Added Tax of the Foreign Contractor Withholding Tax, (iii) Value Added Tax of Local part supplied by

The Total Contract Price of the contract as of the Annex 1 - Price List of the contract is USD and VND (*in words:*), consisting of:

- Total Contract Price for Foreign Part supplied by: USD
- Total Contract Price for Local Part supplied by: VND

3.2.1. The unit price specified in Annex 1 – Price List shall be fixed and valid during the whole implementation of the Contract. A Purchase Order (PO), attached to this Contract as an Annex, shall represent each Purchase Order agreed by the Parties under this Contract.

3.2.2. The Final Total Contract Price of the Contract shall be the total value of all the Purchase Orders issued under the Contract. Each Purchase Order's value shall be calculated based on ordered quantity specified in the Purchase Order and the unit price in the Annex 1.

3.2.3. The Contract Price Net includes:

The Contract Price Net of the Contract shall be the total of Price Net of all Purchase Orders issued under the Contract.

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- Price Net of the Contract for Foreign part supplied by consists of USD
- Price Net the Contract for Local Part supplied by consists of VND

3.2.4. The CIT amount of Foreign Contractor Withholding Tax which will be calculated according to circular 103/2014/TT-BTC dated on 6th August 2014. This amount of Tax shall be withheld by the Purchaser to pay to Tax authorization in Vietnam and consists of (i) Corporate Income Tax (CIT) imposed on the Hardware and (ii) Corporate Income Tax (CIT) imposed on Software (SW) & Software Right To Use (RTU). This amount of Tax shall be withheld by the Purchaser to pay to Tax authorization in Vietnam. The Corporate Income Tax portion (CIT) of Foreign Contractor Withholding Tax of the Contract is USD, consists of:

- Corporate Income Tax (CIT) imposed on the Hardware: USD
- Corporate Income Tax (CIT) imposed on Software and Software Right To Use (RTU): USD

3.2.5. Value Added Tax of Local part supplied by and/or amounts to VND shall be added on the VAT Invoices. The current Value Added Tax (VAT) rate is ten percent (10%) in accordance with the laws and regulations of Vietnam. VAT of Local part consist of VAT of Local Part supplied by: VND

If there is any change to VAT at a payment installment(s) under a Purchase Order in accordance with the law, the Parties, represented by their respective representative having the right to sign invoice adjustment minutes, shall sign a minutes to adjust (increase or decrease) VAT, Purchase Order value, total contract price, payment installment(s) (including the settlement of relevant paid amount(s) if needed) and to issue/adjust VAT invoices accordingly without proceeding with a contract amendment relating to such VAT change. The Party being responsible for such relevant VAT before adjustment shall be responsible for / entitled to the increased or decreased amount(s) unless the law requires otherwise. After full payment of the local contract price of all Purchase Orders, the Parties shall sign a contract amendment to re-determine the total contract price accordingly.

4. Terms of payment:

Refer to GCC 14 of General Conditions of Contract and SCC 14.2 Specific Conditions of Contract

5. Effectiveness of the Contract

Contract shall only come into force on the date when all the following conditions have been fulfilled:

- a) Contract signed by all parties

b) The Contractor submission of Performance Security to the End-User

6. Shipment:

Refer to Article 9.1- SCC 9 of Specific Conditions of Contract

7. Shipping documents, packing and marking:

Refer to Article 9.1- SCC 9 of Specific Conditions of Contract

8. Equipment hand-over and Delivery Acceptance of each PO:

Refer to Article 9.3 and 9.6- SCC 9 of Specific Conditions of Contract

9. Factory Inspection of Foreign Part supplied by:

Refer to GCC 21 of General Conditions of Contract and SCC 21.1 of Specific Conditions of Contract

10. Acceptance Certificate of each PO:

Refer to Article 2- SCC 21.1 of Specific Conditions of Contract

11. Trial run period of each PO:

Refer to Article 3- SCC 21.1 of Specific Conditions of Contract

12. Final Acceptance Certificate (FAC) of each PO:

Refer to Article 4- SCC 21.1 of Specific Conditions of Contract

13. Warranty of each PO:

Refer to SCC 23.3, 23.5, 23.6 of Specific Conditions of Contract

14. Faulty goods replacement:

The Contractor is responsible for replacing all products (including HW and SW) that have systematical fault as mutually agreed by the Parties from the time of DAC to expiry date of Warranty period. All taxes, fees and other related costs (Dismantling, Transportation, Installation, Integration,.....) shall be borne by the Contractor.

