

**BANGLADESH PARJATAN CORPORATION  
ICT DIVISION  
83-88, Mohakhali C/A  
Dhaka - 1212**

**TENDER DOCUMENT  
FOR THE PROCUREMENT OF GOODS (NATIONAL)**

**Supply, Installation, Testing, Commissioning and  
implementation of server room infrastructure, networks and  
computer hardware under “Integration of Automation  
System of Bangladesh Parjatan Corporation”.**

**April 2015**

**Invitation for Tender No: 30.015.014.28.00.006.2014/Part-1**

**Issued on:**

**Tender Package No: N/A**

**Tender Lot No: N/A**

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## Section 1. Instructions to Tenderers

### A. General

- 1. Scope of Tender**
- 1.1 The Procuring Entity, as indicated in the Tender Data Sheet (**TDS**) issues this Tender Document for the supply of Goods and related services incidental thereto, as specified in the **TDS** and as detailed in Section 6: Schedule of Requirements. The name of the Tender and the number and identification of its constituent lot(s) are stated in the **TDS**.
- 1.2 The successful Tenderer shall be required to complete the delivery of the Goods and related services as specified in the General Conditions of Contract.
- 2. Interpretation**
- 2.1 Throughout this Tender Document
- (a) the term “in writing” means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail;
  - (b) if the context so requires, singular means plural and vice versa; and
  - (c) “day” means calendar days unless otherwise specified as working days;
  - (d) “Person” means and includes an individual, body of individuals, sole proprietorship, partnership, company, association or cooperative society that wishes to participate in Procurement proceedings;
  - (e) “Tenderer” means a Person who submits a Tender;
  - (f) “Tender Document”, means the Document provided by the Procuring Entity to a Tenderer as a basis for preparation of its Tender;
  - (g) “Tender”, depending on the context, means a Tender submitted by a Tenderer for delivery of Goods and Related Services to the Procuring Entity in response to an Invitation for Tender ;
- 3. Source of Funds**
- 3.1 The Procuring Entity has been allocated public funds from the source as indicated in the **TDS** and intends to apply a portion of the funds to eligible payments under the contract for which this Tender Document is issued.
- 3.2 For the purpose of this provision, “public funds” means any funds allocated to the Procuring Entity under Government budget, or loan, grants and credits placed at the disposal of the Procuring Entity through the Government by the development partners or foreign states or organizations.
- 3.3 Payments by the development partner, if so indicated in the **TDS**, will be made only at the request of the Government and upon approval by the development partner in accordance with the applicable Loan/Credit/Grant Agreement, and will be subject in all respects to the terms and conditions of that

Agreement.

**4. Corrupt, Fraudulent, Collusive or Coercive Practices**

- 4.1 The Government requires that the Procuring Entity as well as the Tenderers shall observe the highest standard of ethics during implementation of procurement proceedings and the execution of Contracts under public funds.
- 4.2 For the purposes of ITT Sub Clause 4.3, the terms set forth below as follows:
- (a) **“corrupt practice”** means offering, giving or promising to give, receiving, or soliciting either directly or indirectly, to any officer or employee of the Procuring Entity or other public or private authority or individual, a gratuity in any form; employment or any other thing or service of value as an inducement with respect to an act or decision or method followed by the Procuring Entity in connection with a Procurement proceeding or Contract execution;
  - (b) **“fraudulent practice”** means the misrepresentation or omission of facts in order to influence a decision to be taken in a Procurement proceeding or Contract execution;
  - (c) **“collusive practice”** means a scheme or arrangement between two (2) or more Persons, with or without the knowledge of the Procuring Entity, that is designed to arbitrarily reduce the number of Tenders submitted or fix Tender prices at artificial, non-competitive levels, thereby denying the Procuring Entity the benefits of competitive price arising from genuine and open competition;
  - (d) **“coercive practice”** means harming or threatening to harm, directly or indirectly, Persons or their property to influence a decision to be taken in the Procurement proceeding or the execution of a Contract, and this will include creating obstructions in the normal submission process used for Tenders.
- 4.3 Should any corrupt, fraudulent, collusive or coercive practice of any kind come to the knowledge of the Procuring Entity, it will, in the first place, allow the Tenderer to provide an explanation and shall, take actions only when a satisfactory explanation is not received. Such exclusion and the reasons thereof, shall be recorded in the record of the procurement proceedings and promptly communicated to the Tenderer concerned. Any communications between the Tenderer and the Procuring Entity related to matters of alleged corrupt, fraudulent, collusive, coercive, or obstructive practices shall be in writing.
- 4.4 If corrupt, fraudulent, collusive or coercive practices of any kind is determined by the Procuring Entity against any Tenderer or Supplier in competing for, or in executing, a contract under public fund, the Procuring Entity shall :
- (a) exclude the concerned Tenderer from further participation in the concerned procurement

proceedings;

- (b) reject any recommendation for award that had been proposed for that concerned Tenderer; and
- (c) declare, at its discretion, the concerned Tenderer to be ineligible to participate in further Procurement proceedings, either indefinitely or for a specific period of time.

4.5 Tenderer shall be aware of the provisions on corruption, fraudulence, collusion and coercion in Section 64 of the Public Procurement Act, 2006 and Rule 127 of the Public Procurement Rules, 2008 and others as stated in GCC Clause 3.

## **5. Eligible Tenderers**

5.1 This Invitation for Tenders is open to eligible Tenderers from all countries, except for any specified in the **TDS**.

5.2 Tenderers shall have the legal capacity to enter into the Contract.

5.3 Tenderers shall be enrolled in the relevant professional or trade organisations registered in Bangladesh.

5.4 Tenderers may be a physical or juridical individual or body of individuals, or company invited to take part in public procurement or seeking to be so invited or submitting a Tender in response to an Invitation for Tenders.

5.5 Tenderers shall have fulfilled its obligations to pay taxes and social security contributions under the provisions of laws and regulations of the country of its origin.

5.6 Tenderers should not be associated, or have been associated in the past, directly or indirectly, with a consultant or any of its affiliates which have been engaged by the Procuring Entity to provide consulting services for the preparation of the specifications and other documents to be used for the procurement of the Goods to be supplied under this Invitation for Tenders.

5.7 Tenderers in its own name or its other names or also in the case of its Persons in different names, shall not be under a declaration of ineligibility for corrupt, fraudulent, collusive or coercive practices as stated under ITT Sub Clause 4.4.

5.8 Tenderers are not restrained or barred from participating in public Procurement on grounds of execution of defective supply in the past under any Contract.

5.9 Tenderers shall not be insolvent, be in receivership, be bankrupt, be in the process of bankruptcy, be not temporarily barred from undertaking business and it shall not be the subject of legal proceedings for any of the foregoing.

5.10 Government-owned enterprise in Bangladesh may also participate in the Tender if it is legally and financially autonomous, it operates under commercial law, and it is not a

dependent agency of the Procuring Entity

5.11 Tenderers shall provide such evidence of their continued eligibility satisfactory to the Procuring Entity, as the Procuring Entity will reasonably request.

5.12 These requirements for eligibility will extend, as applicable, to Sub-contractor proposed by the Tenderer.

**6. Eligible Goods and Related Services**

6.1 All goods and related services to be supplied under the contract are eligible, unless their origin is from a country specified in the **TDS**.

6.2 For purposes of this Clause, the term “**goods**” includes commodities, raw material, machinery, equipment, and industrial plants; and “related services” includes services such as insurance, transportation, installation, and commissioning, training, and initial maintenance.

For purposes of this clause, “**origin**” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or through manufacturing, processing, or assembling, another commercially recognized new product results that differs substantially in its basic characteristics from its components.

6.3 The origin of Goods and related services is distinct from the nationality of the Tenderer.

**7. Site Visit**

7.1 The costs of visiting the Site shall be at the Tenderer’s own expense.

**B. Tender Document**

**8. Tender Document: General**

8.1 The Sections comprising the Tender Document are listed below and should be read in conjunction with any addendum issued under ITT Clause 11.

- Section 1 Instructions to Tenderers (ITT)
- Section 2 Tender Data Sheet (TDS)
- Section 3 General Conditions of Contract (GCC)
- Section 4 Particular Conditions of Contract (PCC)
- Section 5 Tender and Contract Forms
- Section 6 Schedule of Requirements
- Section 7 Technical Specifications
- Section 8 Drawings

8.2 The Procuring Entity is not responsible for the completeness of the Tender Document and their addenda, if these were not purchased directly from the Procuring Entity, or through its agent as specified in the **TDS**

8.3 Tenderers are expected to examine all instructions, forms, terms, and specifications in the Tender Document as well as in addendum to Tender, if any.

**9. Clarification of Tender**

9.1 A prospective Tenderer requiring any clarification of the Tender Document shall contact the Procuring Entity in writing at the



## **Documents**

Procuring Entity's address and within time as specified in the **TDS**

- 9.2 The Procuring Entity is not obliged to answer any clarification received after that date requested under ITT Sub Clause 9.1.
- 9.3 The Procuring Entity shall respond in writing within five (5) working days of receipt of any such request for clarification received under ITT Sub-Clause 9.1
- 9.4 The Procuring Entity shall forward copies of its response to all those who have purchased the Tender Document, including a description of the enquiry but without identifying its source.
- 9.5 Should the Procuring Entity deem it necessary to amend the Tender Document as a result of a clarification, it shall do so following the procedure under ITT Clause 11.

## **10. Pre-Tender Meeting**

- 10.1 To clarify issues and to answer questions on any matter arising in the Tender Document, the Procuring Entity may, if stated in the **TDS**, hold a pre-Tender Meeting at the place, date and time as specified in the **TDS**. All Potential Tenderers are encouraged to attend the meeting, if it is held.
- 10.2 Tenderers are requested to submit any questions in writing so as to reach the Procuring Entity not later than one day prior to the date of the meeting.
- 10.3 Minutes of the pre-Tender meeting, including the text of the questions raised and the responses given, together with any responses prepared after the meeting, will be transmitted within five (5) working days after holding the meeting to all those who purchased the Tender document and to even those who did not attend the meeting. Any revision to the Tender Document listed in ITT Sub Clause 8.1 that may become necessary as a result of the pre-Tender meeting will be made by the Procuring Entity exclusively through the issue of an Addendum pursuant to ITT Sub Clause 11 and not through the minutes of the pre-Tender meeting.
- 10.4 Non-attendance at the pre-Tender meeting will not be a cause for disqualification of a Tenderer.

## **11. Addendum to Tender Documents**

- 11.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity on its own initiative or in response to a clarification request in writing from a Tenderer, having purchased the Tender Document or as a result of a pre-Tender meeting, may revise the Tender Document by issuing an Addendum.
- 11.2 The Addendum issued under ITT Sub Clause 11.1 shall become an integral part of the Tender Document and shall have a date and an issue number and shall be circulated by fax, mail or e-mail, to Tenderers who have purchased the Tender Documents within five (5) working days of issuance of such Addendum, to enable Tenderers to take appropriate action.
- 11.3 The Procuring Entity shall also ensure posting of the relevant addenda with the reference number and date on their websites

including notice boards, where the Procuring Entity had originally posted the IFTs

- 11.4 To give a prospective Tenderer reasonable time in which to take an amendment into account in preparing its Tender, the Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders, pursuant to ITT Clause 37.2.
- 11.5 If an Addendum is issued when time remaining is less than **one-third** of the time allowed for the preparation of Tenders, the Procuring Entity shall extend the deadline by an appropriate number of days for the submission of Tenders, depending upon the nature of the Procurement requirement and the addendum. The minimum time for such extension shall not be less than three (3) working days.

## C. Qualification Criteria

- 12. General Criteria**
- 12.1 Tenderers shall possess the necessary professional and technical qualifications and competence, financial resources, equipment and other physical facilities, managerial capability, specific experience, reputation, and the personnel, to perform the contract, which entails setting pass/fail criteria, which if not met by the Tenderers, will result in consideration of its Tender as non-responsive.
- 12.2 In addition to meeting the eligibility criteria, as stated under ITT Clause 5, the Tenderer must satisfy the other criteria as stated under ITT Clause 13 to 15 inclusive.
- 12.3 To qualify for multiple number of contracts/lots in a package made up of this and other individual contracts/lots for which Tenders are invited in the Invitation for Tenders, the Tenderer shall demonstrate having resources sufficient to meet the aggregate of the qualifying criteria for the individual contracts. The requirement of general experience as stated under ITT Sub Clause 14.1(a) and specific experience, unless otherwise of different nature, as stated under ITT Sub Clause 14.1(b) shall not be separately applicable for each individual lot.
- 13. Litigation History**
- 13.1 Litigation history shall comply with the requirement as stated under ITT Sub Clause 15.1(b).
- 14. Experience Criteria**
- 14.1 Tenderers shall have the following minimum level of supply experience to qualify for supplying the Goods and related Services under the contract:
- (a) a minimum number of years of general experience in the supply of Goods and related services as specified in the **TDS**;
  - (b) specific experience of satisfactory completion of supply of Goods similar to the proposed goods in at least a number of contract(s) and, each with a minimum value, over the period, as specified in **TDS**; and
  - (c) a minimum supply and/or production capacity of Goods as

specified in the **TDS**.

**15. Financial Criteria**

- 15.1 Tenderers shall have the following minimum level of financial capacity to qualify for the supply of goods under the contract:
- (a) availability of minimum liquid assets i.e. working capital or credit line(s) from any scheduled Bank of Bangladesh, net of other contractual commitments, of the amount as specified in the **TDS**
  - (b) satisfactory resolution of all claims under litigation cases and shall not have serious negative impact on the financial capacity of the Tenderers. All pending litigation shall be treated as resolved against the Tenderers.

**16. Subcontractor (s)**

- 16.1 Tenderers may intend to subcontract an activity or portion of the Goods, in which case such elements and the proposed Subcontractor shall be clearly identified.
- 16.2 The Procuring Entity may require Tenderers to provide more information about their subcontracting arrangements. If any Subcontractor is found ineligible or unsuitable to carry out the subcontracted tasks, the Procuring Entity may request the Tenderers to propose an acceptable substitute.
- 16.3 A Subcontractor may participate in more than one Tender, but only in that capacity.

## **D. Tender Preparation**

**17. Only One Tender**

- 17.1 If a Tender for Goods is invited for one or more items on an "item-by-item" basis, each such item shall constitute a Tender. Tenderers shall submit only one (1) Tender for one or more items of each lot or single lot of a package. Tenderer who submits more than one (1) Tender in one or more item (s) of one (1) lot will cause all the Tenders of that particular Tenderer to be rejected.
- 17.2 If a Tender for Goods is invited for a number of lots on a "lot-by-lot" basis, each such lot shall constitute a Tender. Tenderers shall submit only one (1) Tender for each lot. Tenderer who submits more than one (1) Tender in one (1) lot of the package will cause all the Tenders of that particular Tenderer to be rejected.

**18. Cost of Tendering**

- 18.1 Tenderers shall bear all costs associated with the preparation and submission of its Tender, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

**19. Issuance and Sale of Tender Document**

- 19.1 The Procuring Entity shall make Tender Documents available immediately to the potential Tenderers, requesting and willing to purchase at the corresponding price by the date the advertisement has been published in the newspaper.

- 19.2 There shall not be any pre-conditions whatsoever, for sale of Tender Document and the sale of such Document shall be permitted up to the day prior to the day of deadline for the submission of Tender.
- 20. Language of Tender**
- 20.1 Tenders shall be written in the English language. Correspondences and documents relating to the Tender may be written in English or *Bangla*. Supporting documents and printed literature furnished by the Tenderer that are part of the Tender may be in another language, provided they are accompanied by an accurate translation of the relevant passages in the English or *Bangla* language, in which case, for purposes of interpretation of the Tender, such translation shall govern.
- 20.2 Tenderers shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.
- 21. Contents of Tender**
- 21.1 The Tender prepared by the Tenderer shall comprise the following:
- (a) the Tender Submission Letter (**Form PG3-1**), as stated under with ITT Sub Clause 22.1;
  - (b) the Tenderer Information as stated under ITT Clauses 5,26 and 27 (**Form PG3-2**) ;
  - (c) the priced Schedule for each lot (**Form PG3-4A and PG3-4B**) as stated under ITT Clauses 22, 24 and 25;
  - (d) the Tender Security as stated under ITT Clause 31, 32 and 33;
  - (e) the completed Specifications Submission and Compliance Sheet (**Form PG3-5**) as stated under ITT clause 27.2;
  - (f) the alternatives, if permissible, as stated under with ITT Clause 23;
  - (g) the written confirmation authorising the signatory of the Tender to commit the Tenderer, as stated under ITT Sub Clause 36.3;
  - (h) the Valid Trade License;
  - (i) documentary evidence of Tax Identification Number (TIN) and Value Added Tax (VAT) as a proof of taxation obligations as stated under ITT Sub Clause 5.4;
  - (j) documentary evidence as stated under ITT Clause 26, 27 and 28; establishing the Tenderer's eligibility, eligibility and conformity of the Goods and related services and, the minimum qualifications of the Tenderers required to be met for due performance of the Goods and related services under the Contract;
  - (k) documents establishing legal and financial autonomy and compliance with commercial law, as stated under ITT Sub Clause 5.9 in case of government owned entity; and
  - (l) any other document as specified in the **TDS**.
- 22. Tender**
- 22.1 Tenderers shall submit the Tender Submission Letter (**Form**

- Submission Letter and Price Schedule** **PG3-1)**, which shall be completed without any alterations to its format, filling in all blank spaces with the information requested, failing which the Tender may be rejected as being incomplete.
- 22.2 Tenderers shall submit the priced Schedule using the form(s) furnished in **Section 5: Price Schedule**.
- 22.3 If in preparing its Tender, the Tenderer has made errors in the unit rate or the total price, and wishes to correct such errors prior to submission of its Tender, it may do so, but shall ensure that each correction is initialled by the authorised person of the Tenderer.
- 23. Alternatives**
- 23.1 Unless otherwise stated in the **TDS**, Technical alternatives shall not be considered.
- 23.2 Only the technical alternatives, if any, of the lowest evaluated Tenderer conforming to the basic technical requirements will be considered by the Procuring Entity.
- 24. Tender Prices and Discounts**
- 24.1 The prices and discounts quoted by the Tenderer in the Tender Submission Letter (**Form PG3-1**) and in the Price Schedule (**Form PG3-4A and PG3-4B**) shall conform to the requirements specified below.
- 24.2 Tenderers shall fill in unit rates for the items of the Goods both in figures and in words as described in the Price Schedule.
- 24.3 Tenders are being invited either for one or more items on an 'item-by-item' basis or for a single lot or for a number of lots on 'lot-by-lot' basis, as specified in the **TDS**.
- 24.4 All items or lots in Section 6: **Schedule of Requirements** must be listed and priced separately on the Price Schedule following the Form **PG3-4A and PG3-4B**.
- 24.5 Tenders being invited either for one or more items on an 'item-by-item' basis or for a single lot/package or for number of lots on 'lot-by-lot' basis as stated under ITT Sub Clause 24.3, price quoted for an item shall correspond to full quantity under that particular item; otherwise the Tenders shall be considered non-responsive..
- 24.6 Tenders being invited for a single lot/package, price quoted shall correspond to all the items of the lot/package and, shall further correspond to full quantity under each item of the lot/package as stated under ITT Sub Clause 24.5; otherwise the Tenders shall be considered non-responsive.
- 24.7 Tenders being invited for a number of lots on 'lot-by-lot' basis, the lot not quoting at least eighty (80) percent of the total number of items under that lot and, not representing at least sixty five (65) percent of the equivalent lot value determined in the methodology as stated under ITT Sub Clause 24.8, shall be considered non-responsive.
- 24.8 Tenderers quoting in the least eighty (80) percent of the total number of items in a lot, taking into consideration the fractions after the decimal to the nearer digit, for Tenders invited on 'lot-by-lot' basis, the methodology for determining the equivalent lot

value as stated under ITT Sub Clause 24.7, shall be to simulate the total price of the lot by adding up the average of the prices quoted by the other responsive Tenderers for the missing items to that lot value, to establish its responsiveness and, will be used for price comparison, as stated under ITT Sub Clause 52.2(c).

- 24.9 Tenderers not quoting price for the item as specified in the **TDS**, shall be considered non-responsive, even if it complies with the requirements stated under ITT Sub Clause 24.7 and 24.8.
- 24.10 The price to be quoted in Tender Submission Letter (**Form PG3-1**) shall be the total price of the Tender, excluding any discounts offered.
- 24.11 Tenderers shall quote any unconditional discounts and the methodology for application of that discount in the Tender Submission Letter as stated under ITT Sub Clause 24.12
- 24.12 Tenderers wishing to offer any unconditional discount for the award of more than one lot shall specify the discount applicable to each lot, or alternatively, to any combination of lots within the package in their Tender. Discounts will be submitted as stated under ITT Sub Clause 24.11, provided the Tenders for all lots are submitted and opened together.
- 24.13 All applicable taxes, custom duties, VAT and other levies payable by the Contractor under the Contract, or for any other causes, as of the date twenty-eight (28) days prior to the deadline for submission of Tenders, shall be included in the unit rates and the total Tender price submitted by the Tenderers.
- 24.14 The price of a Contract shall be fixed in which case the unit prices may not be modified in response to changes in economic or commercial conditions.
- 25. Tender Currency** 25.1 Tenderers shall quote all prices in the Tender Submission Letter and in the Price schedule in Bangladesh Taka (BDT) currency.
- 26. Documents Establishing the Eligibility of the Tenderer** 26.1 Tenderers, if applying as a sole Tenderer, shall submit documentary evidence to establish its eligibility as stated under ITT Clause 5 and, in particular, it shall:
- (a) complete the eligibility declarations in the Tender Submission Letter (**Form PG3-1**);
  - (b) complete the Tenderer Information (**Form PG3-2**);
  - (c) complete Subcontractor Information (**Form PG3-3**), if it intends to engage any Subcontractor(s).
- 27. Documents Establishing the Eligibility and Conformity of the Goods** 27.1 Tenderers shall complete the country of origin declarations in the Price Schedule Forms and, submit documentary evidence to establish the origin of all Goods and related services to be supplied under the Contract as stated under ITT Clause 6.

**and Related services**

27.2 To establish the conformity of the Goods and related services to the Tender Documents, the Tenderer shall furnish as part of its Tender the documentary evidence that the Goods and related services conform to the technical specifications and standards in **Section 7, Technical Specifications.**

27.3 Documentary evidence of conformity of the Goods and related services to the Tender Documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristics of the Goods;
- (b) an “item-by-item” commentary on the Procuring Entity’s Technical Specifications demonstrating substantial responsiveness of the Goods and related services to those specifications.

**28. Documents Establishing the Tenderer’s Qualifications**

28.1 Tenderers shall complete and submit the Tenderer Information (**Form PG3-2**) and shall include documentary evidence, as applicable to satisfy the following:

- (a) general experience in the supply of Goods and related services as stated under ITT Sub Clause 14.1(a), substantiated by the year of Tenderer’s registration/constitution/licensing in its country of origin;
- (b) specific experience of satisfactory completion of supply of Goods and related services under public or private sector of similar nature and size as stated under ITT Sub Clause 14.1(b), substantiated by Completion Certificate (s) issued ,or duly certified, by the relevant Procuring Entity(s);
- (c) a minimum supply and/or production capacity of Goods and related services as stated under ITT Sub Clause 14.1(c), substantiated by the updated brochures or others of the supplier and/or manufacturer;
- (d) adequacy of minimum liquid assets i.e working capital substantiated by Audit Reports mentioned in (h) below or credit line(s) substantiated by any scheduled Bank of Bangladesh in the format as specified (**Form PG3-8**), without alteration, issued not earlier than twenty-eight (28) days prior to the day of the original deadline for submission of Tenders for this Contract as stated under ITT Sub Clause 15.1(a);
- (e) information regarding claims under litigation, current or during the last years as specified in the **TDS**, in which the Tenderer is involved, the parties concerned, and value of claim as stated under ITT Sub Clause 15.1(b), substantiated by statement in its letter-head pad;
- (f) if required in the **TDS**, a Tenderer that does not manufacture or produce the Goods shall submit the **Manufacturer’s Authorization Letter (Form PG3-6)**;
- (g) authority to seek references from the Tenderer’s Bankers or any other sources in its letter-head pad; and



- (h) reports on the financial standing of the Tenderers, such as profit and loss statements and audited balance sheet for the past years as specified in the **TDS**, substantiated by Audit Reports.

**29. Validity Period of Tender**

29.1 Tenders shall remain valid for the period specified in the **TDS** after the date of Tender submission deadline prescribed by the Procuring Entity. A Tender valid for a period shorter than that specified will be considered non- responsive.

**30. Extension of Tender Validity and Tender Security**

30.1 In exceptional circumstances, prior to the expiration of the Tender Validity period, the Procuring Entity may solicit all the Tenderers' consent to an extension of the period of validity of their Tenders; provided that those Tenderers have passed the preliminary examination as stated under ITT Sub Clause 47.2.