15. Spare parts

The Contractor must be prepared to supply spare parts of the Supplies which are compatible in form, fit and function or a period of five (05) years from the expiry date of Warranty period. The price of spare parts will be negotiated between the End-user/Purchaser and the Contractor, but should not be higher than the discounted price of the Contract.

16. Performance Security, Advance Payment Guarantee, Warranty Bond:

....., andshall each lodge the Performance Security, Advance Payment Guarantee and Warranty Bond of their own portion of the project, in favor of VNPT Net Corporation.

Advance Payment Guarantee of each PO:

+ Time of submit:, andshall submit to Purchaser

the Advance Payment Guarantee no later than fifteen (15) days after the issuance date of each Purchase Order.

+ Form of Advance Payment Guarantee: The Advance Payment Guarantee shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End-user/Purchaser issued in Vietnamese and English language by way of an unconditional and irrevocable bank guarantee in a form acceptable to the End user/Purchaser. In case the Advance Payment Guarantee submitted to the Purchaser/End-user expires and the Delivery Acceptance Certificate has not duly signed by Parties, the Contractor has obligation to extend the Advance Payment Guarantee by suitable period of time. All costs in respect of such guarantee shall be borne by the Contractor and the Contractor shall indemnify the End user/Purchaser from and against such costs.

+ Advance Payment Guarantee shall cover 10% of Price Net of each PO.

+ Validity of Advance Payment Guarantee: This Advance Payment Guarantee shall be valid up to thirty (30) days after the date of Delivery Acceptance Certificate (DAC) of each PO.

Performance Security:

+ Form of Performance Security: The Performance Security shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End user/Purchaser issued in Vietnamese and English language by way of an unconditional and irrevocable bank guarantee in a form acceptable to the End user/Purchaser. All costs in respect of such guarantee shall be borne by the Contractor and the Contractor shall indemnify the End user/Purchaser from and against such costs.

+ Performance Security shall cover: (i) 10% of Total Contract Price (including CIT) for Foreign Part supplied by, i.e. USD (ii) 10% of Total Contract Price (including VAT) for Local Part supplied by, i.e. VND (iii) 10% of Total Contract Price (including VAT) for Local Part, i.e. VND In case the Final Total Contract Price is different from the Total Contract Price as specified in Article 3.2 upon issuance of last Purchase Order of this Contract, the value of Performance Security shall be amended by the Contractor in accordance with the Final Total Contract value as accepted by the Purchaser/End-user.

+ Validity of Performance Security: This Performance Security shall take effect from the issued date of the Performance Security and valid up to thirty (30) days after the date of the last Final Acceptance Certificate (FAC) of the Contract. The Performance Security shall cover the Contractor's warranty obligation during Trial-run period.

The return of Performance Security: The Performance Security will be discharged by the Purchaser and returned to the Contractor not later than thirty (30) days after the date of Final Acceptance Certificate (FAC).

Warranty Bond:

+ Time of submit:, andshall submit the Warranty Bond of each PO to Purchaser before the date of Final Acceptance Certificate of each PO.

+ Form of Warranty bond: The Warranty bond shall be issued by a well-known bank in Vietnam or a foreign Bank's branch in Vietnam approved by the End user/Purchaser issued in Vietnamese and English language by way of an unconditional and irrevocable bank guarantee in a form acceptable to the End user/Purchaser. All costs in respect of such guarantee shall be borne by the Contractor and the Contractor shall indemnify the End user/Purchaser from and against such costs.

+ Warranty bond shall cover: (i) 10% of total price of PO (including CIT) for Foreign Part supplied by (ii) 10% of total price of PO (including VAT) for Local Part supplied by (iii) 10% of total price of PO (including VAT) for Local Part.

+ Validity of Warranty bond of each PO: This Warranty bond shall be valid up to thirty (30) days after the expiry date of Warranty period.