30.2 The request for extension of Tender Validity period shall state the new date of the validity of the Tender.

30.3 The request and the responses shall be made in writing. Validity of the Tender Security provided under ITT Clause 31 shall also be suitably extended for twenty-eight (28) days beyond the new date for the expiry of the Tender Validity. If a Tenderer does not respond or refuses the request it shall not forfeit its Tender Security, but its Tender shall no longer be considered in the evaluation proceedings. A Tenderer agreeing to the request will not be required or permitted to modify its Tender.

**31. Tender Security**

31.1 Tenderers shall furnish as part of its Tender, in favour of the Procuring Entity or as otherwise directed on account of the Tenderer, a Tender Security in original form (not copy) and in the amount, as specified in the **TDS**

31.2 One Tender Security, in a separate envelope, at the percentage as specified in **TDS**, of the total value of the items quoted by the Tenderer, shall be submitted, if so indicated that the Tenders for one or more items are invited on an "item-by-item" basis

31.3 In case of substitution of the Tender as stated under ITT Clause 42 a new Tender Security shall be required in the substituted Tender.

**32. Form of Tender Security**

32.1 The Tender Security shall:

- (a) at the Tenderer's option, be either;
  - i. in the form of a Bank Draft or Pay Order, or
  - ii. in the form of an irrevocable unconditional Bank Guarantee issued by any scheduled Bank of Bangladesh, in the format **(Form PG3-7)**, without any alteration, furnished in Section 5: Tender and Contract Forms;
- (b) be payable promptly upon written demand by the Procuring Entity in the case of the conditions, as stated under ITT Clause 35.1 being invoked; and
- (c) remain valid for at least twenty-eight (28) days beyond the



expiry date of the Tender Validity in order to make a claim in due course against a Tenderer in the circumstances as stated under ITT Clause 35.1.

- 33. Authenticity of Tender Security**
- 33.1 The authenticity of the Tender Security submitted by a Tenderer may be examined and verified by the Procuring Entity at its discretion in writing from the Bank issuing the security.
- 33.2 If a Tender Security is found to be not authentic, the Procuring Entity may proceed to take measures against that Tenderer as stated under ITT Sub Clause 4.4.
- 33.3 A Tender not accompanied by a valid Tender Security will be considered non-responsive.
- 34. Return of Tender Security**
- 34.1 No Tender Security shall be returned to the Tenderers before contract signing.
- 34.2 Unsuccessful Tenderer's Tender Security will be discharged or returned as soon as possible but within twenty-eight (28) days after the expiry of the Tender Validity period as stated under ITT Sub Clause 29.1
- 34.3 The Tender Security of the successful Tenderer will be discharged upon the Tenderer's furnishing of the performance security and signing of the Agreement.
- 35. Forfeiture of Tender Security**
- 35.1 The Tender Security may be forfeited, if a Tenderer:
- (a) withdraws its Tender after opening of Tenders but within the validity of the Tender, as stated under ITT Sub Clause 29 and 30 ; or
  - (b) refuses to accept a Notification of Award, as stated under ITT Sub Clause 61.3 ; or
  - (c) fails to furnish performance security, as stated under ITT Sub Clause 62.1; or
  - (d) refuses to sign the Contract, as stated under ITT Sub Clause 67.2 ; or
  - (e) does not accept the correction of the Tender price following the correction of arithmetic errors, as stated under ITT Sub Clause 51.
- 36. Format and Signing of Tender**
- 36.1 Tenderers shall prepare one (1) original of the documents comprising the Tender as described in ITT Clause 21 and clearly mark it "ORIGINAL". In addition, the Tenderer shall prepare the number of copies of the Tender, as specified in the **TDS** and clearly mark each of them "COPY". In the event of any discrepancy between the original and the copies, the original shall prevail.
- 36.2 Alternatives, if permitted under ITT Clause 23, shall be clearly marked "Alternative".
- 36.3 The original and each copy of the Tender shall be typed or written in indelible ink and shall be signed by the Person duly authorized

to sign on behalf of the Tenderer. This Tender specific authorization shall be attached to the Tender Submission Letter (**Form PG3-1**). The name and position held by each Person(s) signing the authorization must be typed or printed below the signature. All pages of the original and of each copy of the Tender, except for un-amended printed literature, shall be numbered sequentially and signed by the person signing the Tender

36.4 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the Person(s) signing the Tender.

## E. Tender Submission

### 37. Sealing, Marking and Submission of Tender

37.1 Tenderer shall enclose the original in one (1) envelope and all the copies of the Tender, including the alternative, if permitted under ITT Clause 23 in another envelope, duly marking the envelopes as "ORIGINAL (O)" "ALTERNATIVE (A)" (if permitted) and "COPY." These sealed envelopes will then be enclosed and sealed in one (1) single outer envelope.

37.2 The inner and outer envelopes shall:  
be addressed to the Procuring Entity as stated under ITT Sub Clause 38.1;  
bear the name of the Tender and the Tender Number as stated under ITT Sub Clause 1.1;  
bear the name and address of the Tenderer;  
bear a statement "DO NOT OPEN BEFORE..." the time and date for Tender opening, as stated under ITT Sub Clause 44.1  
bear any additional identification marks as specified in the **TDS**

37.3 Tenderers are solely and entirely responsible for pre-disclosure of Tender information if the envelope(s) are not properly sealed and marked.

37.4 Tenders shall be delivered by hand or by mail, including courier services to location as designated in the ITT Sub Clause 38.1.

37.5 The Procuring Entity will, on request, provide the Tenderer with a receipt showing the date and time when it's Tender was received.

### 38. Deadline for Submission of Tenders

38.1 Tenders shall be delivered to the Procuring Entity at the address specified in the **TDS** and not later than the date and time specified in the **TDS**.

38.2 The Procuring Entity may, at its discretion, extend the deadline for submission of Tender as stated under ITT Sub Clause 37.1, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline will thereafter be subject to the new deadline as extended.

- 38.3 If submission of Tenders is allowed in more than one location, the date and time, for submission of Tenders for both the primary and the secondary place(s), shall be the “**same and not different**” as specified in the **TDS**.
- 38.4 The Procuring Entity shall ensure that the Tenders received at the secondary place(s) are hand-delivered at the primary place as stated under ITT Sub Clause 38.1, within THREE (3) HOURS after the deadline for submission of Tenders at the secondary place (s), in case of MULTIPLE DROPPING as stated under ITT Sub Clause 38.3, as specified in the **TDS**.
- 39. Late Tender** 39.1 Any Tender received by the Procuring Entity after the deadline for submission of Tenders as stated under ITT Sub Clause 38.1, shall be declared LATE and returned unopened to the Tenderer.
- 40. Modification, Substitution or Withdrawal of Tenders** 40.1 Tenderers may modify, substitute or withdraw its Tender after it has been submitted by sending a written notice duly signed by the authorised signatory properly sealed, and shall include a copy of the authorisation; provided that such written notice including the affidavit is received by the Procuring Entity prior to the deadline for submission of Tenders as stated under ITT Sub Clause 38.1.
- 41. Tender Modification** 41.1 Tenderers shall not be allowed to retrieve its original Tender, but shall be allowed to submit corresponding modification to its original Tender marked as “**MODIFICATION**”.
- 42. Tender Substitution** 42.1 Tenderers shall not be allowed to retrieve its original Tender, but shall be allowed to submit another Tender marked as “**SUBSTITUTION**”.
- 43. Withdrawal of Tender** 43.1 Tenderers shall be allowed to withdraw its Tender by a Letter of Withdrawal marked as “**WITHDRAWAL**”.

## F. Tender Opening and Evaluation

- 44. Tender Opening** 44.1 Tenders shall be opened immediately after the deadline for submission of Tenders at the primary place as specified in the **TDS** but not later than **ONE HOUR** after expiry of the submission deadline at the same primary place unless otherwise stated under ITT Sub Clause 44.2.
- 44.2 If submission of Tenders is allowed in more than one location as stated under ITT Sub Clause 38.3 and 38.4, Tenders shall be opened, immediately after receipt of Tenders from all the secondary place(s), at the primary place at the date and time as stated under ITT Sub Clause 44.1.
- 44.3 Persons not associated with the Tender may not be allowed to attend the public opening of Tenders.
- 44.4 Tenderers’ representatives shall be duly authorised by the

Tenderer. Tenderers or their authorised representatives will be allowed to attend and witness the opening of Tenders, and will sign a register evidencing their attendance.

44.5 The authenticity of withdrawal or substitution of, or modifications to original Tender, if any made by a Tenderer in specified manner, shall be examined and verified by the Tender Opening Committee (TOC) based on documents submitted under ITT Sub Clause 40.1.

44.6 Ensuring that only the correct (M), (S), (A), (O) envelopes are opened, details of each Tender will be dealt with as follows:

(a) the Chairperson of the TOC will read aloud each Tender and record in the Tender Opening Sheet (TOS);

(i) the name and address of the Tenderer;

(ii) state if it is a withdrawn, modified, substituted, or original Tender;

(iii) the Tender price;

(iv) any discounts;

(v) any alternatives;

(vi) the presence or absence of any requisite Tender Security; and

(vii) such other details as the Procuring Entity, at its discretion, may consider appropriate;

(b) only discounts and alternative read aloud at the Tender opening will be considered in evaluation;

(c) all pages of the original version of the Tender, except for un-amended printed literature, will be initialled by members of the TOC.

44.7 Upon completion of Tender opening, all members of the TOC and the Tenderers or Tenderer's duly authorised representatives attending the Tender opening shall sign by name, address, designation, the TOS, copies of which shall be issued to the Head of the Procuring Entity or an officer authorised by him or her and also to the members of the Tender Opening Committee and any authorised Consultants and, to the Tenderers immediately

44.8 The omission of a Tenderer's signature on the record shall not invalidate the contents and effect of the record under ITT Sub-Clause 44.7.

44.9 No Tender will be rejected at the Tender opening stage except the LATE Tenders as stated in the ITT Clause 39.

#### **45. Evaluation of Tenders**

45.1 Tenders shall be examined and evaluated only on the basis of the criteria specified in the Tender Document.

45.2 **Tender Evaluation Committee (TEC)** shall examine, evaluate and compare Tenders that are responsive to the requirements

of Tender Documents in order to identify the successful Tenderer.

- 46. Evaluation process**
- 46.1 TEC may consider a Tender as responsive in the Evaluation, only if it is submitted in compliance with the mandatory requirements set out in the Tender Document. The evaluation process should begin immediately after tender opening following four steps:
- (a) Preliminary Examination;
  - (b) Technical Examinations and Responsiveness;
  - (c) Financial evaluation and price comparison;
  - (d) Post-qualification of the lowest evaluated responsive Tenders.

- 47. Preliminary Examination**
- 47.1 TEC shall examine the Tenders to confirm that all documentation as stated under ITT Clause 21 has been provided, to determine the completeness of each document submitted
- 47.2 TEC shall confirm that the following documents and information have been provided in the tender. If any of these documents or information is missing, the offer shall be rejected;
- (a) Tender Submission Letter;
  - (b) Priced Schedule;
  - (c) Written confirmation authorizing the signatory of the Tender to commit the Tenderer; and
  - (d) Valid Tender Security.

- 48. Technical Examinations and Responsiveness**
- 48.1 TEC's determination of a Tender's responsiveness is to be based on the contents of the Tender itself without recourse to extrinsic evidence.
- 48.2 A responsive Tender is one that conforms in all respects to the requirements of the Tender Document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:
- (a) affects in any substantial way the scope, quality, or performance of the Goods and related services specified in the Contract; or
  - (b) limits in any substantial way, or is inconsistent with the Tender Documents, the Procuring Entity's rights or the Tenderer's obligations under the Contract; or
  - (c) if rectified would unfairly affect the competitive position of other Tenderers presenting responsive tenders.

During the evaluation of Tenders, the following definitions shall apply:

**"Deviation"** is a departure from the requirements specified in the Tender Document;

**"Reservation"** is the setting of limiting conditions or withholding from complete

acceptance of the requirements specified in the Tender Document; and

“**Omission**” is the failure to submit part or all of the information or documentation required in the Tender Document.

- 48.3 If a Tender is not responsive to the mandatory requirements set out in the Tender Document, shall not subsequently be made responsive by the Tenderer by correction of the material deviation, reservation, or omission.
- 48.4 There shall be no requirement as to the minimum number of responsive tenders.
- 48.5 There shall be no automatic exclusion of Tenders which are above or below the official estimate.
- 48.6 TEC will examine the adequacy and authenticity of the documentary evidence which may follow the order below:
- (a) verification of the completeness of the country of origin declaration in the Price Schedule for Goods and related services (**Form PG3-4A and 4B**) to determine the eligibility of the Goods and related services.
  - (b) verification and examination of the documentary evidence and completed Specification Submission Sheet (**Form PG3-5**) to determine the conformity of the Goods and related services .
  - (c) verification and examination of the documentary evidence that the Tenderer’s qualifications conform to the Tender Document and the Tenderer meets each of the qualification criterion specified in Sub Section C, Qualification Criteria.
- 48.7 Provided that a Tender is responsive, TEC may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Tender related to documentation requirements. Such omission shall not be related to any aspect of the rates of the Tender reflected in the completed Price Schedule or any mandatory criteria. Failure of the Tenderer to comply with the request may result in the consideration of its Tender as non-responsive.
- 48.8 The TEC may regard a Tender as responsive even if it contains;
- (a) minor or insignificant deviations which do not meaningfully alter or depart from the technical specifications, characteristics and commercial terms and, conditions or other mandatory requirements set out in the Tender Document; or
  - (b) errors or oversights, that if corrected, would not alter the key aspects of the Tender.

**49. Clarification on Tender**

- 49.1 TEC may ask Tenderers for clarification of their Tenders, in order to facilitate the examination and evaluation of Tenders. The request for clarification by the TEC and the response from the Tenderer shall be in writing, and Tender clarifications which may

lead to a change in the substance of the Tender or in any of the key elements of the Tender as stated under ITT Sub Clause 49.2, will neither be sought nor be permitted.

49.2 Change in the Tender price shall not be sought or permitted, except to confirm correction of arithmetical errors discovered by the Procuring Entity in the evaluation of the Tender, as stated under ITT Clause 51.

49.3 Any request for clarifications by the TEC shall not be directed towards making an apparently non-responsive Tender responsive and reciprocally the response from the concerned Tenderer shall not be articulated towards any addition, alteration or modification to its Tender.

49.4 If a Tenderer does not provide clarifications of its Tender by the date and time set in the TEC's written request for clarification, its Tender shall not be considered in the evaluation.

**50. Restrictions on the Disclosure of Information**

50.1 Following the opening of Tenders until issuance of Notification of Award no Tenderer shall, unless requested to provide clarification to its Tender or unless necessary for submission of a complaint, communicate with the concerned Procuring Entity.

50.2 Tenderers shall not seek to influence in anyway, the examination and evaluation of the Tenders.

50.3 Any effort by a Tenderer to influence a Procuring Entity in its decision concerning the evaluation of Tenders, Contract awards may result in the rejection of its Tender as well as further action in accordance with Section 64 (5) of the Public Procurement Act 2006.

50.4 All clarification requests shall remind Tenderers of the need for confidentiality and that any breach of confidentiality on the part of the Tenderer may result in their Tender being non-responsive.

**51. Correction of Arithmetical Errors**

51.1 Provided that the Tender is responsive, TEC shall correct arithmetical errors on the following basis:

(a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the TEC there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted will govern and the unit price will be corrected;

(b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and

(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the

amount in figures shall prevail subject to (a) and (b) above.

## 52. Financial Evaluation

- 51.2 TEC shall correct the arithmetic errors and shall promptly notify the concerned Tenderer(s), if the Tenderer does not accept the correction of arithmetic errors, its Tender shall be rejected.
- 52.1 TEC will evaluate each Tender that has been determined, up to this stage of the evaluation, to be responsive to the requirements set out in the Tender Document.
- 52.2 To evaluate a Tender, TEC will consider the following:
- (a) Tender price for Item(s) or Lot
  - (b) adjustment for correction of arithmetical errors as stated under ITT Sub Clause 51.2;
  - (c) adjustment for application of the methodology for determining the equivalent lot value, as stated under ITT Sub Clause 23.8, if any;
  - (d) adjustment for application of the economic factors, as stated under ITT Sub Clause 52.6, if any;
  - (e) adjustment in order to take into consideration the unconditional discounts and methodology for application of the discount offered for being awarded more than one lot, as stated under ITT Sub Clauses 24.11 and 24.12, if any.
- 52.3 Variations, deviations, alternatives and other factors which are in excess of the requirements of the Tender Document or otherwise result in unsolicited benefits for the Procuring Entity will not be taken into account in Tender evaluation
- 52.4 If so indicated in the ITT Sub Clause 24.3 the TEC may award one or multiple lots to one Tenderer following the methodology specified in ITT Sub Clause 52.5
- 52.5 To determine the lowest-evaluated lot or combination of lots, the TEC will take into account:
- (a) the lowest-evaluated Tender for each item(s) or lot, as applicable .
  - (b) the resources sufficient to meet the qualifying criteria for the individual lot or aggregate of the qualifying criteria for the multiple lots; and
  - (c) the price reduction on account of discount per lot or combination of lots and the methodology for application of the discount as offered by the Tenderer in its Tender.
- 52.6 The Procuring Entity's evaluation of a Tender may require the consideration of other factors, in addition to the Tender price quoted as stated under ITT Clause 24. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Tenders. The factors, methodologies and criteria to be used shall be as specified in **TDS**. The applicable



economic factors, for the purposes of evaluation of Tenders shall be:

- (a) adjustment for deviations in the Delivery and Completion Schedule;
- (b) cost of major replacement components, mandatory spare parts and service.

52.7 If the winning lot is missing some item(s), as stated under ITT Sub Clause 23.8, comprising twenty (20) percent or less number of items in the lot, the Procuring Entity may procure those missing item(s) from the other responsive Tenderer(s) quoting the lowest price for the missing item(s).

52.8 TEC may recommend to increase the amount of the Performance Security above the amounts as stated under ITT Sub Clause 62.1 but not exceeding twenty-five (25) percent of the Contract Price, if in the opinion of the TEC, it is found that the Tender is significantly below the updated official estimated cost.

**53. Price Comparison**

53.1 TEC shall compare all responsive Tenders to determine the lowest-evaluated Tender, as stated under ITT Clause 52.

53.2 In the extremely unlikely event that there is a tie for the lowest evaluated price, the Tenderer with the superior past performance with the Procuring Entity shall be selected, whereby factors such as delivery period, quality of Goods delivered, complaints history and performance indicators could be taken into consideration.

53.3 In the event that there is a tie for the lowest price and none of the Tenderers has the record of past performance with the Procuring Entity, then the Tenderer shall be selected, subject to firm confirmation through the Post-qualification process described in ITT Clause 55, after consideration as to whether the quality of Goods that is considered more advantageous by the end-users.

53.4 The successful Tenderer as stated under ITT Sub Clauses 53.1, 53.2 and 53.3 shall not be selected through lottery under any circumstances.

**54. Negotiation**

54.1 No negotiations shall be held during the Tender evaluation or award, with the lowest or any other Tenderer.

**55. Post-qualification**

55.1 The determination on Post-qualification shall be based upon an examination of the documentary evidence of the Tenderer's eligibility and qualifications submitted by the Tenderer as stated under ITT Clause 26 and 28, clarifications as stated under ITT Clause 49 and the qualification criteria as stated under ITT Clause 12,13,14 and 15. Factors not included therein shall not be used in the evaluation of the Tenderer's qualification.

55.2 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in rejection of the Tenderer's tender, in which event the TEC shall proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform

the Contract satisfactorily, if awarded.

55.3 TEC may verify information contained in the Tender by visiting the premises of the Tenderer as a part of the post qualification process, if practical and appropriate.

**56. Procuring Entity's Right to Accept any or to Reject Any or All Tenders**

56.1 The Procuring Entity reserves the right to accept any Tender or to reject any or all the Tenders any time prior to contract award and , to annul the Procurement proceedings with prior approval of the Head of the Procuring Entity, any time prior to the deadline for submission of Tenders following specified procedures, without thereby incurring any liability to Tenderers, or any obligations to inform the Tenderers of the grounds for the Procuring Entity's action.

**57. Rejection of All Tenders**

57.1 The Procuring Entity may, in the circumstances as stated under ITT Sub Clause 57.2, reject all Tenders following recommendations from the TEC only after the approval of such recommendations by the Head of the Procuring Entity.

57.2 All Tenders can be rejected, if -

- (a) the price of the lowest evaluated Tender exceeds the official estimated cost, provided the estimate is realistic; or
- (b) there is evidence of lack of effective competition; such as non-participation by a number of potential Tenderers; or
- (c) the Tenderers are unable to propose completion of the delivery within the stipulated time in its offer, though the stipulated time is reasonable and realistic; or
- (d) all Tenders are non-responsive; or
- (e) evidence of professional misconduct, affecting seriously the Procurement process, is established pursuant to Rule 127 of the Public Procurement Rules, 2008.

57.3 Notwithstanding anything contained in ITT Sub Clause 57.2 Tenders may not be rejected if the lowest evaluated price is in conformity with the market price.

**58. Informing Reasons for Rejection**

58.1 Notice of the rejection will be given promptly within seven (7) working days of decision taken by the Procuring Entity to all Tenderers and, the Procuring Entity will, upon receipt of a written request, communicate to any Tenderer the reason(s) for its rejection but is not required to justify those reason(s).

## **G. Contract Award**

**59. Award Criteria**

59.1 The Procuring Entity shall award the Contract to the Tenderer whose Tender is responsive to the Tender Document and that has been determined to be the lowest evaluated Tender, provided further that the Tenderer is determined to be Post-qualified as stated under ITT Clause 55.

59.2 Tenderers will not be required, as a condition for award, to undertake responsibilities not stipulated in the Tender documents, to change its price, or otherwise to modify its Tender.

**60. Procuring Entity's Right to Vary Quantities**

60.1 The Procuring Entity, within the amount approved, reserves the right at the time of Contract Award to increase or decrease the quantity per item of Goods and related Services originally specified in Section 6: Schedule of Requirements, provided this does not exceed the percentage specified in the **TDS**, and without any change in the unit prices or other terms and conditions of the Tender and the Tender Document.

**61. Notification of Award**

61.1 Prior to the expiry of the Tender Validity period and within one (1) week of receipt of the approval of the award by the Approving Authority, the Procuring Entity shall issue the Notification of Award (NOA) to the successful Tenderer(s).

61.2 The NOA, attaching the contract as per the sample (**Form PG3-9**) to be signed, shall state:

- (a) the acceptance of the Tender by the Procuring Entity;
- (b) the price at which the contract is awarded;
- (c) the amount of the Performance Security and its format;
- (d) the date and time within which the Performance Security shall be furnished; and
- (e) the date and time within which the contract shall be signed.

61.3 The NOA shall be accepted in writing by the successful Tenderer within seven (7) working days from the date of its issuance.

61.4 In the event, the Tenders were invited for one (1) or more items on an "item-by-item" basis, contract(s) will comprise the corresponding item(s) awarded to the successful Tenderer(s) and, Contract(s) will be signed per each of the successful Tenderer(s), covering the corresponding item(s).

61.5 In the event, the Tenders were invited for a single lot, contract will comprise the corresponding items in the lot awarded to the successful Tenderer and, Contract will be signed with the successful Tenderer of the lot, covering the item(s).

61.6 In the event, the Tenders were invited for a number of lots on a "lot-by-lot" basis, contracts will comprise the corresponding items in a lot awarded to the successful Tenderer(s) and, Contract(s) will be signed per each of the successful Tenderer(s) per lot, covering the corresponding item(s).

61.7 Until a formal contract is signed, the NOA shall constitute a

Contract, which shall become binding upon the furnishing of a Performance Security and the signing of the Contract by both parties.

**62. Performance Security**

62.1 Performance Security shall be provided by the successful Tenderer in BDT currency, of the amount as specified in the **TDS**.

62.2 The proceeds of the Performance Security shall be payable to the Procuring Entity unconditionally upon first written demand as compensation for Supplier's failure to complete its obligations under the Contract.

62.3 In the event a Government owned enterprise as stated under ITT Sub Clause 5.10 is the successful Tenderer, there shall be Security Deposit as specified in the **TDS**, in lieu of the Performance Security, as stated under ITT Sub Clause 62.1.

**63. Form and Time Limit for Furnishing of Performance Security**

63.1 The Performance Security shall be in the form of a Bank Draft, Pay Order or an irrevocable unconditional Bank Guarantee in the format (**Form PG3-11**), without any alteration, issued by any scheduled Bank of Bangladesh acceptable to the Procuring Entity.

63.2 Within fourteen (14) days from the date of acceptance of the NOA but not later than the date specified therein, the successful Tenderer shall furnish the Performance Security for the due performance of the Contract in the amount specified under ITT Sub Clause 62.1.

**64. Validity of Performance Security**

64.1 The Performance Security shall be required to be valid until a date twenty-eight (28) days beyond the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations.

**65. Authenticity of Performance Security**

65.1 The Procuring Entity shall verify the authenticity of the Performance Security submitted by the successful Tenderer by sending a written request to the branch of the Bank issuing the Pay Order, Bank Draft or irrevocable unconditional Bank Guarantee in specified format.

**66. Contract Signing**

66.1 At the same time as the Procuring Entity issues the NOA, the Procuring Entity shall send the draft Contract Agreement and all documents forming the Contract to the successful Tenderer(s).

66.2 Within twenty-eight (28) days of the issuance of NOA, the successful Tenderer(s) and the Procuring Entity shall sign the contract.

66.3 Failure of the successful Tenderer(s) to furnish the Performance Security, as stated under ITT Sub Clause 62.1, or sign the Contract, as stated under ITT Sub Clause 66.2, shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the next lowest evaluated responsive Tenderer(s), who is determined by the

TEC to be qualified to perform the Contract satisfactorily.

**67. Publication of Notification of Award of Contract**

67.1 The NOA for Contract of Taka one crore and above shall be notified by the Procuring Entity to the Central Procurement Technical Unit within 7(seven) days of its issuance for publication in their website, and that notice shall be kept posted for not less than a month.

67.2 The NOA for Contract below Taka one crore, shall be published by the Procuring Entity on its Notice Board and where applicable on the website of the Procuring Entity and that notice shall be kept posted for not less than a month.

**68. Debriefing of Tenderers**

68.1 Debriefing of Tenderers by the Procuring Entity shall outline the relative status and weakness only of his or her Tender requesting to be informed of the grounds for not accepting the Tender submitted by him or her, without disclosing information about any other Tenderer.

68.2 In the case of debriefing confidentiality of the evaluation process shall be maintained.

**69. Adjudicator**

69.1 The Procuring Entity proposes the person named in the **TDS** to be appointed as Adjudicator under the Contract, at an hourly fee and for those reimbursable expenses as specified in the **TDS**.

**70. Right to Complain**

70.1 Tenderer has the right to complain in accordance with the Public Procurement Act 2006 and the Public Procurement Rules, 2008.

## Section 2. Tender Data Sheet

<i>Instructions for completing the Tender Data Sheet are provided, as needed, in the notes in italics and under lined mentioned for the relevant ITT clauses.</i>	
<b>ITT Clause</b>	<b>Amendments of, and Supplements to, Clauses in the Instruction to Tenderers</b>
<b>A. General</b>	
<b>ITT 1.1</b>	<p>The Procuring Entity is Bangladesh Parjatan Corporation.</p> <p>The Name of the Tender is: <b>Supply, Installation, Testing, Commissioning and implementation of server room infrastructure, networks and computer hardware and other components under “Integration of Automation System of Bangladesh Parjatan Corporation”.</b></p> <p>Tender Ref:30.015.014.28.00.006.2014/Part-1</p>
<b>ITT 3.1</b>	The source of public fund is GoB
<b>ITT 3.3</b>	The name of the Development Partner is: None
<b>ITT 5.1</b>	Tenderers from the following countries are not eligible: Israel
<b>ITT 6.1</b>	Goods and related Services from the following counties are not eligible: Israel
<b>B. Tender Document</b>	
<b>ITT 8.2</b>	The following are authorised agents/offices of the Procuring Entity for the purpose of issuing the Tender Document: None
<b>ITT 9.1</b>	<p>For <b><u>clarification of Tender Document purposes</u></b> only, the Procuring Entity’s address is:</p> <p>Attention: Program Director, IAS Program  Address: Bangladesh Parjatan Corporation  83-88, Mohakhali C/A  Dhaka-1212.  Telephone: 88-02-9853301  Facsimile number: 88-02-8834600  Email address: <a href="mailto:info@bangladeshtourism.gov.bd">info@bangladeshtourism.gov.bd</a></p>

ITT 10.1	A Pre- Tender meeting shall not be held.
<b>C. Qualification Criteria</b>	
ITT 14.1(a)	The Tenderer shall have a minimum of 5(five) years of overall experience in the supply of Computer, Network hardware and IT enabled services.
ITT 14.1(b)	<ul style="list-style-type: none"> <li>• The minimum specific experience as Supplier in supply of similar Goods of at least 1 contract successfully completed in any Govt/Semi Govt/Private organization within the last 5 years, with a value of at least Tk. 90 Lacs.</li> <li>• The bidder must have up-to-date &amp; valid trade license, Vat certificate, Tax Identification number certificate, Bank Solvency certificate.</li> <li>• The bidder shall be a certified partner / distributor of the IT peripherals being supplied under the contract. Distributorship/partnership Certificates should accompanied with Tender document</li> <li>• The bidder must have experience of at least one similar Networking product deployments (single job/tender) and should furnish certificate/work order of completion.</li> <li>• The bidder should be Active product (Item bo.13-20 &amp; 49) OEM Premier Certified Partner</li> <li>• The bidder should be Certified Partner of Bandwidth Controller &amp; Wifi Router product offered in this tender.</li> <li>• The bidder must have experience of minimum 500 Node Network deployment (single job/tender) should furnish work order/certificate of completion.</li> <li>• Submit at least 20 years Zero Data Loss Certification for passive (Copper/Fiber Cabling) elements. Passive item ( Copper &amp; Fiber) should be from same OEM /Brand (Item no-23-33)</li> <li>• Bidder must have Three Certified Engineer for Active product, two certified Engineer for cabling Product, One Certified Engineer for Bandwidth Controller Product offered on this tender. Valid certificate should be submitted with tender documents.</li> <li>• Bidder must submit CV's of technical resources with responsibility matrix.</li> <li>• Active product Warranty information with Manufacturer's Part No. either in documents/Website should be providing by Bidder.</li> <li>• Implementation plan (Gantt chart) should be provided with the Tender documents.</li> </ul>
ITT 14.1(c)	The minimum supply and/or production capacity of Goods is/ are: None
ITT 15.1(a)	The minimum amount of liquid assets i.e working capital or credit line(s) of the Tenderer shall be Tk 70 Lacs.

<b>D. Preparation of Tender</b>	
<b>ITT 21.1(l)</b>	<p>The Tenderer shall submit with its Tender the following additional documents:</p> <p>Product's supplied under this contract Manufacturer's Country of origin must be certified by the Manufacturer otherwise the Bidder will be technically disqualified.</p> <p>The bidder shall be a certified partner / distributor of the IT peripherals being supplied under the contract. Distributorship/partnership Certificates should accompanied with Tender document</p>
<b>ITT 23.1</b>	Alternatives will not be permitted.
<b>ITT 24.3</b>	Tenders are being invited for a single lot.
<b>ITT 24.9</b>	The price for the following particular item must be quoted by the Tenderers: None
<b>ITT 28.1(e)</b>	The required information regarding claims under litigation shall be current or during the last 3 years.
<b>ITT 28.1(f)</b>	Manufacturer's Authorisation is required only for the following items listed in Section 6: Schedule of Requirements: Server, Internet Router, Internet Firewall, Core Switch, Core Firewall, SAN Switch, Access Switch, NMS, Bandwidth controller and Cabling.
<b>ITT 28.1(h)</b>	The required reports on the financial standing, such as profit and loss statements and audited balance sheet shall be for the past 3 years.
<b>ITT 29.1</b>	The Tender Validity period shall be 90 days.
<b>ITT 31.1</b>	<p>The amount of the Tender Security shall be:</p> <p>BDT 9,00,000 (Nine Lac Taka Only)</p> <p>In favour of Bangladesh Parjatan Corporation</p>
<b>ITT 31.2</b>	
<b>ITT 36.1</b>	In addition to the original of the Tender, 2 copy/copies shall be submitted.



<b>E. Submission of Tender</b>	
<b>ITT 37.2(e)</b>	The inner and outer envelopes shall bear the following additional identification marks: Both the inner and outer envelopes should be marked with the Lot name and numbers that the bidder is submitting the bid for.
<b>ITT 38.1</b>	<p>For <b><u>Tender submission purposes</u></b> ,the Procuring Entity's address is:</p> <p>Attention:[state full name with designation of person]</p> <p>Attention: Program Director, IAS Program</p> <p>Address: Bangladesh Parjatan Corporation</p> <p>83-88, Mohakhali C/A</p> <p>Dhaka-1212.</p> <p>Telephone: 88-02-9853301</p> <p>Facsimile number: 88-02-8834600</p> <p>The deadline for submission of Tenders is : 16 April 2015</p> <p>Time &amp; Date: 12:00 PM</p>

<p><b>ITT 38.3</b></p>	<p>For <b><u>Tender selling and submission purposes</u></b>, the Procuring Entity's address is:</p> <p>Attention: : Program Director, IAS Program  Address: Bangladesh Parjatan Corporation [<b>PRIMARY PLACE</b>]  83-88, Mohakhali C/A  Dhaka-1212.  Telephone: 88-02-9853301  Facsimile number: 88-02-8834600</p> <p>The deadline for the submission of Tenders is: 16 April 2015  Time &amp; Date: 12:00 PM</p> <p>Attention: Manager  Address: Joy Restaurant (<b>SECONDARY PLACES</b>)  <b>Bangladesh Parjatan Corporation</b>  <b>Savar, Dhaka</b></p> <p>The deadline for the submission of Tenders is: 16 April 2015  Time &amp; Date: 10:00 AM</p> <p>Attention: Joint Secretary (Administration)  Address: Ministry of Civil Aviation and Tourism (<b>SECONDARY PLACES</b>)  <i>Building – 6, Bangladesh Secretariat, Dhaka</i></p> <p>The deadline for the submission of Tenders is: 16 April 2015  Time &amp; Date: 10:00 AM</p> <p>Attention: Divisional Commissioner Office  Address: Segunbagicha, Dhaka (<b>SECONDARY PLACES</b>)</p> <p>The deadline for the submission of Tenders is: 16 April 2015  Time &amp; Date: 10:00 AM</p>
<p><b>ITT 38.4</b></p>	<p>The deadline for hand-delivering of the Tenders at the <b>PRIMARY PLACE</b> is:  Time &amp; Date: 12:00 PM, 16 April 2015</p>
<p><b>F. Opening and Evaluation of Tenders</b></p>	
<p><b>ITT 44.1</b></p>	<p>The Tender opening shall take place at:  Address: Address: Bangladesh Parjatan Corporation [<b>PRIMARY PLACE</b>]  83-88, Mohakhali C/A  Dhaka-1212.  Telephone: 88-02-9853301  Time &amp; Date: 3 PM, 16 April 2015</p>

ITT 52.6	<p>The applicable economic factors, for the purposes of evaluation of Tenders shall be:</p> <p>(a) <b><u>Adjustment for Deviations in the Delivery and Completion Schedule</u></b></p> <p>“The Goods covered by this Tendering process are required to be delivered in accordance with, and completed within, the Delivery and Completion Schedule specified in Section 6, Schedule of Requirements. No credit will be given for earlier completion. Tender offering late contract performance schedules within acceptable period will be accepted but the Tenders shall be adjusted in the evaluation by adding to the Tender Price at the rate of 0.5% of the Tender Price for each day of delay. Tender offering delivery schedules beyond <b>1 week</b> of the date specified in Section 6, Schedule of Requirement, shall be rejected.”</p>
<b>G. Award of Contract</b>	
ITT 60.1	<p>The maximum percentage by which quantities per item may be increased is 15% at the time of Contract Award.</p> <p>The maximum percentage by which quantities per item may be decreased is 15% at the time of Contract Award.</p>
ITT 62.1	<p>The amount of Performance Security shall be ten (10) percent of the Contract Price.</p>
ITT 62.3	<p>The Security Deposit shall be deducted @ ten (10) percent from the the successful Tenderer’s payable invoices during Contract implementation, if awarded the Contract.</p>
ITT 69.1	<p>The Adjudicator proposed by the Procuring Entity is</p>

## Section 3. General Conditions of Contract

### 1. Definitions

- 1.1 In the Conditions of Contract, which include Particular Conditions and these General Conditions, the following words and expressions shall have the meaning hereby assigned to them. Boldface type is used to identify the defined term:
- (a) **Adjudicator** is the expert appointed jointly by the Procuring Entity and the Contractor to resolve disputes in the first instance, as provided for in GCC Sub Clause 42.2.
  - (b) **Completion Schedule** means the fulfilment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract;
  - (c) **Contract Agreement** means the Agreement entered into between the Procuring Entity and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein;
  - (d) **Contract Documents** means the documents listed in the Contract Agreement, including any amendments thereto;
  - (e) **Contract Price** means the price stated in the Notification of Award and thereafter as adjusted in accordance with the provisions of the Contract;
  - (f) **Cost** means all expenditures reasonably incurred or to be incurred by the Contractor, whether on or off the point of delivery, including overhead, taxes, duties, fees and such other similar levies including corresponding incidental charges and premiums for banking and insurances, as applicable.
  - (g) **Day** means calendar days unless otherwise specified as working days;
  - (h) **Delivery** means the transfer of ownership of the Goods from the Supplier to the Procuring Entity in accordance with the terms and conditions set forth in the Contract;
  - (i) **Force Majeure** means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origins not due to negligence or lack of care on the part of the Contractor; such events may include, but not be limited to, acts of the Government in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes or more as included in GCC Clause 36;
  - (j) **GCC** mean the General Conditions of Contract;
  - (k) **Goods** means raw materials, products and equipment and objects in solid, liquid or gaseous form, electricity, and related Services if the value of such Services does not exceed that of the Goods themselves ;
  - (l) **Government** means the Government of the People's Republic of Bangladesh;

- (m) **Head of the Procuring Entity** means the Secretary of a Ministry or a Division, the Head of a Government Department or Directorate; or the Chief Executive; or as applicable, Divisional Commissioner, Deputy Commissioner, Zilla Judge; or by whatever designation called, of a local Government agency, an autonomous or semi-autonomous body or a corporation, or a corporate body established under the Companies Act;
- (n) **Procuring Entity** means a Entity having administrative and financial powers to undertake Procurement of Goods, Works or Services using public funds, as specified in the **PCC**;
- (o) **Related Services** means Services linked to the supply of Goods contracts;
- (p) **PCC** means the Particular Conditions of Contract;
- (q) **Subcontractor** means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier;
- (r) **Supplier** means a Person under contract with a Procuring Entity for the supply of Goods and related services under the Act;
- (s) **Site** means the point(s) of delivery named in the **PCC**
- (t) **Writing** means communication written by hand or machine duly signed and includes properly authenticated messages by facsimile or electronic mail.

**2. Interpretation** 2.1 In interpreting the GCC, singular also means plural, male also means female or neuter, and the other way around. Headings in the GCC shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract. Words have their normal meaning under the English language unless specifically defined.

**2.2 Entire Agreement**

The Contract constitutes the entire agreement between the Procuring Entity and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract Agreement; except those stated under GCC Sub Clause 7.1(i) .

**2.3 Amendment**

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

**2.4 Non-waiver**

- (a) Subject to GCC Sub Clause 2.4(b), no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver

by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorised representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

## 2.5 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

## 3. Communications and Notices

- 3.1 Communications between Parties (notice, request or consent required or permitted to be given or made by one party to the other) pursuant to the Contract shall be in writing to the addresses specified in the **PCC**.
- 3.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
- 3.3 A Party may change its address for notice hereunder by giving the other Party notice of such change to the address.

## 4. Governing Law

- 4.1 The Contract shall be governed by and interpreted in accordance with the laws of the People's Republic of Bangladesh.

## 5. Governing Language

- 5.1 The Contract shall be written in English language. Correspondence and documents relating to the Contract exchanged by the Supplier and the Procuring Entity may be written in English or Bangla language. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

## 6. Corrupt, Fraudulent, Collusive or Coercive Practices

- 6.1 The Government requires that the Procuring Entity as well as the Supplier, shall observe the highest standard of ethics during the implementation of procurement proceedings and the execution of contracts under public funds.
- 6.2 The Government requires that Procuring Entity as well as the Supplier shall, during the execution of Contracts under public funds, ensure-
  - (a) strict compliance with the provisions of Section 64 of the Public Procurement Act 2006 (Act 24 of 2006);
  - (b) abiding by the code of ethics as mentioned in the Rule 127 of the Public Procurement Rules, 2008;
  - (c) that neither it nor any other member of its staff or any other agents or intermediaries working on its behalf engages in any practice as detailed in GCC Sub Clause 6.3

- 6.3 For the purpose of GCC Sub Clause 6.2 the terms –
- (a) **corrupt practice** means offering, giving or promising to give, receiving, or soliciting, either directly or indirectly, to any officer or employee of the Procuring Entity or other public or private authority or individual, a gratuity in any form; employment or any other thing or service of value as an inducement with respect to an act or decision or method followed by the Procuring Entity in connection with a Procurement proceeding or contract execution;
  - (b) **fraudulent practice** means the misrepresentation or omission of facts in order to influence a decision to be taken in a Procurement proceeding or Contract execution;
  - (c) **collusive practice** means a scheme or arrangement between two (2) or more Persons, with or without the knowledge of the Procuring Entity, that is designed to arbitrarily reduce the number of Tenders submitted or fix Tender prices at artificial, noncompetitive levels, thereby denying a Procuring Entity the benefits of competitive price arising from genuine and open competition; or
  - (d) **coercive practice** means harming or threatening to harm, directly or indirectly, Persons or their property to influence a decision to be taken in a Procurement proceeding or the execution of a Contract, and this will include creating obstructions in the normal submission process used for Tenders.
- 6.4 Should any corrupt, fraudulent, collusive or coercive practice of any kind come to the knowledge of the Procuring Entity, it will, in the first place, allow the Supplier to provide an explanation and shall, take actions only when a satisfactory explanation is not received. Such exclusion and the reasons thereof, shall be recorded in the record of the procurement proceedings and promptly communicated to the Supplier concerned. Any communications between the Supplier and the Procuring Entity related to matters of alleged fraud or corruption shall be in writing.
- 6.5 If corrupt, fraudulent, collusive or coercive practices of any kind determined by the Procuring Entity against the Supplier alleged to have carried out such practices, the Procuring Entity will;;
- (a) exclude the Supplier from further participation in the particular Procurement proceeding; or
  - (b) declare, at its discretion, the Supplier to be ineligible to participate in further Procurement proceedings, either indefinitely or for a specific period of time.
- 6.6 The Supplier shall be aware of the provisions on corruption, fraudulence, collusion and coercion in Section 64 of the Public Procurement Act, 2006 and Rule 127 of the Public Procurement Rules, 2008.

- 7. Documents Forming the Contract and Priority of Documents**
- 7.1 The following documents forming the Contract shall be in the following order of precedence, namely :
- (a) The signed Contract Agreement;
  - (b) The Notification of Award;
  - (c) The Completed Tender;
  - (d) Particular Conditions of Contract;
  - (e) General Conditions of Contract;
  - (f) Technical Specifications;
  - (g) Drawings;
  - (h) Priced Schedule and Schedule of Requirements and ;
  - (i) Other Documents including correspondences listed in the **PCC** forming part of the Contract.
- 8. Scope of Supply**
- 8.1 Subject to the **PCC**, the Goods and related services to be supplied shall be as specified in Section 6: Schedule of Requirements.
- 8.2 Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining delivery and completion of the Goods and related services as if such items were expressly mentioned in the Contract Agreement.
- 9. Assignment**
- 9.1 The Supplier shall not assign his rights or obligations under the Contract, in whole or in part, except with the Procuring Entity's prior written consent.
- 10. Eligibility**
- 10.1 The Supplier and its Subcontractor(s) shall have the nationality of a country other than that specified in the **PCC**.
- 10.2 All Goods and related services to be supplied under the Contract shall have their origin in the countries except any specified in the **PCC**.
- 11. Gratuities / Agency Fees**
- 11.1 No fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the Tender or the contract, shall be given or received in connection with the procurement process or in the contract execution.
- 12. Confidential Details**
- 12.1 The Supplier shall not, except for purposes of performing the obligations in this Contract, without the Procuring Entity's prior written consent, disclose this Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.



- 12.2 Any document, other than this Contract itself, enumerated in GCC Clause 12.1 shall remain the property of the Procuring Entity and shall be returned (all copies) to the Procuring Entity on completion of the Supplier's performance under this Contract if so required by the Procuring Entity.
- 13. Trademark, Patent and Intellectual Property Rights**
- 13.1 The Procuring Entity should not be liable for any infringement of intellectual property rights arising from use of the goods procured. In case there are third-party claims of such infringement of patent, trademark, or industrial design rights, the supplier must indemnify and hold the Procuring Entity free and harmless against such claims and shall not be in contravention of Trademark Act, 2009 and Patent and Design Act, 1911.
- 14. Copyright**
- 14.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Procuring Entity by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Procuring Entity directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.
- 15. Sub contracting**
- 15.1 Any subcontracting arrangements made during contract implementation and not disclosed at the time of the Tendering shall not be allowed.
- 15.2 Subcontracting of any portion of the Goods shall not relieve the Supplier from any liability or obligations that may arise from its performance.
- 15.3 Supplier shall retain full responsibility for the contract and can not pass any contractual obligations to the Subcontractor and under no circumstances assignment of the contract to the Subcontractor be allowed.
- 15.4 Subcontractors shall comply with the provisions of GCC Clause 6 and 10.
- 16. Supplier's Responsibilities**
- 16.1 The Supplier shall supply all the Goods and related services specified in the Scope of Supply as stated under GCC Clause 8 and the Delivery and Completion schedule, as stated under GCC Clauses 21 and 23 in conformity with the provisions of the Contract Agreement.
- 17. Procuring Entity's Responsibilities**
- 17.1 Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals and other license from local public authorities, the Procuring Entity may, if so needed by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner. However, the supplier shall bear the costs of such permits and/or licenses.
- 17.2 The Procuring Entity shall pay the Supplier, in consideration of the provision of Goods and related services, the Contract Price under the provisions of the Contract at the times and manner prescribed in the Contract Agreement.
- 18. Issue Variation Orders, Repeat Orders or**
- 18.1 The Procuring Entity may at any time order the Supplier through notice in accordance with GCC Clause 3, 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

- Order for Additional Delivery** delivered under the Contract are to be specifically manufactured for the Procuring Entity;
- (b) the method of packing;
  - (c) the place(s) of delivery of goods and related services; and
  - (d) the related services to be provided by the Supplier.
- 18.2 The Procuring Entity may, in exceptional circumstances, issue Repeat Order where the items originally envisaged have already been procured or, issue order for Additional Delivery of an additional quantity prior to issuing the Acceptance Certificate, of the same items if it is urgently needed to meet the requirements of the project; provided that the Supplier was selected through competitive tendering and funds are available for the purpose and, such prices are still the most advantageous to the Procuring Entity after price verification.
- 18.3 The Supplier shall, under no circumstances, proceed to commence the delivery of Goods and related services under GCC Sub Clause 18.1 and 18.2 unless it has been approved by the **Approving Authority** or authority next higher, as appropriate.
- 19. Costing Variation Orders, Repeat Orders or Order for Additional Delivery**
- 19.1 If the Variation Order under GCC Sub Clause 18.1 consists of additional items, the price shall be based on the unit price in the original contract for items of goods similar to those in the original contract. If the contract does not contain any rate applicable to the additional items, then suitable prices shall be mutually agreed upon between the parties, based on prevailing market prices and, also the Delivery and Completion Schedule.
- 19.2 If any change under GCC Sub Clause 18.2 causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery and Completion Schedule, or both, as applicable.
- 20. Packing and Documents**
- 20.1 The Supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract and in accordance with existing industry standards. The packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 20.2 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 as stated under GCC Sub Clause 20.1, including additional requirements, if any, specified in the **PCC**, and in any subsequent instructions ordered by the Procuring Entity.
- 20.3 The outer packaging must contain a "Packing List" which must reflect

the actual contents of the package.

- 21. Delivery and Documents** 21.1 Subject to GCC Clause 18, the delivery of the Goods and completion of the related services shall be in accordance with the Delivery and Completion Schedule specified in the Section 6: Schedule of Requirements. The documents to be furnished by the Supplier shall be specified in the **PCC**.
- 22. Acceptance** 22.1 Acceptance by the Procuring Entity shall be processed not later than fourteen (14) working days from receipt of the goods at final destination in the form of an Acceptance Certificate, unless any defects in the supply, any damage during transportation or any failure to meet the required performance criteria of the supply are identified and reported to the Supplier as stated under GCC Clause 29 and 30. In such cases the Acceptance Certificate will be issued only for those parts of the contract supplies which are accepted. The Acceptance Certificate for the remaining supplies will only be issued after the Supplier has remedied the defects and/or any non-conformity under GCC Clause 29 and GCC Clause 30.
- 22.2 Technical Inspection and Acceptance Committee (TIAC), if considered appropriate and constituted by the Procuring Entity shall commence the inspection and acceptance process within twenty-four (24) hours from delivery of the goods, and complete the same as soon as practicable.
- 23. Contract Price** 23.1 The Contract Price shall be as specified in the **PCC** subject to any additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- 23.2 Prices charged by the Supplier for the Goods delivered and the related services performed under the Contract shall not vary from the price as stated under GCC Sub Clause 23.1, with the exception of any change in price resulting from a Variation Order or Repeat Order or Order for Additional Delivery issued under GCC Clause 18.
- 24. Transportation** 24.1 The Supplier is required under the Contract to transport the Goods to a specified place of destination as specified in Section 6: Schedule of Requirements, defined as the Site, transport to such place of destination, including insurance, other incidental costs, and temporary storage, if any.
- 25. Terms of Payment** 25.1 The Contract Price, including any Advance Payments, if applicable, shall be paid in the manner as specified in the **PCC**.
- 25.2 The Supplier's request for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and related services performed, and accompanied by the documents as stated under GCC Clause 21 and 22 and upon fulfilment of any other obligations stipulated in the Contract Agreement.
- 25.3 Payments shall be made promptly by the Procuring Entity, but in no case later than the days indicated in the **PCC** after submission of an invoice or request for payment by the Supplier, and after the Procuring Entity has accepted it.
- 25.4 Payments due to the Supplier under this Contract shall be made in

Bangladesh Taka (BDT) Currency.