The return of Warranty bond: The Warranty bond will be discharged by the Purchaser and returned to the Contractor not later than thirty (30) days following the expiry date of Warranty period.

17. Delay

Refer to SCC 22 of Specific Conditions of Contract

18. Termination of the Contract

18.1. Neither the Contractor or the Purchaser shall terminate or suspend performance, in whole or in part, without the other party's prior written consent, provided that the terminating party should grant the other party a reasonable period of sixty (60) days to rectify the discrepancies that bring to the non-performance of this Contract, before the terminating party may terminate the whole or any part of this Contract. And if after this period the defaulting party still fails to perform substantially its obligations, the terminating party may terminate this Contract by serving written notice to the other party.

18.2. Upon termination due to the Contractor's fault, the Purchaser is entitled to draw certain amount to recover its damages but not exceeding the total Contract value. The Purchaser shall return the Supplies, which fails to meet specifications agreed upon and identified for such Supplies as per Annex 1- Price List to the Contractor without compensation for those expenses incurred by the Contractor in the provision of said Supplies. The Contractor shall reimburse the Purchaser all money received from the Purchaser for the returned Supplies at the time of termination. Transportation costs and other costs for returning the Supplies shall be borne by the Contractor.

18.3. Upon termination due to the Purchaser's fault, the parties hereto shall agree upon and certify the portion of the Work which has at the date of termination been performed by the Contractor under this Contract. The Contractor shall be entitled to receive payment from the Purchaser for this part of the work executed.

18.4. Any party may terminate this Contract immediately by written notice to the other party if any party becomes insolvent, makes a general assignment for the benefit of its creditors, suffers or permits the appointment of a receiver over its business or assets, becomes subject to any proceedings under any bankruptcy or insolvency law whether domestic or foreign, either voluntarily or otherwise.

18.5. Either party shall not be in default if any failure to perform its obligations accordance with this Contract arises out of Force Majeure as per Article 20 below.

18.6. On termination of this Contract any other parts of this Contract that, by their nature, are intended to survive termination will do so.

18.7. The Purchaser/End-user has the right to terminate the Contract, without the Contractor's prior written consent, in case:

- In case the penalty value is exceeding 8% of value of the contract part damaged, the Purchaser/End-user shall have the right to terminate the Contract.

- The Contractor delays in delivering Supplies for more than eight (08) weeks (equivalent to 56 days) from the last shipment's delivery date specified in the contract or Contractor is unable to continue supplying equipment and the Purchaser/End-user shall be entitle to withdraw the money under the bank guarantees which the Contractor has submitted to Purchaser/End-user under the contract.

19. Deduction from the Contractor's Money

The Purchaser may claim all direct losses, costs, charges and expenses which the Purchaser shall have incurred by reason of any faults or mistakes of the Contractor during the performance of the Contract together with any liquidated damages sum payable to the Purchaser under the Contract by serving 14 days advanced written notice to the Contractor. If the Contractor fails to pay such liquidated damages within such stipulated period, the Purchase may deduct from payments that are due to the Contractor.

20. Force Majeure

20.1. Neither Party shall be liable for any delay or failure to perform any of its obligations pursuant to this Contract, wholly or in part, directly or indirectly, if such delay or failure is due to Force Majeure.

20.2. In this Contract, "Force Majeure" means an event or situation beyond the control of the Contractor that is not foreseeable, is unavoidable. Such events may include wars or disturbances, strikes, fires, floods, epidemics, quarantine restrictions, etc.

20.3. Upon the force majeure, the Contractor shall timely notice in writing to the Purchaser of the event and reason. At the same time, the Contractor shall send the Purchaser the confirmation of the happening issued by a competent body or Chamber of Commerce at the local of the event. Except otherwise written stated by the Purchaser, the Contractor shall

continue to exercise its obligations under the Contract and shall take all measures to carry out the unaffected items.

21. Limitation of Liability

21.1. Notwithstanding any other provision in this Contract, and irrespective of any fault, negligence or gross negligence of any kind, in no event shall either party or any of its directors, officers, employees or agents be liable to the other party for any consequential, incidental, indirect, reliance or special (including punitive) damages, including, but not limited to, loss of profit or revenues, loss of goodwill or reputation, loss of data or information, loss of interest, downtime loss, cost of interrupted operation of the Network.