25.5 In the event that the Procuring Entity fails to pay the Supplier any payment by its respective due date or within the period as stated under GCC Sub Clause 25.3, the Procuring Entity shall pay to the Supplier interest on the amount of such delayed payment at the rate specified in the **PCC**, for the period of delay until payment has been made in full.

**26. Insurance**

26.1 The Goods supplied under this Contract shall be fully insured by the Supplier against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery until their acceptance by the Procuring Entity.

**27. Taxes and Duties**

27.1 The Supplier shall be entirely responsible for all applicable taxes, custom duties, VAT and other levies imposed or incurred inside or outside Bangladesh..

**28. Performance Security**

28.1 The Procuring Entity shall notify the Supplier of any claim made against the Bank issuing the Performance Security.

28.2 The Procuring Entity may claim against the security if any of the following events occurs for fourteen (14) days or more.

(a) The Supplier is in breach of the Contract and the Procuring Entity has duly notified him or her ; and

(b) The Supplier has not paid an amount due to the Procuring Entity and the Procuring Entity has duly notified him or her.

28.3 In the event as stated under GCC Sub Clause 28.2, the Supplier is liable to pay compensation under the Contract amounting to the full value of the Performance Security or more, the Procuring Entity may call the full amount of the security.

28.4 If there is no reason to call the security, the security shall be discharged by the Procuring Entity and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract and the issuance of the Acceptance Certificate by the Procuring Entity, including any warranty obligations as stated under GCC Clause 31 and, the Procuring Entity shall not make any claim under the security, except for amounts to which the Procuring Entity is entitled under this Contract..

28.5 The security shall only be released after the expiry of the Warranty Period pursuant to GCC Clause 31, provided that the Goods supplied are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

(a) A patent defect, which is one that is apparent to the buyer on normal observation. It is an apparent or obvious defect.

i. For example, a ball pen that does not write is patently defective.

(b) A latent defect, which is one that is not apparent to the buyer by reasonable observation. A latent defect is "hidden" or one that is not immediately determinable.

ii. For example, a ball pen that writes 0.75 km instead of the expected 1.5 km, has a latent defect.

28.6 If the Supplier, having been notified, fails to remedy the defect(s) within the period as stated under GCC Sub Clause 31.7, the Procuring Entity may proceed to call upon the security without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract and under the applicable law.

**29. Specifications and Standards**

29.1 The Goods and related services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section 7, Technical Specification and in Section 8, Drawings, if any.

29.2 If there is no applicable standard, the Goods must conform to the authoritative standards appropriate to the Good's country of origin. Such standards must be the latest issued by the concerned institution.

29.3 Subject to the GCC Clause 18, the Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Procuring Entity, by giving a notice of such disclaimer to the Procuring Entity.

29.4 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Technical Specification. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Procuring Entity and shall be treated under GCC Clause 18.

**30. Inspections and Tests**

30.1 The Procuring Entity shall have the right to test the Goods to confirm their conformity to the Contract specifications. The **PCC** and Technical specifications shall specify what tests the Procuring Entity requires and where they are to be conducted. The Supplier shall at its own expense and at no cost to the Procuring Entity, carry out all such tests of the Goods and related services as are specified in the Contract.

30.2 The Supplier shall provide the Procuring Entity with a report of the results of any such test.

30.3 The Procuring Entity may engage external agents for the purpose of conducting inspection of Goods, provided that the Procuring Entity shall bear all of its costs and expenses.

30.4 The Procuring Entity or its designated representative as specified shall be entitled to attend the tests and/or inspections under GCC Clause 30.1, provided that the Procuring Entity shall bear all of its own costs and expenses incurred in connection with such attendance.

30.5 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Procuring Entity. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Procuring Entity or its designated representative to attend the test and/or inspection.

30.6 The Procuring Entity may require the Supplier to carry out any test and/or inspection not required by the Contract, but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses

incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery and Completion Schedule and the other obligations so affected.

- 30.7 The Procuring Entity may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity, and shall repeat the test and/or inspection, at no cost to the Procuring Entity, upon giving a notice under GCC Sub Clause 30.5.
- 30.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Procuring Entity or its representative, nor the issue of any report as stated under GCC Sub Clause 30.2, shall relieve the Supplier from any warranties or other obligations under the Contract.

### **31. Warranty**

- 31.1 The Supplier warrants that all the Goods supplied under the Contract are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, except when the design and/or material required by the Procuring Entity provides otherwise under GCC Clause 18.
- 31.2 The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in Bangladesh.
- 31.3 In order to assure that manufacturing defects shall be corrected by the Supplier, manufacturer, or distributor, as the case may be, a warranty shall be required from the Supplier for a minimum period of three (3) months, in the case of supplies, and one (1) year, in the case of equipment, after performance of the contract or such other period as may be specified in the **PCC**.
- 31.4 The Warranty Period of the Supplies shall start from the date of completion of delivery in the form of submission by the Supplier and acceptance by the Procuring Entity, of the Delivery Chalan
- 31.5 The Warranty Periods may vary among the various items and lots. The warranty for Goods delivered earlier will expire earlier than the succeeding deliveries.
- 31.6 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 31.7 Upon receipt of such notice, the Supplier shall, within the period specified in the **PCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Procuring Entity.



**32. Extension of Delivery and Completion Schedule**

- 32.1 The Supplier shall be entitled to an extension of the Delivery and Completion Schedule , if and to the extent that completion of the delivery of Goods or any part thereof is or will be delayed by Variation Orders or Repeat Orders or Order for Additional Delivery , as stated under GCC Sub Clause 18.
- 32.2 If the Supplier considers itself to be entitled to an extension of the Delivery and Completion Schedule as stated under GCC Sub Clause 32.1, the Supplier shall give notice, not later than twenty-eight (28) days after the Supplier became aware or should have become aware of the event or circumstance, to the Procuring Entity.
- 32.3 The Procuring Entity shall decide whether and by how much to extend the Delivery and Completion Schedule within twenty-one (21) days of the Supplier asking the Procuring Entity for a decision upon the effect of a Variation Orders or Repeat Orders or Order for Additional Delivery and submitting full supporting information. If the Supplier has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the extension of the Delivery and Completion Schedule.
- 32.4 The Procuring Entity may extend the Delivery and Completion Schedule by twenty (20) percent of the original Contract time as stated under GCC Sub Clause 32.1, if a Variation Orders, Repeat Orders or Order for Additional Delivery issued which does not make it possible to complete the delivery of the Goods by the Delivery and Completion Schedule without incurring additional cost.
- 32.5 In the case an extension of the Delivery and Completion Schedule required under GCC Sub Clause 32.3 is or will be more than twenty (20) percent of the original Contract time, approval of the Head of the Procuring Entity or an officer authorized by him or her for the same shall be required to be obtained.
- 32.6 Except in case of Force Majeure, as provided under GCC Clause 36, a delay by the Supplier in the performance of its delivery and completion obligations shall render the Supplier liable to the imposition of Liquidated Damages pursuant to GCC Clause 33, unless an extension of the Delivery and Completion Schedule is agreed upon, pursuant to GCC Clause 32.

**33. Liquidated Damages**

- 33.1 Except as provided under GCC Sub Clause 37, if the Supplier fails to complete the delivery of Goods and related services within the Delivery and Completion Schedule specified in the contract or as extended, the Procuring Entity shall, as Liquidated Damages or Delay Damages, deduct from the Contract Price, a sum at the percent-rate per day of delay as specified in the PCC, of the contract value of the undelivered Goods and related services or part thereof

delivered after the Delivery and Completion Schedule or as extended. The total amount of Liquidated Damages or Delay Damages shall not exceed the amount specified in the PCC. The Procuring Entity may deduct Liquidated damages from payments due to the Supplier. Payment of Liquidated damages shall not affect the Supplier's liabilities.

- 34. Limitation of Liability** 34.1 Except in cases of criminal negligence or wilful misconduct,
- (a) the Supplier shall not be liable to the Procuring Entity, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Procuring Entity; and
  - (b) the aggregate liability of the Supplier to the Procuring Entity, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the Procuring Entity with respect to patent infringement.
- 35. Adjustment for Changes in Legislation** 35.1 Unless otherwise specified in the Contract, if after the Contract, any law, regulation, ordinance, order or by law having the force of law is enacted, promulgated, abrogated, or changed in Bangladesh (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the adjustment of Contract Price where applicable, under GCC Clause 23.
- 36. Force Majeure** 36.1 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below:
- (i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;
  - (ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war;
  - (iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel;
  - (iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and
  - (v) natural catastrophes such as cyclone, hurricane, typhoon, tsunami, storm surge, floods, earthquake , landslides, fires,



epidemics, quarantine restrictions, or volcanic activity;

(vi) freight embargoes;

(vii) acts of the Government in its sovereign capacity.

36.2 The Head of Procuring Entity decides the existence of a Force Majeure that will be the basis of the issuance of order for suspension of Supply as stated under GCC Sub Clause 39.2.

**37. Notice of Force Majeure**

37.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice within fourteen (14) days after the party became aware, to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented.

37.2 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under the Contract.

**38. Duty to Minimise Delay**

38.1 Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.

38.2 A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

**39. Consequences of Force Majeure**

39.1 The Supplier shall not be liable for forfeiture of its security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

39.2 The Procuring Entity may suspend the delivery or contract implementation, wholly or partly, by written order for a certain period of time, as it deems necessary due to Force Majeure as defined in the Contract.

39.3 Delivery shall be made either upon the lifting or the expiration of the suspension order. However, if the Procuring Entity terminates the contract as stated under GCC Clause 40, resumption of delivery cannot be done.

39.4 After receiving notice under GCC Sub Clause 37.1, the Procuring Entity shall proceed to determine these matters under the provisions of the Contract.

**40. Termination**

**Termination for Default**

40.1 The Procuring Entity, without prejudice to any other remedy for breach of Contract, by giving twenty-eight (28) days written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

- i. if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Procuring Entity pursuant to GCC Clause 32; or
- ii. if the Supplier fails to perform any other obligation under the Contract;

or

- iii. if the Supplier, in the judgement of the Procuring Entity has engaged in corrupt, fraudulent, collusive and coercive practices, as defined in GCC Clause 6, in competing for or in executing the Contract; or
- iv. if the deductible amount due to Liquidated Damages reaches its maximum as stated under GCC Sub Clause 33

40.2 In the event the Procuring Entity terminates the Contract in whole or in part, as stated under GCC Clause 40.1, the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Goods or related services similar to those undelivered or not performed, and the Supplier shall be liable to the Procuring Entity for any additional costs for such similar Goods or related services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

#### **Termination for Insolvency**

40.3 The Procuring Entity shall terminate this Contract if the Supplier is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity and/or the Supplier.

#### **Termination for Convenience**

40.4 The Procuring Entity, by giving twenty-eight (28) days written notice sent to the Supplier, may terminate this Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that the termination is for the procuring Entity's convenience, the extent to which performance of the Supplier under the contract is terminated, and the date upon which such termination becomes effective.

40.5 The Goods that have been delivered and/or performed or are ready for delivery or performance within twenty-eight (28) days after the Supplier's receipt of Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices. For Goods not yet performed and/or ready for delivery, the Procuring Entity may elect:

- (a) to have any portion delivered and/or performed and paid at the contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.

40.6 The expiration of the Delivery and Completion Schedule, initiation of amicable settlement of disputes, adjudication and arbitral proceedings under the set terms and conditions shall not be deemed a termination of the contract.

#### **41. Amendment to Contract**

41.1 The amendment to Contract shall generally include equitable adjustments in original Contract price, Delivery and Completion

Schedule and, any other changes acceptable under the conditions of the Contract.

- 41.2 The Procuring Entity shall amend the Contract, incorporating the changes approved in accordance with the Delegation of Financial Power or sub-delegation thereof and, introduced to the original terms and conditions of the Contract.

## **42. Settlement of Disputes**

### **42.1 Amicable Settlement:**

- (a) The Procuring Entity and the Supplier shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

### **42.2 Adjudication**

- (a) If the Supplier /Procuring Entity believe that amicable settlement of dispute is not possible between the two parties, the dispute shall be referred to the Adjudicator within fourteen (14) days of first written correspondence on the matter of disagreement;
- (b) The Adjudicator named in the **PCC** is jointly appointed by the parties. In case of disagreement between the parties, the Appointing Authority designated in the **PCC** shall appoint the Adjudicator within fourteen (14) days of receipt of a request from either party;
- (c) The Adjudicator shall give its decision in writing to both parties within twenty-eight (28) days of a dispute being referred to it;
- (d) The Supplier shall make all payments (fees and reimbursable expenses) to the Adjudicator, and the Procuring Entity shall reimburse half of these fees through the regular progress payments;
- (e) Should the Adjudicator resign or die, or should the Procuring Entity and the Supplier agree that the Adjudicator is not functioning in accordance with the provisions of the Contract; a new Adjudicator will be jointly appointed by the Procuring Entity and the Supplier. In case of disagreement between the Procuring Entity and the Supplier the Adjudicator shall be designated by the Appointing Authority designated in the **PCC** at the request of either party, within fourteen (14) days of receipt of a request from either Party.

### **42.3 Arbitration**

- (a) If the Parties are unable to reach a settlement under GCC Clause 42.1 or 42.2 within twenty-eight (28) days of the first written correspondence on the matter of disagreement, then either Party may give notice to the other party of its intention to commence arbitration in accordance with GCC Sub Clause 42.3(b);
- (b) The arbitration shall be conducted in accordance with the Arbitration Act (Act No 1 of 2001) of Bangladesh as at present in force and in the place shown in the **PCC**.

## Section 4. Particular Conditions of Contract

*Instructions for completing the Particular Conditions of Contract are provided, as needed, in the notes in italics mentioned for the relevant GCC clauses.*

GCC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
<b>GCC 1.1(n)</b>	The Procuring Entity is Bangladesh Parjatan Corporation
<b>GCC 1.1(s)</b>	The site(s)/ point(s) of delivery is/are: Bangladesh Parjatan Corporation 83-88, Mohakhali C/A, Dhaka. All the DFO's and all the hotels/motels as directed by the authority.
<b>GCC 3.1</b>	For <b><u>notices</u></b> , the Procuring Entity's contact details shall be: Attention: Program Director, IAS Program Bangladesh Parjatan Corporation 83-88, Mohakhali C/A Dhaka-1212. Telephone: 88-02-9853301 Facsimile number: 88-02-8834600
	For <b><u>notices</u></b> , the Supplier's contact details shall be: Attention: Address: Telephone: Facsimile number: Electronic mail address:
<b>GCC 7.1(i)</b>	The following documents shall also be part of the Contract: Finalized bill of quantity
<b>GCC 8.1</b>	The Scope of Supply shall be defined in <i>Section 6, Schedule of Requirements</i> .
<b>GCC 10</b>	The Supplier or the Subcontractor that is a national of, or registered in, the following countries are not eligible: Israel Goods and related services to be supplied shall not have their origin in the following countries: Israel
<b>GCC 20.2</b>	The packing, marking and documentation inside and outside the packages shall be:  The outer packing may be clearly marked on at least four slides as follows:

	<p>Name and address of Procuring Entity</p> <p>Name of the Supplier</p> <p>Contract Description</p> <p>Final Destination/Delivery Point</p> <p>Gross weight</p> <p>Package number of total number of packages</p> <p>Brief description of the content</p> <p>Any special lifting instructions</p> <p>Any special handling instructions</p>
<b>GCC 21.1</b>	<p>The documents to be furnished by the Supplier shall be as follows:  <i>[insert the detail requirements of documents]</i></p> <p>The documents to be furnished by the Supplier as follows:</p> <ol style="list-style-type: none"> <li>a. Copies of Supplier's invoice showing goods' description, quantity, unit price, total amount;</li> <li>b. Delivery note, railway receipt, or truck receipt;</li> <li>c. Manufacturer's/ Supplier's warranty certificate (if any);</li> <li>d. Inspection certificate issued by the nominated inspection agency (or Procuring Entity) and/ or the Supplier's factory inspection report (if any);</li> <li>e. Certificate of origin, if any.</li> </ol>
<b>GCC 23.1</b>	The original Contract price is:
<b>GCC 25.1</b>	The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:
	<p>(a) <b>On Delivery and Acceptance:</b></p> <p>After receiving bill on supplied goods under the contract, from supplier and acceptance certificate from the purchaser along with necessary document stated in GCC27.2, necessary action shall be taken for payment of bill after deducting penalty(if any), necessary income Tax &amp; VAT or any other deduction as per Government rule.</p> <p><b>(b) Bill is payable on (Subject to availability of fund)</b></p> <ol style="list-style-type: none"> <li>1) 50% of the cost of total supplied goods, in whole shall be payable to the supplier after relevant authority of BPC is confirmed that the delivery of equipment have been made to respective sites.</li> <li>2) Rest of the 40% shall be paid on the basis of issuing PAC by the BPC authority on the basis of Installation &amp; Testing of whole works have been completed.</li> <li>3) The remaining 10% of the total contract price shall be paid on the basis of issuing FAC by the authority.</li> </ol>

<b>GCC 25.3</b>	Payments shall be made in no case later than the days 28 days after submission of an invoice or request for payment by the Supplier, and after the Procuring Entity has accepted it.
<b>GCC 25.5</b>	The rate of interest shall be the prevailing rate of interest for commercial borrowing established in the country: None
<b>GCC 30.1</b>	The inspections and tests shall be: <i>as decided by the purchaser where deemed necessary.</i>
<b>GCC 31.3</b>	The Warranty Period shall be : 12 Months
<b>GCC 31.7</b>	The Supplier shall correct any defects covered by the warranty within 2 weeks of being notified by the Procuring Entity of the occurrence of such defects.
<b>GCC 33.1</b>	The amount of Liquidated Damages is 0.05 of ONE (1) percent of the contract value of the undelivered Goods or any part thereof delivered after expiry of the Delivery and Completion Schedule or extended Delivery and Completion Schedule, as applicable, per day of delay.
	The maximum amount of Liquidated Damages for the undelivered Goods or any part thereof is 10 percent of the final Contract Price of the whole of the Goods and related services.
<b>GCC 42.2(b)&amp;(e)</b>	The Adjudicator jointly appointed by the Parties is: Name: Address: Tel No: Fax No: e-mail address:
	In case of disagreement between the parties, the Appointing Authority for the Adjudicator is the President of the Institution of Engineers, Bangladesh (IEB).
<b>GCC 42.3(b)</b>	Arbitration shall take place in:

## Section 5. Tender and Contract Forms

Form	Title
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### Tender Forms

PG3 – 1	Tender Submission Letter
PG3 – 2	Tenderer Information Sheet
PG3 -- 3	Subcontractor Information ( <i>if applicable</i> )
PG3 – 4A	Price Schedule for Goods
PG3 – 4B	Price Schedule for Related Services
PG3 – 5	Specifications Submission and Compliance Sheet
PG3 – 6	Manufacturer's Authorisation Letter
PG3 – 7	Bank Guarantee for Tender Security ( <i>when this option is chosen</i> )
PG3 -- 8	Bank's Commitment for Line of Credit ( <i>when this option is chosen</i> )

### Contract Forms

PG3 – 9	Notification of Award
PG3–109	Contract Agreement
PG3 – 11	Bank Guarantee for Performance Security ( <i>when this option is chosen</i> )
PG3 – 12	Bank Guarantee for Advance Payment ( <i>if applicable</i> )

Forms PG3-1 to PG3-8 comprises part of the Tender and should be completed as stated in ITT Clause 21.

Forms PG3-9 to PG3-12 comprises part of the Contract as stated in GCC Clause7.

## Tender Submission Letter (Form PG3 – 1)

*[This letter shall be completed and signed by the Authorised Signatory preferably on the Letter-Head pad of the Tenderer].*

To: Program Director, IAS Program Bangladesh Parjatan Corporation 83-88, Mohakhali C/A <i>Dhaka</i>	Date:
Invitation for Tender No: 30.015.014.28.00.006.2014/Part-1	IFT No _____
Tender Package No:	Package No _____

We, the undersigned, tender to supply in conformity with the Tender Document the following Goods and related services, viz:

--

In accordance with ITT Clauses 24 and 25, the following price applies to our Tender:

The Tender Price is: Tk. \_\_\_\_\_  
(ITT Sub Clause 24.10 and 25.1) *[in figures]*  
Taka \_\_\_\_\_  
*[in words]*

In signing this letter, and in submitting our Tender, we also confirm that:

- a) our Tender shall be valid for the period stated in the Tender Data Sheet (ITT Sub Clause 29.1) and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- b) a Tender Security is attached in the form of a *[Pay Order / Bank Draft / Bank Guarantee]* in the amount stated in the Tender Data Sheet (ITT Clause 31) and valid for a period of twenty-eight (28) days beyond the Tender Validity date;
- c) if our Tender is accepted, we commit to furnishing a Performance Security in the amount stated in the Tender Data Sheet (ITT Sub Clause 62.1) in the form stated in Tender Data Sheet (ITT Sub Clause 63.1) and valid for a period of twenty-eight (28) days beyond the date of completion of our performance obligations;
- d) we have examined and have no reservations to the Tender Document, issued by you on *[insert date]*;  
including Addendum to Tender Documents No(s) *[state numbers]*, issued in accordance with the Instructions to Tenderers (ITT Clause 11). *[insert the number and issuing date of each addendum; or delete this sentence if no Addendum have been issued]*;
- e) we, including as applicable, subcontractor for any part of the contract resulting from this Tender process, have nationalities from eligible countries, in



accordance with ITT Sub Clause 5.1;

- f) we are submitting this Tender as a sole Tenderer
- g) we are not a Government owned entity as defined in ITT Sub Clause 5.10 or  
we are a Government owned entity, and we meet the requirements of ITT Sub Clause 5.10];  
*(delete one of the above as appropriate)*
- h) we, declare that we are not associated, nor have been associated in the past, directly or indirectly, with a consultant or any other entity that has prepared the design, specifications and other documents, in accordance with ITT Sub Clause 5.6;
- i) we, including as applicable Subcontractor have not been declared ineligible by the Government of Bangladesh on charges of engaging in corrupt, fraudulent, collusive or coercive practices, in accordance with ITT Sub Clause 5.9;
- j) furthermore, we are aware of ITT Sub Clause 4.2 concerning such practices and pledge not to indulge in such practices in competing for or in executing the Contract;
- k) we intend to subcontract an activity or part of the Supply, in accordance with ITT Sub Clause 16.1 to the following Subcontractor(s);

Nature of the Supply or related service      Name and address of Subcontractor

- l) we, confirm that we do not have a record of poor performance, such as abandoning the Supply, not properly completing contracts, inordinate delays, or financial failure as stated in ITT Sub Clause 5.8, and that we do not have, or have had, any litigation against us, other than that stated in the Tenderer Information Sheet (Form PG3-2);
- m) we are not participating as Tenderers in more than one Tender in this Tendering process. We understand that your written Notification of Award shall become a binding Contract between us, until a formal Contract is prepared and executed;
- n) we understand that you reserve the right to accept or reject any Tender, to cancel the Tender proceedings, or to reject all Tenders, without incurring any liability to Tenderers, in accordance with ITT Clause 57.1.