21.2. Notwithstanding any other provision in this Contract, the total liability of the Contractor on any claim, whether in contract, tort (including negligence), infringement of intellectual property rights, or otherwise, arising out of, connected with, or resulting from the manufacture, sale, license, delivery, repair, replacement or use of any supplies shall not exceed one hundred percent (100%) of the Total Contract Price.

21.3., andshall be liable for their own portion of the project.

22. Variation of this Contract

No modification, amendment or other change may be made to this Contract or any part thereof unless reduced to writing and executed by authorized representatives of both Parties.

Any variation and/or amendment to this Contract shall be valid and become an integral part of this Contract only after it is duly signed by authorised representatives of all Parties.

23. Taxes, Levies and Fees

23.1. All taxes, duties and customs fees and other expenses outside S.R. Vietnam in connection with the execution of this Contract shall be borne by the Contractor, and all taxes, duties and customs fees inside S.R. Vietnam shall be borne and paid by Purchaser, unless otherwise stipulated.

As per DAP INCOTERMS, prices for Foreign part supplied by are exclusive of customs duties, fees, sales tax, and any other taxes and costs due at the time of importation in Vietnam. The Purchaser shall perform the customs clearance and pay the customs duties in addition to the prices.

23.2. The Value Added Tax (VAT) invoiced by the andin accordance with the applicable laws and regulations of Vietnam shall be paid in addition to the prices by the Purchaser to andaccordingly.

23.3. The Value Added Tax (VAT) part of the Foreign Contractor Withholding Tax (FCWT) imposed on in accordance with the applicable laws and regulations of

Vietnam is not included in the Contract Price specified in the Annex 1 – Price List. Consequently, the Purchaser shall pay the VAT part of the FCWT in addition to the Contract Price and on’s behalf to Vietnamese Tax Authorities.

23.4. The Corporate Income Tax (CIT) part included in the FCWT and imposed on shall apply within the limit of the applicable laws, tax treaties in force and regulations of Vietnam as specified in the Annex 1 – Price List. The Purchaser shall then pay this amount on’s behalf to the Vietnamese Tax Authorities and provide one (01) copy of (i) Corporate Income Tax declaration and (ii) Corporate Income Tax Payment Receipt within thirty (30) days from the date of the tax payment to within thirty (30) days from the date of the tax payment. will issue a separated invoice to the Purchaser for the amount of CIT value of the FCWT. This amount of CIT value of the FCWT and the corresponding invoice from to the Purchaser will be adjusted due to the changes in tax laws (if any).

23.5. The income tax for Contractor's personnel shall be borne by Contractor whether imposed inside or outside Vietnam.

24. Intellectual Property Rights

24.1. If a third party rightfully raises claims due to infringement of intellectual property right which is effective in Vietnam in connection with the Supplies, the Contractor will at its discretion and costs, and excluding further liability, either:

a) Get a license from the third party which owns a duly effective intellectual property right infringed by the Supplies,

b) Or substitute these parts for other non-infringing parts,

c) Or take back the Supplies concerned against the reimbursement of all relating fee.

Claims shall be deemed rightful only if they are acknowledged by the Contractor or finally so adjudicated by a court or competent jurisdiction.

24.2. The obligation set forth in Article 24.1. above is conditional upon:

a) The Purchaser giving the Contractor notice in writing without undue delay of any claim being made against the Purchaser or action threatened to be brought against the Purchaser or the Contractor and the Purchaser has not made any admission with respect to the infringement of third party intellectual property rights which might be prejudicial to the defense against such claim or action;

b) The Purchaser permitting the Contractor at its own expense to have full authority and conduct any ensuing litigation and all negotiations for settlement of the claim; and

c) The Contractor being informed of all circumstances which may be of relevance in the legal action and the Purchaser providing all the necessary assistance and refraining from taking any steps in any legal action which may prejudice the rights of the Contractor.

The Contractor shall not be liable for any settlements entered into and/or any expense

or cost incurred by the Purchaser without the prior written approval of the Contractor.

In the event the Contractor fails to act against such claims or actions, the Purchaser shall have the right to take appropriate legal action and reasonable expenses incurred therein shall be refunded by the Contractor.