Signature:

<i>[insert signature of authorised representative of the Tenderer]</i>
--

Name:

<i>[insert full name of signatory with National ID]</i>
---

In the capacity of:

<i>[insert designation of signatory]</i>
--

Duly authorised to sign the Tender for and on behalf of the Tenderer

*[If there is more than one (1) signatory add other boxes and sign accordingly].*

**Attachment 1:** Written confirmation authorising the above signatory(ies) to commit the Tenderer, in accordance with ITT Sub-Clause 36.3;



1.8	Tenderer to attach photocopies of the original documents mentioned aside	[All documents required under ITT Clauses 5 and 26]
The following two information are applicable for National Tenderers		
1.9	Tenderer's Value Added Tax Registration (VAT) Number	
1.10	Tenderer's Tax Identification Number(TIN)	
[The foreign Tenderers, in accordance with ITT Sub Clause 5.1, shall provide evidence by a written declaration to that effect to demonstrate that it meets the criterion]		
2. Qualification Information of the Tenderer [ITT Clause 28]		
2.1	General Experience in the supply of Goods and related services of Tenderer [State years of experience]	
2.2	Specific Experience of satisfactory completion of supply of similar Goods	
	Contract No	[ insert reference no] of [ insert year]
	Name of Contract	[insert name]
	Award date	[insert date]
	Completion date	[insert date]
	Total Contract Value	[insert amount]
	Procuring Entity's Name Address Tel / Fax e-mail  Brief description with justifications of the similarity compared to the Procuring Entity's requirements	[state justification in support of its similarity compared to the proposed supply]
2.3	Supply and/or production capacity of Goods are:	
	Year	Quantity
		Type of Goods
2.4	Liquid assets available	
	No	Source of Financing
		Amount Available

## Subcontractor Information (Form PG3-3)

*[This Form should be completed by each Subcontractor, preferably on its Letter-Head Pad]*

Invitation for Tender No:

[ IFT No]

Tender Package No

[Package No]

1.	Eligibility Information of the Subcontractor <i>[ITT Clause 5 and 26]</i>	
1.1	Nationality of Individual or country of Registration	
1.2	Subcontractor's legal title	
1.3	Subcontractor's registered address	
1.4	Subcontractor's legal status <i>[complete the relevant box]</i>	
	Proprietorship	
	Partnership	
	Limited Liability Concern	
	Government-owned Enterprise	
	Other (please describe)	
1.5	Subcontractor's year of registration	
1.6	Subcontractor's authorised representative details	
	Name	
	Address	
	Telephone / Fax numbers	
	e-mail address	
1.7	Subcontractor to attach copies of the following original documents	All documents to the extent relevant to ITT Clause 5 and 26 in support of its qualifications
The following two information are applicable for national Subcontractors		
1.8	Subcontractor's Value Added Tax Registration (VAT) Number	
1.9	Subcontractor's Tax Identification Number(TIN)	
<i>[The foreign Subcontractors , in accordance with ITT Sub Clause 5.1, shall provide evidence by a</i>		

written declaration to that effect to demonstrate that it meets the criterion]		
2. Key Activity(ies) for which it is intended to be Subcontracted [ITT Sub Clause 16.1]		
2.1	Elements of Activity	Brief description of Activity
2.2	List of Similar Contracts in which the proposed Subcontractor had been engaged	
	Name of Contract and Year of Execution	
	Value of Contract	
	Name of Procuring Entity	
	Contact Person and contact details	
	Type of Work performed	

### Price Schedule for Goods (Form PG3-4A)

Invitation for Tender No:	30.015.014.28.00.006.2014/Part-1	Date:	
Tender Package No:		Package Description:	Supply, Installation, Testing, Commissioning and implementation of server room infrastructure, networks and computer hardware and other components under "Integration of Automation System of Bangladesh Parjatan Corporation".

#### A: PRICE OF GOODS (Including Spare Parts, if any) AND DELIVERY SCHEDULE

1	2	3	3	4	5	6	7	8
Item N° .	Description Of Item	Country of Origin	Unit of Measurement	Qty Of units Required	Unit price (Figure and in Words)	Total price (col. 4 × 5)	Point of Delivery as per Schedule of Requirement	Delivery Period Offered as per Schedule of Requirement
01	Desktop Computers		Pcs.	151	(Note1)		(Note2)	
02	Barcode Scanner		Pcs.	20				
03	Printer		Pcs.	50				
04	UPS		Pcs.	165				
05	Projector and Screen		Pcs.	14				
06	Interactive Board and Pen with Software		Pcs.	8				

07	Laptop		Pcs.	17			
08	Scanner		Pcs.	40			
09	Wi-Fi Router		Pcs.	253			
10	Access Control Device		Pcs.	38			
11	Mac Book Pro		Pcs.	1			
12	Server		Pcs.	4	(Note1)		(Note2)
13	Internet Router		Pcs.	1			
14	Internet Firewall with application visibility and web security		Pcs.	1			
15	Core Switch		Pcs.	1			
16	Core Firewall with IPS		Pcs.	1			
17	Server Farm and DMZ Switch		Pcs.	2			
18	SAN Switch		Pcs.	1			
19	Access Switch		Pcs.	9			



20	Network Management System		Pcs.	1				
21	Bandwidth Controller		Pcs.	1				
22	Storage System		Pcs	1				
23	Cat 6 UTP Cable		Box	105				
24	Face Plate for modular		Pcs.	200				
25	CAT6 I/O Modular		Pcs.	200				
26	CAT6 Patch Panel (24 Port)		Pcs.	9				
27	CAT6 Patch Cord 3 Meter		Pcs.	200				
28	CAT6 Patch Cord 1 Meter		Pcs.	200				
29	Wire Manager		Pcs.	9				
30	6 Core Single mode Fiber		Mtr.	1500				
31	Fiber Patch Panel (Server Room)		Pcs.	2				
32	Fiber Patch Panel (Access End)		Pcs.	9				

33	Fiber Patch Cord (Single Mode)		Pcs.	25				
34	Server Rack with Console Monitor 42U		Pcs.	1				
35	Network Rack (42U)		Pcs.	1				
36	Wall Mount Rack (12U)		Pcs.	9				
37	PVC pipe (Size 1/1.5"); WATER QUALITY PIPE		RFT	1500				
38	PVC Flexible Pipe and Plastic channel : 1/1.5 inch dia		RFT	1300				
39	PVC white colored Plastic channel : 1/2 , 1.5/2 inch dia		RFT	1300				
40	Accessories (Cable Tie, Screw, GI wire, Royal Plug, Royal		Set	1				
41	Node Installation(UTP) with required accessories.		Pcs.	200				
42	Node Installation (UTP) for Wifi (Qty. 253)and access control (Qty. 38) with required accessories		Pcs.	291				
43	Termination of Fiber/Splicing		Core	110				
44	Fiber Cable Laying		Mtr.	1500				

45	Monitor for Server Room		Pcs.	1				
46	Online UPS 10 KVA		Pcs	1				
47	Auto Fire Detection & Suppression System		Set	1				
48	Raised Floor for Server Room		. Sq.Ft.	100				
49	Electrical Goods (lighting etc.) for Server Room		Set	1				
50	Access Switch Type 2		Pcs	24				
51	OS for Server: Microsoft Windows Server 2012		Pcs.	5				
52	Database: Microsoft SQL Server 2012		Pcs.	1				

**Total Quoted Amount TK.....**

**Total Quoted Amount in Words.....**

**Note 1:** All unit rates and prices quoted by the Tenderers against each basic item or activity shall include the Tenderer's profit, overheads, VAT and all other charges including corresponding incidental service charges and premiums for banking and insurances, as applicable *and, shall be the delivered price in final destination or at point of delivery* and, thus forth the total Tender Price quoted by the Tenderers

**Note 2:** Tenderer will complete these columns as appropriate following the details specified in Section 6: Schedule of Requirements

Signature:	<i>[insert signature of authorised representative of the Tenderer]</i>
Name:	<i>[insert full name of signatory with National ID]</i>
In the capacity of:	<i>[insert designation of signatory]</i>
Duly authorised to sign the Tender for and on behalf of the Tenderer	

## Specifications Submission and Compliance Sheet (Form PG3-5)

Invitation for Tender 30.015.014.28.00.006.2014/Part-1      Date:

No:

Tender Package

No:

Package      *[enter description  
Description: as specified in  
Section 6]*

Item No.	Name of Goods or Related Service	Country of Origin	Make and Model ( <i>when applicable</i> )	Full Technical Specifications and Standards
1	2	3	4	5
	<b>FOR GOODS</b>			Note 1
	<b>FOR RELATED SERVICES</b>			

*[The Tenderer should complete all the columns as required]*

Signature:	<i>[insert signature of authorised representative of the Tenderer]</i>
Name:	<i>[insert full name of signatory with National ID]</i>
In the capacity of:	<i>[insert designation of signatory]</i>
Duly authorised to sign the Tender for and on behalf of the Tenderer	

## Manufacturer's Authorisation Letter (Form PG3 - 6)

*[The Tenderer shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]*

*[The Tenderer shall include it in its Tender, if so indicated in the TDS as stated under ITT Sub Clause 27.1 (f)]*

Invitation for Tender No: 30.015.014.28.00.006.2014/Part-1	Date:
Tender Package No:	
Tender Lot No:	
To: Program Director, IAS Program Address: Bangladesh Parjatan Corporation 83-88, Mohakhali C/A Dhaka-1212. Telephone: 88-02-9853301 Facsimile number: 88-02-8834600	

### WHEREAS

We *[insert complete name of Manufacturer]*,

who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby

authorize *[insert complete name of Tenderer]* to supply the following Goods, manufactured by us *[insert name and or brief description of the Goods]*.

We hereby extend our full guarantee and warranty as stated under GCC Clause 31 of the General Conditions of Contract, with respect to the Goods offered by the above Tenderer.

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

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

Address: *[insert full address including Fax and e-mail]*

Title: *[insert title]*

Date: *[insert date of signing]*

## Bank Guarantee for Tender Security (Form PG3 – 7)

*[this is the format for the Tender Security to be issued by a scheduled Bank of Bangladesh as stated under ITT Clause 31 and 32]*

Invitation for Tender No:  
30.015.014.28.00.006.2014/Part-1

Date:

Tender Package No:

Tender Lot No:  
To:

Program Director, IAS Program  
Address: Bangladesh Parjatan Corporation  
83-88, Mohakhali C/A  
Dhaka-1212.  
Telephone: 88-02-9853301  
Facsimile number: 88-02-8834600

### **TENDER GUARANTEE No:** [insert number]

We have been informed that *[insert name of Tenderer]* (hereinafter called “the Tenderer”) intends to submit to you its Tender dated *[insert date of Tender]* (hereinafter called “the Tender”) for the supply of *[description of goods and related services]* under the above Invitation for Tenders (hereinafter called “the IFT”).

Furthermore, we understand that, according to your conditions, Tenders must be supported by a Bank Guarantee for Tender Security.

At the request of the Tenderer, we *[insert name of Bank]* hereby irrevocably unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Tenderer is in breach of its obligation(s) under the Tender conditions, because the Tenderer:

- a. has withdrawn its Tender after opening of Tenders but within the validity of the Tender Security ; or
- b. refused to accept the Notification of Award (NOA) within the period as stated under Instructions to Tenderers (ITT) ; or
- c. failed to furnish Performance Security within the period as stipulated in the NOA; or
- d. refused to sign the Contract Agreement by the time specified in the NOA; or
- e. did not accept the correction of the Tender price following the correction of the arithmetic errors in accordance with the ITT.

This guarantee will expire:

- (a) if the Tenderer is the successful Tenderer, upon our receipt of a copies of the contract signed by the Tenderer and the Performance Security issued to you in accordance with the ITT; or

(b) if the Tenderer is not the successful Tenderer, twenty-eight (28) days after the expiration of the Tenderer's Tender validity period, being [*date of expiration of the Tender validity plus twenty-eight(28) days*]

Consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

Signature

Seal

## Letter of Commitment for Bank's undertaking for Line of Credit (Form PG3-8)

*[This is the format for the Credit Line to be issued by any scheduled Bank of Bangladesh in accordance with ITT Clause 28.1(d)]*

Invitation for Tender No:  
30.015.014.28.00.006.2014/Part-1

Date:

Tender Package No:

Lot No:  
To:

Program Director, IAS Program

Address: Bangladesh Parjatan Corporation

83-88, Mohakhali C/A

Dhaka-1212.

Telephone: 88-02-9853301

Facsimile number: 88-02-8834600

**CREDIT COMMITMENT No:** *[insert number]*

We have been informed that *[name of Tenderer]* (hereinafter called "the Tenderer") intends to submit to you its Tender (hereinafter called "the Tender") for the supply of Goods of *[description of Goods and related services]* under the above Invitation for Tenders (hereinafter called "the IFT").

Furthermore, we understand that, according to your conditions, the Tenderer's Financial Capacity i.e. Liquid Asset must be substantiated by a Letter of Commitment of Bank's Undertaking for Line of Credit.

At the request of, and arrangement with, the Tenderer, we *[name and address of the Bank]* do hereby agree and undertake that *[name and address of the Tenderer]* will be provided by us with a revolving line of credit, in case awarded the Contract, for the delivery of Goods and related services viz. *[insert name of supply]*, for an amount not less than BDT *[in figure]* ( *in words*) for the sole purpose of the supply of Goods and related services under the above Contract. This Revolving Line of Credit will be maintained by us until issuance of "**Acceptance Certificate**" by the Procuring Entity.

In witness whereof, authorised representative of the Bank has hereunto signed and sealed this Letter of Commitment.

Signature

Signature



## Notification of Award (Form PG3 - 9)

Contract No:  
To:

Date:

*[Name of Contractor]*

This is to notify you that your Tender dated *[insert date]* for the supply of Goods and related Services for *[name of contract]* for the Contract Price of Tk *[state amount in figures and in words]* as corrected and modified in accordance with the Instructions to Tenderers, has been approved by *[name of Procuring Entity]*.

You are thus requested to take following actions:

- i. accept in writing the Notification of Award within seven (7) working days of its issuance pursuant to ITT Sub-Clause 61.3
- ii. furnish a Performance Security in the specified format and in the amount of Tk *[state amount in figures and words]* ,within fourteen (14) days of acceptance of this Notification of Award but not later than *(specify date)*, in accordance with ITT Clause 63.2
- iii. sign the Contract within twenty-eight (28 ) days of issuance of this Notification of Award but not later than *(specify date)*, in accordance with ITT Clause 66.2

You may proceed with the execution of the supply of Goods and related Services only upon completion of the above tasks. You may also please note that this Notification of Award shall constitute the formation of this Contract, which shall become binding upon you.

We attach the draft Contract and all other documents for your perusal and signature.

Signed

Duly authorised to sign for and on  
behalf of *[name of Procuring Entity]*

Date:

## Contract Agreement (Form PG3 -10)

THIS AGREEMENT made the *[day]* day of *[month]* *[year]* between *[name and address of Procuring Entity]* (hereinafter called “the Procuring Entity”) of the one part and *[name and address of Supplier]* (hereinafter called “the Supplier”) of the other part:

WHEREAS the Procuring Entity invited Tenders for certain goods and related services, viz, *[brief description of goods and related services]* and has accepted a Tender by the Supplier for the supply of those goods and related services in the sum of Taka *[Contract Price in figures and in words]* (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract hereafter referred to.
2. The following documents forming the Contract shall be in the following order of precedence, namely :
  - (a) the signed Form of Contract Agreement;
  - (b) the Notification of Award
  - (c) The completed Tender
  - (d) Particular Conditions of Contract;
  - (e) General Conditions of Contract;
  - (f) Technical Specifications;
  - (g) Drawings;
  - (h) Price Schedules and Schedule of Requirements and;
  - (i) other document including correspondences listed in the PCC forming part of the Contract
3. In consideration of the payments to be made by the Procuring Entity to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring Entity to provide the goods and related services and to remedy any defects therein in conformity in all respects with the provisions of the Contract.
4. The Procuring Entity hereby covenants to pay the Supplier in consideration of the provision of the goods and related services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bangladesh on the day, month and year first written above.

	For the Procuring Entity:	For the Supplier:
Signature		
Print Name		
Title		
In the presence of Name		
Address		

## Bank Guarantee for Performance Security (Form PG3 – 11)

*[this is the format for the Performance Security to be issued by a scheduled Bank of Bangladesh in accordance with ITT Sub Clause 63.1]*

Contract No:

Date:

To:

Program Director, IAS Program

Address: Bangladesh Parjatan Corporation

83-88, Mohakhali C/A

Dhaka-1212.

Telephone: 88-02-9853301

Facsimile number: 88-02-8834600

### **PERFORMANCE GUARANTEE No:** *[insert number]*

We have been informed that *[name of supplier]* (hereinafter called “the Supplier”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”) for the supply of *[description of goods and related services]* under the Contract.

Furthermore, we understand that, according to your conditions, Contracts must be supported by a performance guarantee.

At the request of the Supplier, we *[name of bank]* hereby irrevocably unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Supplier is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

*[Signatures of authorized representatives of the bank]*

Signature

Seal

## Bank Guarantee for Advance Payment (Form PG3 – 12)

*[this is the format for the Advance Payment Security to be issued by a scheduled Bank of Bangladesh in accordance with GCC Clause 26.1]*

Contract No:

Date:

To:

[Name and address of Procuring Entity]

**ADVANCE PAYMENT GUARANTEE No:** [insert number]

We have been informed that *[name of supplier]* (hereinafter called “the Supplier”) has undertaken, pursuant to Contract No *[reference number of Contract]* dated *[date of Contract]* (hereinafter called “the Contract”) for the supply of *[description of goods and related services]* under the Contract.

Furthermore, we understand that, according to your Particular Conditions of Contract Clause 25.1, Advance Payment(s) on Contracts must be supported by an irrevocable unconditional Bank Guarantee.

At the request of the Supplier, we *[name of bank]* hereby irrevocably unconditionally undertake to pay you, without cavil or argument, any sum or sums not exceeding in total an amount of Tk *[insert amount in figures and in words]* upon receipt by us of your first written demand accompanied by a written statement that the Supplier is in breach of its obligation(s) under the Contract conditions, without you needing to prove or show grounds or reasons for your demand of the sum specified therein.

We further agree that no change, addition or other modification of the terms of the Contract to be performed, or of any of the Contract documents which may be made between the Procuring Entity and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee is valid until *[date of validity of guarantee]*, consequently, we must receive at the above-mentioned office any demand for payment under this guarantee on or before that date.

*[Signatures of authorized representatives of the bank]*

Signature

Seal

## Section 6. Schedule of Requirements

Invitation for Tender 30.015.014.28.00.006.2014/Part-1 Date

No:

Tender Package No:

### A. List of Goods and Delivery Schedule

When completing Form PG3-2 the Tenderer shall quote prices and contract delivery dates for each item against each lot and show each Lot separately, as specified in the List of Goods and Delivery Schedule.)

Item No.	Description of Item	Unit of Supply	Quantity of Units required	Point of Delivery	Date Required (in weeks)
1	2	3	4	5	6
	Procuring Entity's Option for delivery terms is:				<i>[note 1]</i>
Supply, Installation, Testing, Commissioning and implementation of server room infrastructure, networks and computer hardware and other components under "Integration of Automation System of Bangladesh Parjatan Corporation".					
01	Desktop Computers	Pcs.	151	Note 2	45 Days
02	Barcode Scanner	Pcs.	20	Note 3	45 Days
03	Printer	Pcs.	50	Note 4	45 Days
04	UPS	Pcs.	165	Note 5	45 Days
05	Projector and Screen	Pcs.	14	Note 6	45 Days
06	Interactive Board and Pen with Software	Pcs.	8	Note 7	45 Days
07	Laptop	Pcs.	17	Note 8	45 Days
08	Scanner	Pcs.	40	Note 9	45 Days
09	Wi-Fi Router	Pcs.	253	Note 10	45 Days
10	Access Control Device	Pcs.	38	Note 11	45 Days
11	Mac Book Pro	Pcs.	1	Note 12	45 Days

12	Server	Pcs.	4	Note 13	45 Days
13	Internet Router	Pcs.	1		45 Days
14	Internet Firewall with application visibility and web security	Pcs.	1		45 Days
15	Core Switch	Pcs.	1		45 Days
16	Core Firewall with IPS	Pcs.	1		45 Days
17	Server Farm and DMZ Switch	Pcs.	2		45 Days
18	SAN Switch	Pcs.	1		45 Days
19	Access Switch	Pcs.	9		45 Days
20	Network Management System	Pcs.	1		45 Days
21	Bandwidth Controller	Pcs.	1		45 Days
22	Storage System	Pcs	1		45 Days
23	Cat 6 UTP Cable	Box	105		45 Days
24	Face Plate for modular	Pcs.	200		45 Days
25	CAT6 I/O Modular	Pcs.	200		45 Days
26	CAT6 Patch Panel (24 Port)	Pcs.	9		45 Days
27	CAT6 Patch Cord 3 Meter	Pcs.	200		45 Days
28	CAT6 Patch Cord 1 Meter	Pcs.	200		45 Days
29	Wire Manager	Pcs.	9		45 Days
30	6 Core Single mode Fiber	Mtr.	1500		45 Days
31	Fiber Patch Panel (Server Room)	Pcs.	2		45 Days
32	Fiber Patch Panel (Access End)	Pcs.	9		45 Days

33	Fiber Patch Cord (Single Mode)	Pcs.	25		45 Days
34	Server Rack with Console Monitor 42U	Pcs.	1		45 Days
35	Network Rack (42U)	Pcs.	1		45 Days
36	Wall Mount Rack (12U)	Pcs.	9		45 Days
37	PVC pipe (Size 1/1.5"); WATER QUALITY PIPE	RFT	1500		45 Days
38	PVC Flexible Pipe and Plastic channel : 1/1.5 inch dia	RFT	1300		45 Days
39	PVC white colored Plastic channel : 1/2 , 1.5/2 inch dia	RFT	1300		45 Days
40	Accessories (Cable Tie, Screw, GI wire, Royal Plug, Royal Bolt, PVC Pipe Joints , Clump, PVC Tape, Masking Tape, Rivet, High quality Nylon fastener etc.)	Set	1		45 Days
41	Node Installation(UTP) with required accessories, Pvc Pipe , Channel	Pcs.	200		45 Days
42	Node installation (UTP) for Wi-fi (Qty. 253) and access control (Qty. 38) with required accessories	Pcs.	291	Note 14	
42	Termination of Fiber/Splicing	Core	110		45 Days
43	Fiber Cable Laying	Mtr.	1500		45 Days
44	Monitor for Server Room	Pcs.	1		45 Days
45	Online UPS 10 KVA	Pcs	1		45 Days
46	Auto Fire Detection & Suppression System	Set	1		45 Days
47	Raised Floor for Server Room	. Sq.Ft.	100		45 Days
48	Electrical Goods (lighting etc.) for Server Room	Set	1		45 Days
49	Access Switch Type 2	pcs	24	Note 14	45 Days
50	OS for Server: Microsoft Windows Server 2012	Pcs.	5		45 Days
51	Microsoft SQL Server 2012	Pcs.	1		45 Days

Note 1: Delivery period starts from the date of contract signing.

Note 2: Delivery and installation of the desktop computers should be made to the following points according to the given quantity: BPC head office 55, all the duty free shops 18, Joy restaurant, savar 3, Parjatan motel, Bogra 6, Parjatan motel, Rajshahi 6, Parjatan motel, Rangpur 6, Parjatan motel, Dinajpur 4, Hotel Pashur Mongla, Bagerhat 4, Motel Shaikat, Chittagong 5, Parjatan Holiday Complex, Rangamati 5, Motel Probal, Cox's Bazar 4, Motel Upal, Cox's Bazar 4, Hotel Shaibal, Cox's Bazar 6, Parjatan Motel, Sylhet 4, Parjatan Holiday Homes, Kuakata 6, Hotel Madhumoti, Tungipara 2, Hotel Ne Taung, Teknaf 4, Parjatan Motel, Khagrachori 4, Patjatan Motel, Benapole 4, Parjatan Restaurant, madhobkunda 1.

Note 3: Delivery and installation of the barcode scanners should be made to all the duty free shops located in Dhaka, Chittagong and Sylhet.

Note 4: Delivery and installation of the printers should be made to the following points according to the given quantity: Head office 13 and the rest of the 37 printers to other 22 units.

Note 5: Delivery and installation of the UPS should be made to the following points according to the given quantity: Head office 62, all the duty free shops 18, all the hotels 85.

Note 6: Delivery and installation of the Projector and screen should be made to the following points according to the given quantity: Head office 9, Hotel Shaibal, Cox's Bazar 1, Parjatan Motel, Bogra 1, Parjatan Motel, Rajshahi 1, Parjatan Motel, Rangpur 1, Parjatan Motel, Dinajpur 1.

Note 7: Delivery and installation of the Interactive Board should be made to the following points according to the given quantity: Head office 8.

Note 8: Delivery and installation of the Laptops should be made to the following points according to the given quantity: Head office 16, Hotel Shaibal, Cox's Bazar 1.

Note 9: Delivery and installation of the Scanners should be made to the following points according to the given quantity: Head office 12, Duty free shops in Dhaka, Chittagong and Sylhet 3, all the hotels 25.

Note 10: Delivery and installation of the wi-fi routers should be made to the following points according to the given quantity: Hotel Abakash, Dhaka 10, Joy restaurant, Savar 6, Parjatan Motel, Bogra 16, Parjatan motel, Rajshahi 20, Parjatan motel, Rangpur 16, Parjatan motel, Dinajpur 16, hotel Pashur Mongla, Bagerhat 12, Mptel Shaikat, Chittagong 30, Parjatan Holliday Complex, Rangamati 26, Motel Probal, Cox's Bazar 10, Motel Upal, Cox's Bazar 10, Hotel Shaibal, Cox's Bazar 12, Parjatan Holiday Homes, Kuakata 25, Hotel Madhumoti, Tungipara 10, Hotel Ne Taung, Teknaf 8, Parjatan Motel, Khagrachori 12, Parjatan motel, Benapole 12, Parjatan restaurant Madhobkunda 2.