24.3. The Parties hereto agree that Article 24.1 above shall constitute the entire liability of the Contractor and shall be the Purchaser's sole and absolute remedy for any intellectual property infringement.

24.4. The indemnity shall not apply to any claim based on any of the following:

- a) Contractor's compliance with the Purchaser's design or design instructions, or
- b) use of the Equipment or Software in a manner, or for a purpose, which was not foreseeable, or
- c) the assembly, function or use of the Equipment or Software in combination with any goods or software not supplied by Contractor, or
- d) the modification of the Equipment or Software by the Purchaser or by any third party.

24.5. The Parties hereto agree that the Purchaser shall lose its warranty rights, if it attempts to rectify defects or malfunctions on its own accord during the Warranty Period. In any case, such attempts do not constitute any proprietary rights of the Purchaser in the Equipment.

24.6. The Purchaser shall not, without the Contractor's prior written permission, delete, conceal or change or alter any of the Contractor or its subsidiary or affiliate companies' trade name, trademark, trade device, service mark, symbol, code or specification or any abbreviation, contraction or simulation thereof.

24.7. In respect to the Supplies containing Software acquired under this Contract, the End-user is hereby granted a perpetual, non-exclusive and non-transferable license to use the Software for the purposes of operating the End-user's network in Vietnam. The End-user is granted no title or ownership rights or interests in the Software, where such title, rights and/or interest in the Software shall remain with the Contractor or Contractor's Contractor at all times. The End-user further agrees with the Contractor that it shall not himself (or through any holding, subsidiary or associated company, agent or third party) modify, vary, enhance, copy, reproduce, adapt, disassemble, decompile, reassemble, translate, sub-lease, license, or otherwise deal with the Software and any part thereof. The documents may only be copied for recording or operational purposes or for purposes expressly permitted by the Contractor in writing. Any and all such copies shall contain the same proprietary and confidential notices and legends which appear on the original documentation. The license does not extend any rights to End-user in respect of the source code of the Software.

24.8. The Purchaser acknowledges and agrees that the proprietary rights or interest or other intellectual property rights in the Supplies under this Contract shall remain with the Contractor. The Purchaser also acknowledges that the validity and ownership of the Contractor's copyright in all the materials or spare parts supplied by the Contractor to the Purchaser in connection with the Supplies under this Contract and all the right in its logos, emblems shall remain the property of the Contractor. The Purchaser undertakes not to procure, cause the registration or attempt to register the Contractor's patent, industrial design in its own name and also not to claim any rights or interests whatsoever in the Contractor's copyright.

24.9. Subject to the approval of the authorized person of Vietnam Post and Telecommunication Group, End-user consents, in written form, to grant to Contractor (upon request of the Contractor, such consent not to be unreasonably withheld) either remote access or periodical physical access (including, but not limited to, installation of appropriate Software Monitoring Client into End-user's Network Management System) for the purpose of verifying product usage, activation compliance and invoicing of Software usage in accordance with agreed prices. Contractor shall own the copyright to the raw data that it has collected in such network via remote or physical access to such Network Elements (or System Elements) ("Data") and any and all aggregations and/or compilations of such Data into reports and/or any other documents and materials created by Contractor ("Report"). Contractor shall allow End-user to have access rights to a reasonable amount of copies of the Report containing Data directly relating to its Software usage for the purposes of checking invoicing and payments. End-user shall obtain prior written consent from the Contractor for access to all other Data and Reports.

25. Arbitration

25.1. Any disputes or discrepancies which may arise out of this Contract shall be settled smoothly, amicably, based on mutual benefit and understanding.

25.2. If an attempt at settlement has failed, all disputes arising out of or in relation to this contract shall be finally settled by the Vietnam International Arbitration Centre at the Vietnam Chamber of Commerce and Industry in accordance with its Arbitration Rules.

25.3. The place of arbitration shall be carried out in Country of Vietnam.

25.4. The arbitrary award shall be substantiated in writing. The decision of the arbitration shall be final and binding for both parties.

25.5. All expenses in connection with the arbitration shall be borne by the losing party.

25.6. The language for the arbitration shall be English or Vietnamese.

26. Law Governing the Contract

The Governing Law and Jurisdiction of the Contract shall be the law of S.R.Vietnam.