Note 11: Delivery and installation of the access control devices should be made to the following points according to the given quantity: Head office 4, Duty free shops 10, all the hotels 24.

Note 12: Head office, Mohakhali, Dhaka.

Note 13: Head office, Mohakhali, Dhaka.

Note 14: Access switch type 2 and UTP cable 3 box each should be delivered to 24 units of BPC.



## B. List of Related Services and Completion Schedule

When completing Form PG3-2 the Tenderer shall quote prices and Completion date for services for each item against each lot

Item No.	Description of Related Services	Unit of Supply	Quantity of Units Required	Point at which Services are required	Required Completion Date for Services
1	2	3	4	5	6
	Procuring Entity's Option for delivery terms is:				<i>[note 1]</i>
	<i>[add as many rows and details as there are individual items in the Lot]</i>	<i>[note 2]</i>	<i>[note 2]</i>		
	<i>[add as many rows and details as there are individual items in the Lot]</i>				

Note 1: Delivery period starts from the date of contract signing

Note 2: The Procuring Entity must decide whether there is a separate unit of supply and quantity of units, otherwise may specify ONE (1) in both columns or LUMP SUM in Column 4

## Section 7. Technical Specifications

### Background

Bangladesh Parjatan Corporation (BPC) is the Govt Tourism Organization to promote and develop tourism, establish tourism infrastructure in Bangladesh, provide facilities to undertake measures and carry out all kinds of activities connected with tourism, acquire, establish, construct, arrange, provide and run hotels, motels, restaurants, rest houses, picnic spots, camping sites, amusement park, institute of instruction and training of potential tourism personnel, bring out tourism publications etc. The organization performs various safety and operational functions, as well as common corporate functions like administration, accounts and store management. BPC intends to automate its functions through implementing a large-scale but integrated information & communication technology (ICT) and software-based e-governance system. The computer network infrastructure shall extend to all BPC outlets of the country to enjoy corporate intranet services.

### Vision and Mission

Bangladesh Parjatan Corporation (BPC) was established in November 1972 by the order of the President Act 143 and commenced its function in 1973. It is an autonomous organization under the Ministry of Civil Aviation and Tourism.

### Vision and Mission statement of Bangladesh Parjatan Corporation (BPC)

#### VISION:

- Develop Bangladesh as an Exotic Tourist Destination.

#### MISSION:

01. Develop BPC as an Organization of excellence with adequate authority and capacity to regulate / facilitate tourism industry in Bangladesh.
02. Develop and maintain international standard tourism products and ancillary facilities.
03. Involve government and encourage private sector in developing physical infrastructure i.e. road, rail, air and waterways for easy accessibility.
04. Ensure security & safety of the tourists.
05. Take initiative for simplifying visa and immigration formalities for tourists.
06. Encourage pro-poor tourism industry for their economic betterment and empowerment.
07. Develop ecotourism based on nature and ethnic culture.
08. Enhance the balance of payment, create employment opportunities, alleviate poverty and create social harmony through tourism activities.
09. Enhance marketing of tourism products at home and abroad.
10. Develop human resource in tourism sector.
11. Build a strong public-private partnership in the tourism industry.
12. Promote and maintain close cooperation with regional and international counterparts of the industry.

## Technical Specification of Computer Hardware and Other Components

### 1. Desktop Computers

Item Description	Required Specification
Brand	Any internationally reputed brand.
Model	To be mentioned by the bidder.
Machine Type	Mini or SFF
Country of Origin	To be mentioned by the bidder.
Country of Assemble	To be mentioned by the bidder.
Processor	4th Generation Intel Core i5- 4xxx (To be mentioned by the Bidder) Clock speed: Minimum 1.7 GHz Cache : Minimum 3MB
Chipset	Intel Chipset
RAM	Minimum 4 GB DDR3 (Min.1600MHz), Upgradeable up to 16 GB with 2 Slots
System BIOS	Flash BIOS with Machine SL No./Tag No. Shown in BIOS setup
Hard Disk Drive	Minimum 1 x 500GB SATA (7200 RPM)
Audio	1 x Optical S/PDIF out, 3 x Audio Jack(s) (Line in/Mic in/Speaker out)
Speaker	Minimum 2 x 2 W integrated speaker
I/O Ports & Interfaces	Minimum 2 X USB3.0, 4 X USB2.0 Ports, 1 X Integrated Display/VGA & 1 X HDMI ports
Network Card	Integrated Gigabit Ethernet Card with RJ-45 interface
Graphics	Integrated Intel HD Graphics 4400
Wi-Fi	In-Built with 802.11 ac
Bluetooth	In-Built
Card Reader	Minimum 2-in-1 Card Reader
Keyboard	Same Brand Original Wireless Keyboard
Mouse	Same Brand Original Wireless Mouse
Web storage	Minimum 30 GB web storage provided by manufacturer for minimum 3 years
Vesa mounting Kit	Yes
Others	1 x Kensington Lock
Monitor	Min.18.5" LCD/LED Color monitor (Same Brand as System Unit)
Warranty period	3 Years full warranty with parts & labor.
Certification	ISO Certificate required.
Operating System	Free Dos

### 2. Barcode Scanner

Item Description	Required Specification
Brand	Any reputed brand to be mentioned by the bidder
Model	To be mentioned by the bidder
Country Of Origin	To be mentioned by the bidder
Scan rate	300 scan per second
Microprocessor	32 bit
Depth of field	35-200mm
Light source	650NM
Indicators (LED)	Three color LED
System Interface	Keyboard, RS-232, USB, USB Virtual com Wand
Weight	120 G
Warranty	1Year

### 3. Printer

Item Description	Required Specifications
Brand	Any reputed brand to be mentioned by the bidder
Model	To be mentioned by the bidder
Country of Origin	To be mentioned by the bidder
Technology	Mono Laser Printer
Memory	8 MB
Print Speed	24 PPM
Print Resolution	2400x600 dpi (HQ quality)
Processor	200 MHz
Double Side Print Compatibility	Auto Duplex
ADF	N/A
Response Time	Less then 8.5 seconds
Paper Input (Standard Tray)	250 Sheets
Paper Output	100 Sheets
Paper Handling Size - Paper Tray	Letter/Legal/A4/A5/A6/B5/B6
Networking Compatibility	NA
Wifi Compatibility	NA
Interface	USB 2.0
Monthly Duty Cycle	10,000 Page
Weight	7Kg

### 4. UPS

Item Description	Required Specification	
Brand	Any reputed brand to be mentioned by the bidder	
Model	To be mentioned by the bidder	
Country Of Origin	To be mentioned by the bidder	
Power (VA)	Requirements	1200 VA
Input	Voltage	120 VAC or 220/230/240VAC 25%(145-290V5V Option)
	Frequency	50/60Hz+/-10%
Output	Voltage (Inverter Mode)	120 VAC or 220/230/240VAC 10%
	Capacity	720W
	Frequency (Inverter Mode)	50/60Hz+/-10%
	Transfer Time	2~6ms typical
	Waveform	Modified-Sinewave
Protection	Spike & Surge Suppression	Yes
	Over/Under Volt.	Switch to Bat. O / P when main over regulation range
	Over load /short Circuit	Fuse & current limited for both Mains and Battery modes
Function	Cool start	Cool start computer even there is no main power

	Automatic recharge	Automatic recharge even UPS is off
Battery	Type	Lead-Acid maintenance-free
	DC Bus	12V8.2Ah
	Number	2pcs
	Recharge time	8hours90%
	Back up time	35mins
Body	Type	Metal
Environmental	Temperature	120 VAC or 220/230/240VAC 10%
	Humidity	20% to 90%
Warranty		01 ear Battery & 2 years Service Warranty

## 5. Projector and Screen

Item Description		Required Specification
Brand		Any reputed brand to be mentioned by the bidder
Model		To be mentioned by the bidder
Country Of Origin		To be mentioned by the bidder
Projector Technology		DLP
Brightness		3500 Lumens
Native Resolution		XGA (1024 x 768)
Max. Resolution		UXGA (1600 x 1200)
Contrast Ratio		6000:1 (Full On/Off)
Lamp Life		4500/6000 Hours (Standard/Economy Mode), 190W
Display Type		Single 0.55" DLP @ Technology by Texas Instruments
Projector Distance		3.28' to 32.8' (1.0 to 10.0 m)
Image Size (Diagonal)		25.6" to 308"
Speaker		10W
Aspect Ratio		4:3 Native
File Format Supported	Document	Microsoft Office 97-2001 ( DOC, PPT, XLS), Adobe Reader (PDF), Text (TXT)
	Video	AVI, DIVX, MKV, TS, DAT, VOD, MPG, MPEG, MOV, MP4, RM, RMVB, WMV
	Image	JPEG, JPG, BMP
	Audio	MP1, MP2, MP3, WMA, OGG, ADPCM-WAV, PCM-WAV, ACC
I/O Connection Port		HDMI v1.4a, VGA-In (x2), Composite Video, Audio-In RCA (L/R), Audio-In (Mini-Jack), VGA-Out, USB (Type A) (x2), Audio-Out (Mini-Jack), RJ45, RS-232C, Mini- USB (Service)
Security Solution		Kensington® Security Slot, Security Bar, Keypad Lock
Weight		3.15kg
Fan Noise Level		35dB/32dB (Standard/Economy Mode)
Power Source		Supply: AC 110-240V, 50/60Hz
Power Consumption		240W (Economy Mode), 290W (Standard Mode), <1W (Standby Mode)
Warranty		Six Month Lamp & One Years Limited Parts Warranty.

## 6. Interactive Board and Pen with Software

Item Description	Required Specification
Brand	Hitachi or any reputed brand to be mentioned by the bidder
Model	To be mentioned by the bidder
Country Of Origin	To be mentioned by the bidder
Input Methods	Infrared Image Sensor
Interface to Computer	USB
Sampling Rate	Approximately 100 pts/sec
Resolution	Approx. 0.05mm
Accuracy	±1.5mm
Board/Surface Material	Particle wood (core), cured resin (sur)
Operating Specification	+ 5 - +35 Celsius, 20 - 80% Humidity
Other Features	Hand writing recognition Direct access to internet Import Microsoft office files Remote conferencing Support IWB common file formats (CFF) Customized floating toolbar OS support : Windows, Mac, Linux Pen : Electronic pen

## 7. Notebooks

Item Description	Required Specification
Brand	Any internationally reputed brand.
Model	To be mentioned by the bidder.
Country of Origin	To be mentioned by the bidder.
Country of Assemble	To be mentioned by the bidder.
Display	14.0" 16:9 HD (1366x768)
Processor	4th Generation Intel Core i5- 4xxx (To be mentioned by the Bidder) Clock speed: Minimum 1.7 GHz Cache : Minimum 3MB
Chipset	Intel Chipset
RAM	Minimum 4 GB DDR3 (Min.1600MHz), Upgradeable up to 16 GB with 2 Slots
System BIOS	Flash BIOS with Machine SL No./Tag No. Shown in BIOS setup
Hard Disk Drive	Minimum 1 x 1TB SATA
Audio	Built in Speaker and Microphone
I/O Ports & Interfaces	Minimum 1 x COMBO audio jack 1 x VGA port/Mini D-sub 15-pin for external monitor 1 x USB 3.0 port(s) 2 x USB 2.0 port(s) 1 x RJ45 LAN Jack for LAN insert 1 x HDMI
Network Card	Integrated Gigabit Ethernet Card with RJ-45 interface
Graphics	Integrated Intel HD Graphics 4400
Camera	Minimum VGA Webcam
Wi-Fi	In-Built
Card Reader	Minimum 3-in-1 Card Reader
Battery	Polymer Battery (Minimum 37 Watt)
Web storage	Minimum 30 GB web storage provided by manufacturer for minimum 3 years

Others	1 x Kensington Lock
Warranty period	2 Years full warranty with parts & labor
Certification	ISO Certificate required.
Operating System	Free Dos

## 8. Scanner

Item Description	Required Specification
Brand	Any reputed brand to be mentioned by the bidder
Model	To be mentioned by the bidder
Country Of Origin	To be mentioned by the bidder
Scanner Type	Desktop color flatbed scanner
Image Sensor Type	CCD
Resolution	2400 x 4800 dpi
Light Source	CCFL
Scanning Area	Reflective: 8.5"x 11.7"(216 x 297 mm)
Scanning Speed	7ms/ line at 600 dpi ; 10ms/ line at 1200 dpi ; 12ms/ line at 2400 dpi
Bit Depth	48 bit internal
Paper Size	A4
Connectivity	Hi-Speed USB (USB 2.0)
Drivers	TWAIN
Smart-Touch Buttons	7 buttons (Scan, Copy, Email, OCR, Scan to web, Setup/ Cancel, Custom
Scanable Media Types	Reflective
Supported File Types	TIF, BMP, EPS, JPG, PSD, IFF, PCX, PXR, TGA,WMF, PDF, SCT, GIF
Supported Film Types	135 mm film strip, 35 mm slide framed
OS Support	Windows 2000 /XP /Vista/Windows 7 ; Mac OS X 10.3~10.6
Dimensions (L x W x H)	483 x 294 x 60 mm
Weight	5.7 lbs (2.6 kg)
Power Source	DC 12V, 1.25A
Power Consumption	15 Watts
System Requirements PC	CD-ROM drive (for installing software)
	Color display with 24-bit color output capability
	512 MB RAM or more
	Pentium IV PC or higher with USB 2.0 port
	Microsoft Windows 2000/ XP/ Vista/ Windows 7
System Requirements MAC	CD-ROM drive (for installing software)
	Color display with 24-bit color output capability
	512 MB RAM or more
	Mac computer (Intel CPU) with built-in USB port
	Mac OS X 10.3~10.6
Inbox Contents	Scanner unit
	Hi-Speed USB cable(USB 2.0)
	Power adaptor

	Software CD(s)
	User's manual(s)

## 9. Wi-fi Router

Features	Specifications & Features
<b>Certification/Quality</b>	Product or OEM should have following certification: ISO 9001-2000, ITIL Compliance, FCC , CE norms, ROHS, etc (Please provide certificate)
<b>Brand</b>	Internationally Reputed Brand
<b>Model</b>	To be mentioned by the bidder
<b>Country of Origin</b>	To be mentioned by the bidder
<b>Power Supply</b>	External Power Adapter
<b>Interfaces</b>	4x 10/100 LAN Ports (RJ45) MDI/MDIX, 1x USB Port (2.0, Host)
<b>Wireless Features &amp; Performance</b>	Wireless Standard : IEEE 802.11 b/g/n
	Antenna Power : External, 3 dBi
	Wireless Transmit Power : 20dBm
	Access Points : Multiple SSID (up to 4), WPA / WPA2, WEP encryption
	Data Rate : Upto 300 Mbps
	Number of selectable channels : 11 Channels (US, Canada), 13 Channels (Europe), 14 Channels (Japan)
	RF Operating Frequency : 2.4 Ghz
	Range : Indoor - up to 100 meters; Outdoor - up to 300 meters
<b>Network Protocols</b>	Static IP
	Network Address Translation (NAT)
	Port Forwarding
	NAT Application Level Gateway for popular applications
	DHCP Server /client
	DNS Relay Agent
	DDNS support
	UPnP (Universal Plug and Play)
	PPP Auto Reconnect
	ALG for SIP, FTP, TFTP, H323, IRC, PPTP and RTSP
IPSec VPN	
<b>Internet Control</b>	Website Filtering & Application Filtering
	Identity-based Internet Access
	Block offensive and inappropriate websites and applications
	Different Level of Internet Access
	Website and Application Control - provide scheduled Access to Website categories and applications
	Customize usage with Internet controls - Customize the Access privileges for each user based on needs
	MAC Address white list
<b>Security Features</b>	Firewall with SPI (Stateful Packet Inspection)
	IP Sharing Method - Network Address Translation (NAT)



	Intrusion Prevention System (IPS)
	Authentication protocols - PAP, CHAP, TCP/IP/Port filtering rules, Port Forwarding, Packet and MAC Address filtering, Access Control
<b>Management</b>	User-friendly Web Interface
	Password Protected System Management
	Automatic System clock synchronization with NTP Server
	Configuration backup and restoration
	Software upgrade via HTTP
	NetGenie DDNS
	TR-069 Support
	<b>Should support Cable Internet, 3G modem</b>
	NCMS - NetGenie's On-Cloud Management
<b>Reports</b>	Monitor web and application activity of each office user over Internet websites visited, applications used
<b>Package Contents</b>	Appliance x 1
	Antenna x 2
	RJ11 cable x 1
	RJ45 cable x 1
	External splitter X1
	Multi-Country Power Adapter x 1
	USB broadband extension cable
	Quick Start Guide x 1
<b>Warranty &amp; Support</b>	OEM should have regional presence for sales and support
	OEM's GSMC should be ISO 20000 certified
	The proposed solution should have 1 year hardware & software warranty with Free Firmware upgrade & live updates

## 10. Access Control Device

Item Description	Required Specification
Brand	Any internationally reputed brand.
Model	To be mentioned by the bidder.
Country of Origin	To be mentioned by the bidder.
Country of Assemble	To be mentioned by the bidder.
Modes of Authentications:	*Finger Print + Electro Magnetic Card + Pass Word*
Capacity	User Capacity : 5,000
Memory :	8 MB Flash + 16 MB SD Ram
Communication Interface:	TCP / IP
Authentication Time :	<1 Second with Adapter
Software	Licensed software to intricate e from 20 to 250 Device

## 11. Mac Book Pro

Item Description	Required Specification
Brand	Apple
Model	Mac Book Pro
Processor	Intel Core i7
Clock Speed	2.6 GHz Quad Core (TB)
Cache	L3 Cache Memory
Memory	8 GHz DDR3 - 1600 MHz Bus
HDD	750GB SATA
Weight	2.56Kg
Graphics Card	Intel HD Graphics 4000
Camera	720 Face Time HD Camera
Wireless	802.11n Wi-Fi Wireless
Speaker	Stereo Speaker with Subwoofer
Keyboard	Full size backlit keyboard
Track Pad	Multi touch track pad
Battery and Power	Up to 7 hours
Include Software	OS X Mountain Lion

12.Server	
Features	
Quantity	Four (04)
Brand	Should be mention by bidder
Model number	Should be mention by bidder
Country of origin	USA
Form Factor	2U rack mounted kit with Cable Management Arm
Processor	2 x Intel Xeon processor E5-2650V2 DDR3-1866 MHz product family with QPI Technology
Clock Speed	Min. 2.6 GHz
QPI (Quick Path Interconnect)	8.0 GT/s
Cache Memory	Min 20 MB Cache per processor or higher
Chipset	Intel C602 series chipset
Memory	24 DIMM slots ( Support up to 768GB), 32 GB DDR3-1600-MHz RDIMM installed from day one

	Support for DDR3 low-voltage DIMMs Advanced error-correcting code (ECC)
<b>RAID Controller</b>	RAID controller with on-board 512 MB data cache 6Gb/s SAS Min. RAID 0, 1, 5, 6, 10, 50, 60 SAS/SATA support
<b>Hard Disk Drives</b>	4 x 600GB 3.5-inch 15K RPM, 6Gbps SAS Hot Plug Hard Drive
<b>Hard Drive Bays</b>	Up to eight 3.5" drives or up to sixteen 2.5" drives SAS/SATA
<b>Optical Drive</b>	DVD + /-RW Drive integrated/external or Virtual media support for remote CD and DVD drives
<b>Expansion Slots</b>	Min. 6 PCI-Express Generation 3.0 slots
<b>I/O Ports</b>	Min. 3 USB 2.0, 1 Serial port
<b>Graphics Controller</b>	Integrated Intel HD Graphics
<b>Network Interface</b>	Embedded quad-port Gigabit Ethernet Port
<b>Power Supply</b>	Hot Plug, 750W Redundant Power supplies
<b>Systems Management</b>	USB Keyboard, Mouse
	Should capable to view server properties and sensors
	Should capable to monitor faults, alarms, and server status
	Should have remote Management port
<b>Warranty Period</b>	3 Years with Spare parts.

<b>13. Internet Router</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance
<b>Brand</b>	To be mentioned by the bidder
<b>Model</b>	To be mentioned by the bidder
<b>Country of Origin</b>	USA
<b>Enclosure Type</b>	Rack-mountable Modular Chassis
<b>Environmental</b>	Maintain International Quality Environmental Safety standard
<b>Quantity</b>	One (01)
<b>Part No</b>	Bidder should submit BOQ of proposed device including the details part numbers.
<b>Architecture</b>	Should be chassis based & modular architecture for scalability and should be a single box configuration for ease of management.
	Should have hardware based IPSEC VPN (3DES/AES) Encryption card. Should support IPSEC VPN, Firewall & SSL VPN features.
	Router should be quoted with AC power supply.
<b>Performance:</b>	Routing Capacity: 3.4 Gbps based on 1500 byte traffic
	Forwarding Capacity: 470 Kpps based on 64 byte packets
	Firewall Capacity: 50 Kpps based on 64 byte traffic
	Firewall Capacity: 150 Mbps based on IMIX standard traffic
	IPSEC throughput support on IMIX Traffic: 80 Mbps
	IPSEC throughput support on 64 Byte Traffic: 30 Kpps
	GRE Tunnel Throughput on IMIX Traffic: 500 Mbps
	GRE Tunnel Throughput on 64 Byte Traffic: 150Kpps
Encrypted Tunnel Capacity: 220 Tunnels	
<b>DRAM</b>	Min. 512 MB (installed) / Max 2 GB Upgradable

<b>Flash Memory</b>	Min. 256 MB (installed) / Max 4 GB Upgradable
<b>Interfaces Requirements</b>	Min. 3 x 10/100/1000Base-T - RJ-45, Routing Port
	Min. 4 x 10/100/1000 Base-T - RJ-45, Lan Port
	Management : 1 x console
	Serial : 1 x auxiliary - RJ-45
	USB : 2 x USB 2.0 Type A
<b>Expansion Slots</b>	Min. 4 WAN Interface Slots for future interface expansion
<b>Security</b>	Device should have hardware-based cryptography acceleration (IPSec + Secure Sockets Layer [SSL])
	Should support SUITE-B VPN Encryption mechanism
	Should Dynamic VPN to connect remote VPN devices
	Should have stateful Firewall & support Intrusion Prevention
<b>Data Link Protocol</b>	Ethernet, Fast Ethernet, Gigabit Ethernet.
<b>Interface support</b>	3.7G HSPA+ module
	T1/E1, Channelized E1/T1, FXS, FXO
<b>Protocols</b>	IPv4, IPv6, static routes, Open Shortest Path First (OSPF), Border Gateway Protocol (BGP), BGP Router Reflector, Intermediate System-to-Intermediate System (IS-IS), Multicast Internet Group Management Protocol (IGMPv3), Protocol Independent Multicast sparse mode (PIM SM), PIM Source Specific Multicast (SSM), Distance Vector Multicast Routing Protocol (DVMRP), IPv4-to-IPv6 Multicast, MPLS, Layer 2 and Layer 3 VPN, IPSec, Layer 2 Tunneling Protocol Version 3 (L2TPv3), Bidirectional Forwarding Detection (BFD), IEEE802.1ag, IEEE802.1ad, and IEEE802.3ah.
<b>Encapsulations</b>	Generic routing encapsulation, Ethernet, 802.1q VLAN, Point-to-Point Protocol, Multilink Point-to-Point Protocol (MLPPP), High-Level Data Link Control (HDLC), Serial (RS-232, RS-449, V.35).
<b>Voice and Video support</b>	Should have 3 slots over for the Digital Signal Processing cards for Voice and Video for Future use
	Router Should have the capability to support Voice features like Call Control and Remote site Telephony Survival.
<b>QoS Features: Shall support the following</b>	QoS, Class-Based Weighted Fair Queuing, Weighted Random Early Detection, Hierarchical QoS, Policy-Based Routing (PBR) or similar technology, Performance Routing, and Network base Application inspection and treatment.
	QoS for tunnel interface.
	Shall support WAN traffic TCP optimization mechanism
	Shall support Modular Quality of Service.
<b>Compliant Standards</b>	IEEE 802.3, IEEE 802.1Q, IEEE 802.3af, IEEE 802.3ah, IEEE 802.1ag
<b>Monitoring</b>	Should have Telnet , SSH, SNMP, Remote Monitoring (RMON), syslog, NetFlow / SFlow / Jflow
	Should have IPv4 and IPv6 Packet Capture for analysis using an external tool such as Wireshark features for troubleshooting
	Should have capability to monitor events and take informational, corrective, or any desired event action when the monitored events occur or when a threshold is reached

	Support application performance monitoring
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty should be provided for this unit from the date of successful commissioning