27. Confidential relationship

27.1. Confidential Information shall mean all information, data, know-how, whether it is technical in nature or not, which is disclosed to the other Party, and which is related to research, technology, design, equipment and business activities or strategies of the proprietor, which is either marked or stated to be confidential, or is by its nature and/or its name reasonably intended to be confidential.

27.2. The Parties hereby undertakes to keep and maintain the Confidential Information received from the other Party during the term of this Contract in strict confidence and to use it only in accordance with the purpose of fulfilling this Contract.

27.3. The Parties hereby agree to use all reasonable efforts to take such actions as may be necessary and appropriate to prevent the unauthorized use and the disclosure of the same, and to keep and maintain all such Confidential Information in strict confidence, including but not limited to:

- a) Ensuring that such Confidential Information is disclosed only to responsible employees of respective Parties who have a bona fide need to know such Confidential Information and who have been properly instructed to maintain such Confidential Information in strict confidence;
- b) Not to disclose to any third party the terms and conditions of this Contract or any Confidential Information;
- c) Not to disclose the methods of the manufacture and/or sale of the equipment information including the marketing plans or strategies; and
- d) To safeguard all documents and/or information against theft, damage, loss or access by unauthorized persons.

27.4. Neither Party shall use the name of the other Party or the name of any of its Affiliates in any promotional material or make any publicity release regarding this Contract without prior written permission of the other Party.

27.5. The Parties hereto agree that the Confidential Information disclosed to the other Party has been developed and acquired by the disclosing Party over many years at great costs and expense.

27.6. The Parties agree that in the event of any violation of the duty of confidentiality and such violation constitutes a fundamental breach of this Contract and shall result in grave and serious injury and damage to the other Party that no monetary damages can compensate such injury and damage.

27.7. The Parties agree that money damages are not a sufficient remedy for any breach of this Contract by the receiving Party and that the disclosing Party shall be entitled to specific performance or injunctive relief as a remedy for any breach or threatened breach thereof, in addition to any other remedies available at law or in equity.

27.8. The Parties agree that, notwithstanding the termination of this Contract for any reason whatsoever, the provisions in relation to the Confidential Information shall survive this Contract and shall be continuing obligations for a period of five (5) years from the date hereof.

27.9. The Parties' duty of confidentiality herein shall not apply, however, to any part of the Confidential Information which:

- a) was already obtained in good faith by the receiving Party prior to the receipt thereof;
- b) was already in the public domain or became so through no fault of the receiving Party;
- c) was acquired by the receiving Party from a third party having the absolute right to convey the Confidential Information to the receiving Party without violating any duty of confidentiality;
- d) is independently developed by the receiving Party;
- e) is approved for the release of disclosure by prior written authorization by the owner of the Confidential Information; and
- f) is required to comply with or fulfill governmental requirements, submissions to governmental bodies, or securing of regulatory approvals.

27.10. Notwithstanding the above, Contractor may use or transfer any network data provided by the Purchaser upon request of the Contractor for such purposes in connection with the proper execution of this Contract and scope of work therein. Contractor may transfer any such personal data to Contractor's affiliates that are located overseas where such transfer is required for Contractor to perform its obligations under the Contract. Contractor confirms that transfer of data will only take place if need be.

28. No Assignment

Either party shall not directly or indirectly transfer or assign wholly or partly of the Contract without the prior written approval of the other party while such approval shall not be unreasonably withheld.

29. Language and Measurement System

29.1. All correspondence between two parties hereto including notices, request, consents, offers or demands shall be made in English or Vietnamese. All drawings, specifications, reports and other documents shall be also prepared in English or Vietnamese.

29.2. All documents made hereunder shall adopt the metric system and days shall be calendar days, unless otherwise stated.