<b>14. Internet Firewall with Application Visibility &amp; Web Security</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance
<b>Brand</b>	Any International Reputed Brand
<b>Model</b>	To be mentioned by the bidder
<b>Country of Origin</b>	USA
<b>Enclosure Type</b>	19-in rack mountable, Rail kit Should installed from day one
<b>Environmental</b>	Maintain International Quality Environmental Safety Standard
<b>Quantity</b>	One (01)
<b>Part No</b>	Bidder should submit BOQ of proposed device including the details part numbers.
<b>Architecture</b>	The Firewall should be an appliance based rack mountable firewall. Firewall should have content filter (like web filter, application detection and visibility control) feature from day one
	The Firewall should have innovative extensible multi core processor design and software architecture that enables to easily install additional security services.
	Firewall should be on purpose built hardware platform and should not use any of the commercially available operating system.
	Firewall should have separate bus system
	Should have minimum 7 GB System Memory and minimum 7 GB Flash Memory
<b>Interface Requirement</b>	Firewall device should have at least 8 x 1GE interfaces as Traffic interface from day 1.
	Firewall device should have one expansion module slot for future expansion
	Firewall can be upgraded to 13 ports 1GE interfaces in future
	Expansion Interface module should support optical Gigabit Ethernet interfaces.
	Should have 1 console and auxiliary port.
<b>Firewall Performance</b>	Minimum 2.0 Gbps statefull firewall traffic inspection throughput or more
	Minimum 1.0 Gbps statefull firewall multi-protocol traffic inspection throughput
	Minimum 650 Mbps Next-Generation (NG) firewall / content firewall /multiprotocol traffic throughput
	3DES VPN performance should be minimum 290 Mbps
	IPSec VPN peers minimum >= 750
	Minimum concurrent connection >= 5,00000

	Minimum New Connections/Second >= 19,000
	Support for Jumbo frames of up to 9000 bytes
	Minimum Security Contexts/virtual firewall (VSYS) 2 and Can be upgradable up to 20.
	Firewall should have high-availability Active/Active and Active/Standby
<b>Firewall Features</b>	The Firewall should support transparent (Layer 2) firewall or routed (Layer 3) firewall operation
	Support Load sharing of traffic
	Support Ether Channel / Link Aggregation Protocol for Link Failure protection
	Firewall should support maximum vlans 200
	Firewall should support static NAT, Policy based NAT and PAT
	Firewall Should support antimalware capabilities, including antivirus, botnet traffic filter and antispysware
	Firewall should support IPSec data encryption
	Firewall should support client based IPSec VPN Tunnels
	Firewall should support IPSec NAT Traversal
	Support for Standard Access Lists and Extended Access Lists to provide supervision and control.
	Control SNMP access through the use of SNMP with MD5 authentication.
	Implement Access Lists on the router to ensure SNMP access only to the SNMP manager or the NMS workstation.
	Support Multiple Privilege Levels for access.
	Support for Remote Authentication Dial-In User Service (RADIUS) and AAA or similar protocol
	IPS should have event correlation technology for detection, blocks multi-event attacks and malware in real time.
	Supports full TCP/IP and application protocol state, spanning multiple packets in flows and support Full flow normalization for proper packet ordering.
	Support SYN detection and protection for both targets and IPS devices.
	Support detection for Port Scan including full connect, SYN stealth, FIN stealth, and UDP scans
	Support built-in custom signature tool to add, copy, and modify existing signatures.
<b>Application Control Features</b>	<b>Device should have 3 years Application Visibility &amp; Web security license included from day one</b>
	Device should support Granular Application, User, and Device Control mechanism
	Device can blocks port and protocol-hopping applications such as Skype and other peer-to-peer applications
	Device can identify 1100 applications and 140,000 micro-applications for granular control on application
	Device can Support at least 75 URL categories & More than 19 million URLs categorized
	Device can control users by identifying user locations or type of device being used by users
	Device can integrate with Active Directory, LDAP, Kerberos
	Device should support URL filtering to granular control of web traffic

	Device should have threat intelligence inputs for near-real-time protection from zero-day malware protection
	Device should have Layer 7 context-aware policies and stateful firewall features
	Support central management to management of context-aware firewalls policies
<b>Management Features</b>	Support for Built-in Management Software for simple, secure remote management of the security appliances through integrated, Web-based GUI.
	Support accessible through variety of methods, including console port, Telnet, and SSHv2.
	Support for both SNMPv2 and SNMPv2c, providing in-depth visibility into the status of appliances.
	Support real time monitoring of the firewall through the management console or through external syslog servers.
	Should ensure critical messages are not lost under busy network conditions by providing message buffering locally on the appliance.
	Should have capability to import configuration and software files for rapid provisioning and deployment using Trivial File Transfer Protocol (TFTP), HTTP, HTTPS
	Support for using both SSHv1 and SSHv2 to remotely manage the security appliances, providing improved compatibility with third-party SSH tools.
	Should capable to perform configuration rollback and offers the ability to store and use multiple configurations and software images in compact flash memory.
	Support prevention of unauthorized access to sensitive configuration data, certificates, and key material stored on the security appliance by automatically wiping flash memory contents if an asset recovery or password reset procedure occurs.
	Support for out-of-band management through a dedicated GE Ethernet management interface.
	Support Packet Capturing for powerful troubleshooting capabilities by providing robust packet-capturing facilities on each interface. Support for several methods of accessing captured packets, including through the console, secure Web access, or a file exported to a TFTP server
	Should capable to provide a convenient method for alerting administrators when critical events are encountered, by sending e-mail alert messages to administrator defined e-mail addresses.
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, Application Visibility, Web security license should be 3 years. Minimum Three (03) year warranty should be provided for this unit from the date of successful commissioning

15. Core Switch	
Features	Specifications
Quality	ISO 9001/9002 for manufacturer, FCC Class A/B for quality Assurance
Brand	To be mentioned by the bidder
Model	To be mentioned by the bidder
Country of Origin	USA
Quantity	One (01)
Enclosure Type	Rack-mountable Chassis
Environmental	Maintain International Quality Environmental Safety Standard
Part No	Bidder should submit BOQ of proposed device including the details part numbers
General Features	The switch should have minimum 24 x 10/100/1000 SFP Ports and 4 x 1 Gigabit Ethernet SFP uplink ports
	The switch should have minimum 4 SFP ports uplinks from day one.
	Switch should have stacking feature with 60 Gbps stack throughput
	Switch has 10 x 1 GE Single mode SFP modules & 05 x 1 GE Copper Module (OEM Original Module) installed from day one
	Switch should have redundant Power supply from day one
Performance	Minimum of 155 Gbps switching fabric capacity
	Forwarding rate >= 65 Mpps
	Should support 9216 byte jumbo frames
	Number of Switch Virtual Interface >= 900 or more
	Support for up to 11, 000 MAC addresses on VLAN, should support up to 11,000 unicast routes in routing & 1000 IGMP groups and multicast routes
Layer-2 Features	Support IEEE 802.1Q VLAN encapsulation. Up to 1000 VLANs per switch.
	Support for Automatic Negotiation of Trucking Protocol, to help minimize the configuration & errors.
	Support Centralized VLAN Management. VLANs created on the Core Switches should be propagated to all the other switches automatically, thus reducing the overhead of creating / modifying / deleting VLANs in all the switches eliminating the configuration errors & troubleshooting.
	Support Spanning-tree protocols for fast convergence
	Support 802.1d, 802.1s, 802.1w, 802.3ad
	Support Spanning-tree root guard to prevent other edge switches becoming the root bridge.
	Support IGMP snooping v1, v2 and v3



	Support Link Aggregation Protocol (LACP)
	Support for detection of Unidirectional links and disable them to avoid problems such as spanning-tree loops.
	Support for switch port auto recovery to automatically re- enable a link that is disabled because of a network error.
	Support Automatic media-dependent interface crossover automatically
<b>Basic L3 Feature</b>	Basic IP unicast routing protocols (static, RIPv1, and RIPv2,RIPng,)
	Support for IPv4 unicast routing protocols like OSPF, BGPv4 and IS-ISv4 in future if required.
	Support for IPv6 routing protocols like OSPFv3 in future if required.
	Support IPv6 features in hardware
	Support for Protocol Independent Multicast (PIM) for IP multicast routing, PIM sparse mode (PIM-SM), PIM dense mode (PIM-DM), PIM sparse-dense mode and Source Specific Multicast (SSM) in future if required.
	Support Protocol Independent Multicast (PIM) for IP Multicast routing, including PIM sparse mode (PIM-SM), PIM dense mode (PIM-DM), and PIM sparse-dense mode.
	Support for Multicast VLAN registration (MVR) to continuously send multicast streams in a multicast VLAN while isolating the streams from subscriber VLANs for bandwidth and security reasons.
<b>QoS Features</b>	Support 802.1p (CoS) and DSCP field classification, marking and re-classification based on per-packet by source and destination IP address, MAC address, or Layer 4 TCP/UDP port number.
	Support Control plane and data plane QoS ACLs for security and threat mitigation
	Support Weighted tail drop (WTD) to provide congestion avoidance
	Support Eight egress queues per port
	Support Strict priority queuing for high-priority packets
	Support Rate limiting based on source and destination IP TCP/UDP information address, source and destination MAC address, Layer 4
	Support 60 aggregate or individual policers for each Fast Ethernet or GbE
	Support for Automatic Quality of Service for easy configuration of QoS features for critical applications.
<b>Network security features</b>	Support IEEE 802.1x and port-based security
	Support IPv6 ACLs to filter IPv6 traffic.
	Support Port-based ACLs for Layer 2 interfaces to allow application of security policies on individual switch ports.
	Support Unicast MAC filtering to prevent the forwarding of any type of packet with a matching MAC address.

	Support RADIUS authentication to enable centralized control of the switch and restrict unauthorized users from altering the configuration.
	Support MAC addresses notification to allow administrators to be notified of users added to or removed from the network.
	Support DHCP snooping to allow administrators to ensure consistent mapping of IP to MAC addresses.
	Support Port security to secure the access to an access or trunk port based on MAC address.
	Support Multilevel security on console access to prevent unauthorized users from altering the switch configuration.
	Support BPDU Guard feature to avoid accidental Layer 2 topology loops.
	Support multiple level of security on console port for device access
	Support Dynamic ARP Inspection and IP Source guard.
	Device should support security on Layer 2, Ethernet data confidentiality and integrity on host facing ports, protecting against man-in-the-middle attacks (snooping, tampering, and replay)
<b>Management</b>	Support Telnet/SSH, SNMP, management
	Support for enhanced traffic management, monitoring, and analysis, Remote Monitoring (RMON) software agent should support RMON groups (history, statistics, alarms, and events).
	Support Layer 2 troubleshoots to ease troubleshooting by identifying the physical path that a packet takes from source to destination.
	Support Event Manager for customizable event correlation and policy actions during failure/error threshold exceed
	Support Domain Name System (DNS) , NTP, TFTP
	Support RMON I and II standards
	Support SNMPv1, SNMPv2c
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty should be provided for this unit from the date of successful Commissioning

<b>16. Core Firewall with IPS</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	<b>ISO 9001/9002 for manufacturer, FCC Class A/B for quality Assurance</b>
<b>Quantity</b>	One (01)
<b>Brand</b>	Any International Reputed Brand
<b>Model</b>	Please mention
<b>Country of Origin</b>	USA/EU
<b>Enclosure Type</b>	1 RU, 19-in rack mountable, Rail Kit should be installed from day one
<b>Architecture</b>	The Firewall should be an appliance based rack mountable firewall with Next Generation IPS subscription from day one.
	Firewall should be on purpose built hardware platform and should not use any of the commercially available operating system.
	Firewall should have separate bus system
	Should have minimum 8 GB System Memory and minimum 8 GB Flash Memory
<b>Interface Requirement</b>	Firewall device should have at least 6 x 1GE interfaces as Traffic interface from day 1.
	Firewall device should have one expansion module slot for future expansion and Firewall can be upgraded to (6+6)12 ports 1GE interfaces in future
	Expansion Interface module should support optical Gigabit Ethernet interfaces.
	Firewall should have at least one dedicated 1GE port for management
<b>Firewall Performance</b>	Should have 1 RJ-45 console port
	Minimum 1.2 Gbps Firewall throughput
	Integrated firewall and IPS throughput should be at least 399 Mbps
	3DES VPN performance should be minimum 249 Mbps
	Firewall should have minimum 250000 concurrent connection
	Minimum New Connections/Second >= 15,000
	Support for Jumbo frames of up to 9000 bytes
	Maximum VPN tunnels>= 250 IPSec Tunnels
	2 Security Contexts from day 1
	Maximum 5 Security Contexts in future
Support Active/Active and Active/Standby	
<b>Firewall Features</b>	The Firewall should support transparent (Layer 2) firewall or routed (Layer 3) firewall operation
	Support Ether Channel / Link Aggregation Protocol for Link Failure protection
	Firewall should support maximum vlan 100
	Firewall should support static NAT, Policy based NAT and PAT
	Firewall Should support antimalware capabilities, including antivirus, botnet traffic filter and antispysware
	Firewall should support IPSec data encryption
	Firewall should support client based IPSec VPN Tunnels
	Firewall should support IPSec NAT Traversal
	Support for Standard Access Lists and Extended Access Lists to provide supervision and control
Control SNMP access through the use of SNMP with MD5 authentication.	

	Intrusion prevention System from day 1
	Support Multiple Privilege Levels for access
	Support for Remote Authentication Dial-In User Service (RADIUS) and AAA or similar protocol
<b>IPS Features</b>	<b>Next Generation Intrusion Prevention System (IPS) Three (03) year subscription should be included from day one.</b>
	IPS should have Application inspection control of HTTP, port 80 misuse/application tunneling, FTP, mime type filtering. DHCP, DNS, FTP, file sharing (peer-to-peer, Finger, HTTP, HTTPS, IMAP, Ident, LPR, NNTP, NTP, POP, R-Service, RPC, MSRPC, SMTP, SNMP, SOCKS, SQL, SSH, Telnet TFTP, H.323, H.225, WINS, MSSQL, IRC, LDAP, SMB, TNS, and anomaly based day-zero scanning worm protection.
	IPS should detect GRE, IP-in-IP, MPLS, and IPv6 tunneling protocols.
	IPS should be able to protect malicious traffic in IPv4, IPv6, and hybrid IPv6 and IPv4 networks environment
	IPS should have DDoS and DoS anomaly detection and protection mechanism with automatic threshold configuration
	IPS should have event correlation technology for detection, blocks multi-event attacks and malware in real time.
	Supports full TCP/IP and application protocol state, spanning multiple packets in flows and support Full flow normalization for proper packet ordering.
	Support SYN detection and protection for both targets and IPS devices.
	Support detection for Port Scan including full connect, SYN stealth, FIN stealth, and UDP scans
	Support built-in customize signature tool to add, copy, and modify existing signatures.
	IPS should support the following Detection features:
	• Protocol anomaly detection
	• Statistical anomaly detection
	• Application anomaly detection
	• Statistical analysis
	• Evasion protection
	• Vulnerability-based signature detection
	• Exploit-based signature detection
	• Session normalization and evasion detection
	IPS should support the following Day-Zero Protection features:
	• Unknown exploit variant protection
	• Unknown exploit protection
	• Unknown vulnerability protection (H.323, SIP, SNMP, HTTP, FTP)
	• Day-zero worm protection
	IPS should be able to detect signatures of exploits for high-severity file-based, Trojan, spyware, and virus attacks.
<b>Management Features</b>	<b>The Firewall should have included Virtual Management Software supporting at least 2 Firewall device management</b> for simple, secure remote management of the security appliances through integrated, Web-based GUI.
	Support accessible through variety of methods, including console port, Telnet, and SSHv2.

	Support for both SNMPv2 and SNMPv2c, providing in-depth visibility into the status of appliances.
	Support real time monitoring of the firewall through the management console or through external syslog servers.
	Should ensure critical messages are not lost under busy network conditions by providing message buffering locally on the appliance.
	Should have capability to import configuration and software files for rapid provisioning and deployment using Trivial File Transfer Protocol (TFTP), HTTP, HTTPS
	Support for using both SSHv1 and SSHv2 to remotely manage the security appliances, providing improved compatibility with third-party SSH tools.
	Should capable to perform configuration rollback and offers the ability to store and use multiple configurations and software images in compact flash memory.
	Support prevention of unauthorized access to sensitive configuration data, certificates, and key material stored on the security appliance by automatically wiping flash memory contents if an asset recovery or password reset procedure occurs.
	Support Packet Capturing for powerful troubleshooting capabilities by providing robust packet-capturing facilities on each interface. Support for several methods of accessing captured packets, including through the console, secure Web access, or a file exported to a TFTP server
	Should capable to provide a convenient method for alerting administrators when critical events are encountered, by sending e-mail alert messages to administrator defined e-mail addresses.
<b>Warranty</b>	<b>3 Year's OEM Warranty &amp; 3 Year's IPS subscription with Manufacturer's part-number should be mentioned.</b>

<b>17. Server farm &amp; DMZ Switch</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	<b>ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance</b>
<b>Brand</b>	<b>Any International Reputed Brand</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>USA</b>
<b>Form factor</b>	Rack Mountable
<b>Environmental</b>	Maintain International Quality Environmental Safety Standard
<b>Quantity</b>	Two (02)
<b>General Features</b>	Should have min 24 x 10/100/1000 Gigabit Ethernet Ports & 4 x 1 Gigabit SFP uplink ports. The switch should have stack option feature The switch should be capable for stack option with minimum 70 Gbps throughput
<b>Performance</b>	Minimum Switching bandwidth - minimum 200 Gbps Minimum Forwarding bandwidth - minimum 100 Gbps

	Forwarding rate (64-Byte L3 Packets) - minimum 70 Mpps
	MTU: Minimum 9198 bytes
	Jumbo Frame: 9216 bytes
	Switch should optionally support stacking of multiple switches with single management IP address
<b>Layer-2 Features</b>	Supported RFC: IEEE 802.1p, IEEE 802.1Q, IEEE 802.1ab, IEEE 802.1X, IEEE 802.1w, IEEE 802.3ad, IEEE 802.3ah, IEEE 802.3x, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z
	Support port Auto negotiation, MDIX, LACP, UDLD
	Support IGMP Snooping for IPv4 and IPv6 MLD v1 and v2
	Support Remote Switch Port Analyzer (RSPAN)
	IEEE 802.1Q VLAN encapsulation. Upto 1000 VLANs should be supported. Support for 4000 VLAN IDs.
<b>Network security features</b>	802.1X Features: Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization.
	Support IPv6 First-Hop Security for protecting against rogue router advertisements, address spoofing, fake DHCP replies and other risks in IPv6 technology
	Support Port Security, Dynamic ARP Inspection, and IP Source Guard
	Support Private VLANs, Private VLAN Edge, Spanning Tree Root Guard (STRG), Bridge protocol data unit (BPDU) Guard, IGMP filtering
	Support Unicast Reverse Path Forwarding (RPF)
	Support Multidomain Authentication, RADIUS authentication and Multilevel security on console access
	Support Access Control Lists for Pv6 and IPv4 for security and QoS
	Support VLAN ACLs, Router ACLs, Port-based ACLs
	Support Switched Port Analyzer (SPAN), MAC Address Notification,
<b>QoS Features</b>	Support automatic configuration of QoS
	Support eight egress queues per port
	Support congestion avoidance feature like SRR/SRR/similar protocol
	Support 250 aggregate or individual policies per port.
	Support 802.1p class of service (CoS) and Differentiated Services Code Point (DSCP) classification, with marking and reclassification on a per-packet basis by source and destination IP address, MAC address, or Layer 4 TCP/UDP port number.
	Support QoS across the stack/virtual switch members
	Support Rate limiting is provided based on source and destination IP address, source and destination MAC address, Layer 4 TCP/UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps
<b>Redundancy</b>	Support Link Aggregation or similar technology across different members of the stack / virtual switch members for high resiliency
	Support link redundancy with convergence time less than 100 milliseconds
	Support IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP)
<b>Management</b>	Support diagnostic commands and system health checks within the switch

	Support automatic configuration of QoS
	Support Remote Monitoring (RMON) software with four RMON groups (history, statistics, alarms, and events).
	support Layer 2 troubleshoot features
	Support SSHv2, Telnet, console, NTP, DNS, TFTP, DHCP
	Support RMON I and II standards
	Support SNMP v1, v2c, and v3
<b>Manufacturer part number</b>	Bidder should submit BOQ of proposed device including the details part numbers and Manufacturer Warranty.
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty should be provided for this unit from the date of successful commissioning.

18. San Switch	
Features	Specifications
<b>Quality</b>	<b>ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance</b>
<b>Brand</b>	<b>Any International Reputed Brand</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>USA</b>
<b>Form factor</b>	Rack Mountable
<b>Environmental</b>	Maintain International Quality Environmental Safety Standard
<b>Quantity</b>	One (01)
<b>General Features</b>	Should have min 24 x 10/100/1000 Gigabit Ethernet Ports & 4 x 1 Gigabit SFP uplink ports.
	The switch should have stack option feature
	The switch should be capable for stack option with minimum 70 Gbps throughput
<b>Performance</b>	Minimum Switching bandwidth - minimum 200 Gbps
	Minimum Forwarding bandwidth - minimum 100 Gbps
	Forwarding rate (64-Byte L3 Packets) - minimum 70 Mpps
	MTU: Minimum 9198 bytes
	Jumbo Frame: 9216 bytes
	Switch should optionally support stacking of multiple switches with single management IP address
<b>Layer-2 Features</b>	Supported RFC: IEEE 802.1p, IEEE 802.1Q, IEEE 802.1ab, IEEE 802.1X, IEEE 802.1w, IEEE 802.3ad, IEEE 802.3ah, IEEE 802.3x, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z
	Support port Auto negotiation, MDIX, LACP, UDLD
	Support IGMP Snooping for IPv4 and IPv6 MLD v1 and v2
	Support Remote Switch Port Analyzer (RSPAN)
	IEEE 802.1Q VLAN encapsulation. Upto 1000 VLANs should be supported. Support for 4000 VLAN IDs.

<b>Network security features</b>	802.1X Features: Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization.
	Support IPv6 First-Hop Security for protecting against rogue router advertisements, address spoofing, fake DHCP replies and other risks in IPv6 technology
	Support Port Security, Dynamic ARP Inspection, and IP Source Guard
	Support Private VLANs, Private VLAN Edge, Spanning Tree Root Guard (STRG), Bridge protocol data unit (BPDU) Guard, IGMP filtering
	Support Unicast Reverse Path Forwarding (RPF)
	Support Multidomain Authentication, RADIUS authentication and Multilevel security on console access
	Support Access Control Lists for Pv6 and IPv4 for security and QoS
	Support VLAN ACLs, Router ACLs, Port-based ACLs
	Support Switched Port Analyzer (SPAN), MAC Address Notification,
<b>QoS Features</b>	Support automatic configuration of QoS
	Support eight egress queues per port
	Support congestion avoidance feature like SRR/SRR/similar protocol
	Support 250 aggregate or individual policies per port.
	Support 802.1p class of service (CoS) and Differentiated Services Code Point (DSCP) classification, with marking and reclassification on a per-packet basis by source and destination IP address, MAC address, or Layer 4 TCP/UDP port number.
	Support QoS across the stack/virtual switch members
	Support Rate limiting is provided based on source and destination IP address, source and destination MAC address, Layer 4 TCP/UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps
<b>Redundancy</b>	Support Link Aggregation or similar technology across different members of the stack / virtual switch members for high resiliency
	Support link redundancy with convergence time less than 100 milliseconds
	Support IEEE 802.1s/w Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP)
<b>Management</b>	Support diagnostic commands and system health checks within the switch
	Support automatic configuration of QoS
	Support Remote Monitoring (RMON) software with four RMON groups (history, statistics, alarms, and events).
	support Layer 2 troubleshoot features
	Support SSHv2, Telnet, console, NTP, DNS, TFTP, DHCP
	Support RMON I and II standards
Support SNMP v1, v2c, and v3	
<b>Manufacturer part number</b>	Bidder should submit BOQ of proposed device including the details part numbers and Manufacturer Warranty.
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty should be provided for this unit from the date of successful commissioning.



<b>19. Access Switch</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	<b>ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance</b>
<b>Brand</b>	<b>To be mentioned by the bidder</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>USA</b>
<b>Environmental</b>	Maintain International Quality Environmental Safety standard
<b>Form factor</b>	Rack Mountable with Rack Mounting Kit
<b>Quantity</b>	Nine (09)
<b>Environmental</b>	Maintain International Quality Environmental Safety standard
<b>General Features</b>	Should have min 24 x 10/100 Ethernet Ports & 2 Dual Purpose Gigabit Ethernet SFP uplink ports from day one
	Each Switch has 1 x 1 GE Single mode SFP modules (OEM Original Module) installed from day one.
	Min DRAM 128 MB, Min Flash 64 MB
<b>Performance</b>	Minimum Forwarding bandwidth - minimum 16 Gbps
	Forwarding rate (64-Byte L3 Packets) - minimum 6.5 Mpps
	MTU: Minimum 9000 bytes
	Jumbo Frame: 9018 bytes
<b>Layer-2 Features</b>	IEEE 802.1Q VLAN encapsulation. Upto 255 VLANs should be supported. Support for 4000 VLAN IDs.
	Supported RFC: IEEE 802.1p, IEEE 802.1Q, IEEE 802.1ab, IEEE 802.1X, IEEE 802.1w, IEEE 802.3ad, IEEE 802.3ah, IEEE 802.3x, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z
	Support port Auto negotiation, MDIX, LACP, UDLD
<b>Security</b>	Support 802.1X, Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization
	Support Port-based ACLs, VLAN ACLs
	Support IPv6 ACLs
	Support Unicast Reverse Path Forwarding (RPF)
	Support Port Security, Dynamic ARP Inspection, and IP Source Guard
	Support Switched Port Analyzer (SPAN), MAC Address Notification,
	Support to verify and authentication of OS images
<b>QoS Features</b>	Support automatic configuration of QoS
	Support four egress queues per port
	Support congestion avoidance feature like SRR/SRR/similar protocol
	Support 64 aggregate or individual policers per port.
	Support Rate limiting is provided based on source and destination IP address, source and destination MAC address, fields, using QoS ACLs (IP ACLs or MAC ACLs), class maps, and policy maps
	Support 802.1p class of service (CoS) and Differentiated Services Code Point (DSCP) classification, with marking and reclassification on a per-packet basis by source and destination IP address, MAC address, or Layer 4 TCP/UDP port number.