30. Entire Agreement

The following documents shall constitute the Contract between the Purchaser and the Contractor, and each shall be read and construed as an integral part of the Contract:

30.1. This Contract Agreement;

30.2. Attached Annexes:

Annex 1 - Price List

Annex 2 - Statement of Compliance for Scope of Supply and Technical Requirements

Annex 3 - Solution description

Annex 4 - Implementation Schedule

Annex 5 - Responsibility Matrix

Annex 6 - Acceptance Procedure

Annex 7 - Technical supporting documents

Annex 8 - List of installation materials

30.3. Bid, Bidding documents and correspondences during tender process, clarifying bid documents.

30.4. Minutes of Contract Negotiation (if any), Minutes of Contract Finalization;

30.5. Letter of Acceptance of Bid and Contract Award;

30.6. Other Documents (if any);

This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

31. Status of Both Parties

31.1. The relationship between the Purchaser and the Contractor is intended to be and shall be that of a Purchaser and Contractor. The Purchaser or its employees or agents and/or representatives shall under no circumstances be considered as agents, partners, joint ventures or representatives of the Contractor.

31.2. The Purchaser or its employee or agents or representatives shall not act or attempt to act, or represent himself, directly or by implication, as agent, joint venture, partner or representative of the Contractor, or in any manner assume or attempt to assume or create any obligation or liability of any kind, nature or sort, express or implied, on behalf of or in the name of the Contractor.

32. Waiver

No delay on the part of either Party in exercising any of its right hereunder or failure to exercise the same, nor the acquiescence or knowledge thereto shall operate as a release or waiver except in the specific instance for which is expressly given. None of the terms, conditions or provisions of this Contract shall be held to have been changed, waived, varied, modified or altered by any act or knowledge of either party, their respective agents, servants or employees.

33. Severability

In the event any one or more of the provisions of this Contract is held to be void or unenforceable or illegal under the applicable law, such voidances or unenforceability or illegality shall not affect any other provision of this Contract.

34. Sub-Contractor

The Contractor shall notice in writing to the Purchaser Sub-contractor's name and scope of supply. This notice shall not exclude the Contractor from obligation and responsibility of Contract's performance. Work value shall be done by Sub-contractor not exceeding

This Contract is made in eight (08) originals to be signed by below representatives. The Purchaser keeps two (02) originals, the End-user keeps two (02) originals, keeps one (01) original, keeps one (01) original, keeps two (02) originals.

Handwritten marks:
A signature in blue ink at the bottom left.
The number "125" written vertically in blue ink.
A blue checkmark or "e" symbol at the bottom right.

IN WITNESS WHEREOF, this Contract has been duly signed by the Parties
hereto, on the day written above

PURCHASER:

Authorized signatory:

Name:

Title:

END-USER: VNPT NET CORPORATION

Authorized signatory:

Name:

Title:

CONTRACTOR consist of:

Authorized signatory:

Name:

Title:

Authorized signatory:

Name:

Title:

Authorized signatory:

Name:

Title:

Authorized signatory:

Name:

Title:

PERFORMANCE SECURITY ⁽¹⁾

____, day ____ month ____ year ____

To: ____ [*name of Beneficiary*]

(Hereinafter called the Beneficiary)

At the request of the ____ [*name of Contractor*] (hereinafter called the Contractor) who is the successful Bidder of the Procurement Package ____ [*insert name of the Procurement Package*] and is committed to signing a contract to supply goods for the above Procurement Package (hereinafter called the Contract); ⁽²⁾

As stipulated in the Bidding Document (or Contract), the Contractor shall submit to the Beneficiary a bank guarantee with a specified amount to ensure their obligations and responsibilities in the implementation of the contract;

We, ____ [*name of bank*] at ____ [*name of country or territory*] with its registered office at ____ [*address of bank* ⁽³⁾] (hereinafter called "the Bank"), undertake to guarantee for the implementation of the contract by the Contractor in the amount of ____ [*insert the corresponding value in number and words and the currency used as specified in Clause 5.2 SCC of the Bidding Document*]. We commit to paying unconditionally, irrevocably to the Beneficiary any money in the limit of ____ [*Insert the amount of security*] as described above, upon written notification of Beneficiary to the extent that the Contractor breaches the Contract during the valid period of Contract Performance Security.

This Security is effective from the date of issue until the end of the day ____ month ____ year ____ ⁽⁴⁾.

The legal representative of the bank____ [*name and title, sign and stamp*]**Note:**

(1) Only applicable in the case of guarantee for the implementation of the contract is a letter of security from a bank or financial organization.

(2) If the bank requires to have signed contract for granting the security, the Investor shall report to Beneficiary for consideration and decision. In this case, the above paragraph may be revised as follows:

"At the request of the ____ [*name of Contractor*] (hereinafter called the Contractor) who was the successful Bidder of the Procurement Package ____ [*insert name of the Procurement Package*] and has signed the Contract No. ____ [*insert the Contract Number*] dated ____ (hereinafter called the Contract)."

(3) Bank address: specify the address, telephone number, fax number, e-mail address to contact.

(4) Insert period consistent with requirements specified in Clause 5.2 SCC.

ADVANCE PAYMENT GUARANTEE ⁽¹⁾

____, day ____ month ____ year ____

To: ____ [*insert name of Beneficiary*]

(Hereinafter called the Beneficiary)

[*Insert name and number of the contract*]

According to the term of the advance payment referred in the specific conditions of the contract, ____ [*Insert name and address of the contractor*] (Hereinafter called "the Contractor") shall submit a guarantee letter of a bank to the Beneficiary to ensure that the Contractor will use properly the advance ____ [*Specify the value in number and words, and the currency used*] for the execution of the contract;

We, ____ [*name of Bank*] in ____ [*name of country or territory*] has its registered office at ____ [*Insert address of the bank* ⁽²⁾] (Hereinafter called "the Bank"), at the request of the Beneficiary, hereby unconditionally, irrevocably and with no Contractor's preview undertake to pay you an amount not exceeding ____ [*Specify the value in number and words, and the currency used as specified in Clause 13.1 SCC of the BD*].

In addition, we undertake that any changes, supplements or adjustment of the conditions of the Contract or of any documents relating to the Contract which signed between the Contractor and the Beneficiary will not alter any obligations of us under this guarantee.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor via the installments of payment stipulated in Article 5 of the Contract as indicated in confirmation letter of Beneficiary which shall be presented to us.

This guarantee is effective from the date when the Contractor receives the advance payment under this contract to day ____ month ____ year ____ ⁽³⁾ or when the Beneficiary recovers the total amount of the advance, whichever comes earlier.

The legal representative of the bank[*name and title, sign and stamp*]

Note:

(1) Pursuant to the specific conditions of the procurement package that provisions consistent with requirements specified in Clause 13.1 SCC.

(2) Bank address: specify the address, telephone number, fax number, e-mail address to contact.

WARRANTY BOND ⁽¹⁾

_____, day ____ month ____ Year ____

To: ____ [*insert name of Beneficiary*]

(Hereinafter called the Beneficiary)

[*Insert name and number of the contract*]

Guarantor:

We are informed that you have entered into a contract No..... (Hereinafter referred to as the “ Contract”) with the Joint Venture includes having its registered address at (Hereinafter referred to as “Foreign contractor”) and having its representative address at (Hereinafter referred to as the “Local contractor”) for Project: “..... ” and under the contract ,the Foreign contractor has to provide you with the warranty Bond.

At the request of the Foreign contractor, We,, having registered address at issue this warranty for USD (In word :), in your favor to guarantee the Foreign contractor’s warranty obligations under the contract as agreed.

We hereby unconditionally and irrevocably undertake to pay you any sum(s) in the aggregate not exceeding USD (In word :) upon our receipt of the Beneficiary original written demand stating that the Foreign contractor has failed to fulfill this warranty obligations under the contract as agreed, the guarantee REF. number and the amount the Beneficiary request the bank to pay, accompanied by the original bond and its related amendment(s) (if any) .

The beneficiary of Performance Security:

Name of the Bank:

Account number:

Any demand under this bond shall be made by letter, duly signed and sealed by authorized representative of the Beneficiary.

This security is effective since the date of issue and shall expire at the earliest of the following (hereinafter called the “Expiry”):

- (i) The end of or,
- (ii) When the bank have completed payment obligations under this bond.

Demand documents under this bond must be sent to and received by us in our working hours and before the expiry ----- Viet Nam.

After the expiry, this bond shall automatically become null and void whether or not the original bond and its related amendments (if any) are returned to us for cancelation.

This security is issued in one (01) sole original and it not transferable or assignable.

This Security is governed by and construed in accordance with the Vietnamese Laws.

The legal representative of the bank

[name and title, sign and stamp]

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