<b>Management</b>	Support diagnostic commands and system health checks within the switch
	Support Remote Monitoring (RMON) software with four RMON groups (history, statistics, alarms, and events).
	support Layer 2 troubleshoot features
	Support SSHv2, Telnet, console, NTP, DNS, TFTP, DHCP
	Support RMON I and II standards
	Support SNMP v1, v2c, and v3
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty should be provided for this unit from the date of successful commissioning.

<b>20. Network Management System:</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	<b>ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance</b>
<b>Brand</b>	<b>To be mentioned by the bidder</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>USA</b>
<b>Quantity</b>	01 (One)
<b>Software functional requirements</b>	The Network management System (NMS) should be single pane-of-glass solution for complete end-to-end infrastructure management with necessary required software and licenses.
	The Network management System (NMS) shall be able to manage at least 25 devices and license need to be provided from day one
	Network devices like Routers, switches and other SNMP based devices.
<b>Operational features</b>	Support workflows to deployment, and operational tasks
	Support dashboards and views of relevant information for troubleshooting.
	Support glance updates of network status through web-client or mail
	Support Mobile application for smart phone devices to access to view, troubleshoot, and resolve network issues anywhere and anytime
	Support Integration with knowledge base helps to provide service and support, product updates, best practices, and reports to improve network availability
	Support service request creation to fix problems
	Support protocol support helps improve accuracy and completeness, including ping, Link Layer Discovery Protocol (LLDP), Address Resolution Protocol (ARP), Border Gateway Protocol (BGP), Open Shortest Path First (OSPF), and route table lookups.
	Support grouping and site profiles to manage networks by associating network elements to user groups or to a hierarchical campus/area, building, and floor model.

	Support network inventory, discovery, manual and bulk import, and software management
	Support best practices and design configuration templates to enable device and service deployment.
	Support composite/combined templates to provide flexibility and packaging of individual templates into reusable, purpose-built configurations for consistent and quicker network designs.
	Support centralized monitoring of wired access networks to maintain robust performance and optimal access connectivity.
	Support configuration templates for Application Visibility and Control, Firewall, VPN), dynamic multipoint VPN, , access control lists (ACLs) deployment and management
	Support device-level support for ACLs, Routing Information Protocol (RIP), OSPF, static routes, Ethernet interfaces, and Network Address Translation (NAT) configuration
	Support reports to use to monitor the system and network health as well as troubleshoot problems.
	Support AAA for local, RADIUS or Single Sign-on options
	support Role-based access control
	Support workflows and tools to help administrators assess service disruptions, receive notices about performance degradation, research resolutions, and take action to remedy non-optimal situations.
<b>Manufacturer part number</b>	Bidder should submit BOQ of proposed software including the details part numbers and Manufacturer Warranty.
<b>Warranty</b>	Mentioning manufacturer warranty part number should be quoted, minimum One (01) year warranty (Software Update & upgradation) should be provided for this unit from the date of successful commissioning.

<b>21. Bandwidth Controller:</b>	
<b>Features</b>	<b>Specifications</b>
<b>Quality</b>	<b>Product or OEM should be ISO 9001-2000 Certified</b>
<b>Brand</b>	<b>To be mentioned by the bidder</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>To be mentioned by the bidder</b>
<b>Quantity</b>	One (01)
<b>Architecture</b>	Proposed solutions should be appliance based solutions with inbuilt HDD for storage of Logs & reports.
	Hardware platform must be 64 bit
	Must be based on Multicore Parallel Processing Architecture
	10 number of 10/100/1000 interface with Hardware Bypass
	1,00000 number of new connection
	32,00,000 number of concurrent connection
	12,000 Mbps Firewall throughput
2,900 Mbps AV throughput	

	1300 Mbps IPSec VPN throughput
	4000 Mbps IPS throughput
	1700 Mbps UTM Throughput
	4GB Flash, 2 GB Memory
	250GB HDD for reporting on appliance
	The proposed solution should have unrestricted user/node license.
	The proposed solution must work as standalone HTTP proxy server with integrated Firewall, Anti Virus, Anti Spam, Content filtering, IPS.
	The proposed solution must support User based policy configuration for security & internet management.
	The proposed solution should provide on appliance reports based on user not only on the base of IP address.
	Proposed appliance should support MIX mode deployment.
<b>Administration, Authentication &amp; General Configuration</b>	The proposed solution should support administration via secured communication over HTTPS, SSH and from Console.
	The proposed solution should be able to export and import configuration backup including user objects
	The proposed solution should support Route (Layer 3)/transparent mode (Layer 2).
	The proposed solution should support integration with Windows NTLM, Active Directory, LDAP, Radius or Local Database for user authentication.
	The proposed solution must support automatic transparent Single Sign on (ASSO) for user authentication. SSO must be proxy independent and support all applications for authentication.
	The proposed solution should support Dynamic DNS configuration.
	The proposed solution should provide bandwidth utilization graph on daily, weekly, monthly or yearly for total or individual ISP link.
	The proposed solution should provide real time data transfer/bandwidth utilization done by individual user/ip/application.
	The proposed solution should support Parent Proxy with IP/FQDN support.
	The proposed solution should support NTP.
	The proposed solution should support user/ip/mac binding functionality to map username with IP address & MAC address for security reason.
	The proposed solution should have multi lingual support for Web admin console.
	The proposed solution should support Version roll back functionality.
	The proposed solution should support session time out & Idle time out facility to forcefully logout the users.
	The proposed solution should support ACL based user creation for administration purpose.
	The proposed solution should support LAN bypass facility in case appliance is configured in Transparent mode.
	The proposed solution should support inbuilt PPPOE client and should be capable to automatically update all required configuration whenever PPPOE get changed.
	The proposed solution should support SNMP v1, v2c & v3.
	The proposed solution must be firmware based instead of normal software with capability to keep three firmware instant roll back.
	The proposed solution must provide flexible, granular role-based GUI administration.

	<p>The proposed solution must provide support of multiple authentication servers for each module (Firewall, Different type of VPN)</p> <p>The proposed solution must support of Thin Client (Microsoft TSE, Citrix) authentication and must be able to differentiate users coming from same IP address.</p>
<b>Multiple ISP Load Balancing and Failover</b>	The proposed solution should support load balancing & failover for more than 3 ISPs.
	The proposed solution should support explicit routing based on Source, Destination, Username, Application.
	The proposed solution should support weighted round robin algorithm for Load balancing.
	The proposed solution should provide option to create failover condition on ICMP, TCP or UDP protocol to detect failed ISP connection.
	The proposed solution should send alert email to admin on change of gateway status.
	The proposed solution should have Active/Active (Round Robin) and Active/Passive gateway load balancing and failover support.
<b>High Availability</b>	The proposed solution should support High Availability Active/Passive or Active/Active
	The proposed solution should be ICSA certified High Availability solution.
	The proposed solution should send notification to admin on change of appliance status in High Availability.
	The HA traffic between two peers must be encrypted.
	The proposed solution should support Link, device & Session failure.
	The proposed solution should support automatic & manual synchronization between appliances in cluster.
<b>Firewall</b>	The proposed solution should be standalone appliance with hardened OS.
	The proposed solution should be ICSA & Webcoast checkmark certified firewall.
	The proposed solution should support stateful inspection with user based one-to-one & dynamic NAT, PAT.
	The proposed solution must support user identity as matching criteria along with Source/Destination IP/Subnet/group, destination Port in firewall rule.
	The proposed solution should facilitate to apply unified threat policy like AV/AS, IPS, Content filtering, Bandwidth policy & policy based routing decision on firewall rule for ease of use, also unified threat controls must be applied on inter zone traffic.
	The proposed solution should support user defined multi zone security architecture.
	The proposed solution should have predefine application based on port/Signature & also support creation of custom application based on port/protocol number.
	The proposed solution should support inbound NAT load balancing.
	The proposed solution should support 802.1q VLAN tagging support.
	The proposed solution should support dynamic routing like RIP1, RIP2, OSPF, BGP4.
	The proposed solution should support Cisco compliance command line interface for Static/Dynamic routing.
	The proposed system should provide alert message on Dash Board whenever default password is not changed, non secure access is allowed & module subscription is expiring.

	The proposed system must provide Mac Address (Physical Address) based firewall rule to provide OSI Layer 2 to Layer 7 security
	The proposed solution must be support IPv6 as per www.ipv6ready.org guidelines
	The proposed solution must support 3G UMTS, GSM, GPRS modem via USB interface for VPN and Gateway Failover - Load Balancing.
	The proposed solution should support Fully Qualified Domain Name (FQDN) based host and host group.
	The proposed solution should support Differentiated Services Code Point (DSCP)
<b>Proxy Solution Web content filtering</b>	The proposed solution should be webcoast checkmark certified.
	The proposed solution should be integrated solution with local database instead of quering to database hosted somewhere on the internet.
	The proposed solution must work as Standalone HTTP proxy.
	The proposed solution must have 82+ web category with 40 Million URL database.
	The proposed solution must have following features inbuilt
	a. Should able to block HTTPS based URLs with the help of Certificates.
	b. Should able to block URL based on regular expression
	c. Should support exclusion list based on regular expression
	d. Must have support to block any HTTP Upload traffic.
	e. Should able to block google cached websites on based of category.
	f. Should able to block websites hosted on Akamai.
	g. Should able to identify & block requests coming from behind proxy server on the base of username & IP address.
	h. Should able to identify & block URL translation request.
	The proposed solution should support application control blocking features as follows
	a. Should able to block known Chat application like Yahoo, MSN, AOL, Google, Rediff, Jabber etc
	b. Should support blocking of File transfer on known Chat application and FTP protocol.
	The proposed solution must block HTTP or HTTPS based anonymous proxy request available on the internet.
	The proposed solution should provide option to customize Access denied message for each category.
	The proposed solution should be CIPA compliant and should have predefined CIPA based internet access policy.
	The proposed solution should be able to identify traffic based on Productive, Neutral, unhealthy & non working websites as specified by admin.
	The proposed solution should have specific categories that would reduce employee productivity, bandwidth choking sites and malicious websites.
	The proposed solution should able to generate reports based on username, IP address, URL, groups, categories & category type.
	The proposed solution should support search criteria in reports to find the relevant data.
	The proposed solution should support creation of cyclic policy on Daily/Weekly/Monthly/Yearly basis for internet access on individual users/group of users.
	The proposed solution should support creation of internet access time policy for individual users or on group basis.
	The proposed solution should support creation of cyclic data transfer policy on Daily/weekly/Monthly/yearly basis for individual user or on group.
The proposed solution should have integrated bandwidth management.	

	The proposed solution should able to set guaranteed and burstable bandwidth per User/IP/Application on individual or shared basis.
	The proposed solution should provide option to set different level of priority for critical application.
	The proposed solution should provide option to define different bandwidth for different schedule in a single policy & bandwidth should change as per schedule on the fly.
	The proposed solution must provide web category based bandwidth management and priotization.
	The proposed solution must provide logging and extensive controls on Instant Messanging (IM) traffic for Yahoo and MSN messengers 1. Log of chat sessions for all or specific set of users. 2. Rules to control allow or deny chat, voice, web cam and file transfer for specific ID or Group of IDs. 3. Archieve of transfered files. 4. Antivirus scanning on file transfered.
<b>Warranty</b>	1 Year OEM Hardware Warranty with Part code

<b>22. Storage systems</b>	
<b>Feature</b>	<b>Description</b>
<b>Brand</b>	<b>Gartner Report based International reputed brand</b>
<b>Model</b>	<b>To be mentioned by the bidder</b>
<b>Country of Origin</b>	<b>USA</b>
<b>Quantity</b>	<b>One (01)</b>
<b>Storage Controller</b>	The Storage system must have at least two controllers running in an active-active mode with automatic failover to each other in case of one controller failure. The storage system shall not be a re-branded or re-chirstened make of another OEM. Brand and model of only the original principle owner of the technology can be offered.
<b>Cache required</b>	Dual controllers on Active mode ; controllers should support mirroring each other's cache; Minimum 8GB Cache across dual controllers.
<b>Protocols Supported</b>	The storage shall support FCP, iSCSI protocols for use with different applications and avoid any protocol related buying in future. Any hardware/software required for this functionality shall be supplied along with it in NSPOF (No Single Point Of Failure) mode per storage controller specifications above
<b>Storage Capacity</b>	The storage shall support both SAS, NL-SAS, SSD based disks simultaneously in the same enclosure. The storage shall be supplied with 14* 900GB 10K RPM SAS drives from day one
<b>Front-End connectivity</b>	The storage should be provided with 4 * 12Gbps SAS Storage front end ports as well as an additional 4 * 10 Gbps iSCSI host ports from day one

<b>Back End Connectivity</b>	The storage should be provided with 4 * 6Gbps SAS Storage backend disk ports
<b>RAID configuration</b>	The system should support RAID 0, 1, 5, 6, 1+0
<b>Storage Scalability</b>	The storage should be scalable to at least 180+ drives.
	The storage should be capable and provided with features to dynamically rebalance data during changes in the number of drives even due to failure of more than 2 drives
<b>Storage built-in functionality</b>	Dynamic volume expansion
	Thin provisioning should be provided & capable from day one for the entire storage capacity
	Dynamic capacity expansion
	Dynamic RAID level migration
	Local protection snapshots, volume copy & Remote replication software should be provided from day ONE. The remote replication software provide should be able to establish replication in synchronous as well as asynchronous mode
	The storage should support cache tiering mechanism through SSD up to 5TB for intensive performance requirements
	Dynamic mode switching from one replication mode to another mode
	Storage should deliver minimum 140000 IOPS
	Should deliver sustained throughput of 6000 MB/S
	Non-Distruptive controller fitmware upgrade.
<b>Licensing</b>	All the licenses on the storage system must be provided for an entire capacity supported by the system from day one.
<b>Upgradeability/ Investment Protection</b>	The proposed system should be field upgradeable to a higher model in the family through data-in-place upgrades without requiring forklift upgrade and without requiring replacement of the disk shelves.
<b>Management</b>	Easy to use GUI based and web enabled administration interface for configuration, storage management. Storage management alerting and reporting tools also should be bundled with the storage
<b>OS support</b>	Support for industry-leading Operating System platforms including: LINUX/UNIX , Microsoft Windows.
<b>Remote Diagnostics</b>	The proposed system should support Web based, Email facility for remote service & also support dial-in / dial-out to report errors and warnings
<b>Warranty</b>	3 years warranty should be offered with Auto Support directly from OEM.



<b>23. Category 6 UTP Cable (Qty 35 Box)</b>
Required Specification
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
<p>General Specifications:  Suitable Applications: Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG, ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6  Cable Type: U/UTP (unshielded)  Pairs, quantity: 4  Conductor Gauge, singles: 23 AWG  Conductor Material: Bare Copper  Conductors, quantity: 8  Environmental Space: Non-plenum  Outer Jacket Materials: PVC  UL Flame Test: UL 1685 UL Loading  TIA/EIA Specification: 568-B.2 Category 6  Operating Temp: -20 Deg to +75 Deg.  ROHS Compliance: Yes  Box Length: 305 Meter or 1000 ft.</p>

<b>24: Face Plate for Modular (Qty 200 Pcs)</b>
<b>Required Specifications</b>
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
<p>Modular Shuttered Dual port Faceplate, white  General Specifications:  Color : White  Mount Type: Flush  Product Type: European "6C" Style faceplates  Application : Compatible with offered Modular  Should supplied required MK Box with Face Plate</p>

<b>25: Cat6 I/O Modular (Qty 200 Pcs)</b>
Required Specification
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
<p>ANSI/TIA Category: 6  Bandwidth: 300 MHz  Data Rate: 4.8 Gb/s  Current Rating: 1.5A Max.  Dielectric Strength: 1,000 V RMS  Insulation Resistance: 200 M Ohms Min.  Contact Resistance: 1 M Ohms Min.</p>

<b>26: Cat6 Patch Panel 24 Port (Qty 9 Unit)</b>
<b>Required Specifications</b>
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
24 Port Patch Panels provide a flexible and versatile termination solution for telecommunications room rack-mounted installations. The panels can be custom configured in the field to suit practically any particular configuration. Patch Panels are compatible with offered modules Material: Panel: steel, 16 gauge, powder paint finish, black Module holder: fire-retardant plastic, UL94HB, black.

<b>27: Cat6 Patch Cord 3 Meter (Qty 200 Pcs)</b>
<b>Required Specifications</b>
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
Conductors: 24 AWG solid copper Length 3 Meter Insulation: PE Cable Core: Four twisted pairs, Filler Jacket: PVC Boots: PVC Plug: Polycarbonate. Dielectric strength: 1,000 V RMS at 60 Hz for 1 minute Voltage rating: 150 VAC maximum Current rating: 1.5 A maximum Insulation resistance: 500 Mega-ohms minimum Contact resistance: 10 milli-ohms maximum.

<b>28: Cat6 Patch Cord 1 Meter (Qty 200 Pcs)</b>
<b>Required Specifications</b>
<b>Brand: To be Mention by the bidder</b>
Country of Origin: USA
Part # To be Mention by the bidder
Conductors: 24 AWG solid copper

Length: 1 Meter  
 Insulation: PE  
 Cable Core: Four twisted pairs, Filler  
 Jacket: PVC  
 Boots: PVC  
 Plug: Polycarbonate.  
 Dielectric strength: 1,000 V RMS  
 at 60 Hz for 1 minute  
 Voltage rating: 150 VAC maximum  
 Current rating: 1.5 A maximum  
 Insulation resistance: 500 Mega-ohms minimum  
 Contact resistance: 10 milli-ohms maximum.

**29: Wire Manager  
(Qty 9 Unit)**

**Required Specifications**

**Brand: To be Mention by the bidder**

Country of Origin: USA

Part # To be Mention by the bidder

Material Type Plastic

1U Horizontal Cable Runs

Hinged removable cover opens 180 degree in the open to closed position

Large flanged pass through opening allows cable to be routed from rear of rack

Should be same brand of the copper materials

**30. 6 Core Single mode Fiber  
Qty: 1500 Mtr.**

Features	Specifications
Brand	Same as Copper cable Brand
Model	Please mention
Country of Origin	USA

<b>Specification</b>	Fiber Optic-Central Tube- Aramid Yarn - Armored/Single PE Jacket No of Core: 6 Armor Thickness : 0.15mm Outer Jacket Materials: PE Outer Jacket Nom. Thickness: 1.1mm Overall Nominal Diameter: 7.3mm Standard: IEC 60794, EIA/TIA-455 EU RoHS Compliance: Yes Typical Core Diameter: 50.0 +/- 2.5 µm Typical Cladding Diameter: 125.0 +/- 1.0 µm Fiber Characteristics																																	
	<table> <tr> <td>Typical Mode Field Diameter @ 1310nm</td> <td>9.2 ± 0.4 µm</td> </tr> <tr> <td>Typical Mode Field Diameter @ 1550nm</td> <td>10.4 ± 0.5 µm</td> </tr> <tr> <td>Cladding Diameter</td> <td>125 ± 0.7 µm</td> </tr> <tr> <td>Clad Non-Circularity</td> <td>≤ 0.7 %</td> </tr> <tr> <td>Core-Clad Concentricity Error</td> <td>≤ 0.5 µm</td> </tr> <tr> <td>Primary Coating Material</td> <td>Acrylate</td> </tr> <tr> <td>Primary Coating Diameter</td> <td>245 ± 5 µm</td> </tr> <tr> <td>Secondary Color Coating Diameter</td> <td>250 ± 10 µm</td> </tr> <tr> <td>Max. Attenuation @ 1310nm</td> <td>0.36 dB/km</td> </tr> <tr> <td>Max. Attenuation @ 1550nm</td> <td>0.22 dB/km</td> </tr> <tr> <td>Point Loss @ 1310nm &amp; 1550nm</td> <td>0.05 dB</td> </tr> <tr> <td>Zero Dispersion Wavelength</td> <td>1302 – 1322 nm</td> </tr> <tr> <td>Max. Slope @ Zero Dispersion Wavelength</td> <td>0.090 ps/(nm<sup>2</sup>·km)</td> </tr> <tr> <td>Max. PMD @ Link Design Value</td> <td>0.1 ps/√km</td> </tr> <tr> <td>Cable Cutoff Wavelength</td> <td>≤ 1260 nm</td> </tr> <tr> <td>Refractive Index @1310nm</td> <td>1.466</td> </tr> <tr> <td>Refractive Index @1550nm</td> <td>1.467</td> </tr> </table>	Typical Mode Field Diameter @ 1310nm	9.2 ± 0.4 µm	Typical Mode Field Diameter @ 1550nm	10.4 ± 0.5 µm	Cladding Diameter	125 ± 0.7 µm	Clad Non-Circularity	≤ 0.7 %	Core-Clad Concentricity Error	≤ 0.5 µm	Primary Coating Material	Acrylate	Primary Coating Diameter	245 ± 5 µm	Secondary Color Coating Diameter	250 ± 10 µm	Max. Attenuation @ 1310nm	0.36 dB/km	Max. Attenuation @ 1550nm	0.22 dB/km	Point Loss @ 1310nm & 1550nm	0.05 dB	Zero Dispersion Wavelength	1302 – 1322 nm	Max. Slope @ Zero Dispersion Wavelength	0.090 ps/(nm <sup>2</sup> ·km)	Max. PMD @ Link Design Value	0.1 ps/√km	Cable Cutoff Wavelength	≤ 1260 nm	Refractive Index @1310nm	1.466	Refractive Index @1550nm
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<b>31. Fiber Patch Panel- 24 Port 2 Unit</b>	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	<b>Same as Copper cable Brand</b>
<b>Model</b>	<b>Please mention</b>
<b>Country of Origin</b>	<b>USA</b>
<b>General Specification</b>	Low profile, takes up only one unit of rack Space — 1U = 45 mm (1.75 in.) Patch panel can be ordered in Gray or Black Universal Connector Panel and Strips allowing flexible and customized patch panel design Mounted on a hinge, swings out to allow easy access to the back of the panel, from the front Rugged design protects fiber terminations and fiber connectors Compatible with 203 mm (8 in.) Splice Organizer Tray, allows for splicing optical pigtailed  Connector capacity: 12 and 24 (two strips) (up to 48 fibers with MT-RJ or LC connectors)

	<p>Splice Tray capacity: Two 203 mm (8 in.) trays.</p> <p>3/6/12 Port Universal Adapter Strips for SC, Push-pull coupling with floating ferrule for positive locking and contact stability Ceramic ferrule and plastic housing for long term reliability Duplex version with A and B marking as per TIA/EIA-568-B.3 – for ease of administration Available in PC (MM), SPC (SM) and UPC (SM) polish for maximum performance.</p> <p>Simplex Pig Tail, SC, SPC-Polish, 2m (6ft 7in), Singlemode, OS2, SM</p>
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<b>32. Fiber Patch Panel- 6 Port</b>	
<b>Qty: 9 Unit</b>	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	<b>Same as Copper cable Brand</b>
<b>Model</b>	<b>Please mention</b>
<b>Country of Origin</b>	<b>USA</b>
<b>General Specification</b>	<p>Low profile, takes up only one unit of rack Space — 1U = 45 mm (1.75 in.) Patch panel can be ordered in Gray or Black Universal Connector Panel and Strips allowing flexible and customized patch panel design Mounted on a hinge, swings out to allow easy access to the back of the panel, from the front Rugged design protects fiber terminations and fiber connectors Compatible with 203 mm (8 in.) Splice Organizer Tray, allows for splicing optical pigtails</p> <p>Connector capacity: 12 (up to 12 fibers with MT-RJ or LC connectors) Splice Tray capacity: Two 203 mm (8 in.) trays.</p> <p>3/6 Port Universal Adapter Strips for SC, Push-pull coupling with floating ferrule for positive locking and contact stability Ceramic ferrule and plastic housing for long term reliability Duplex version with A and B marking as per TIA/EIA-568-B.3 – for ease of administration Available in PC (MM), SPC (SM) and UPC (SM) polish for maximum performance.</p> <p>Simplex Pig Tail, SC, SPC-Polish, 2m (6ft 7in), Singlemode, OS2, SM</p>

<b>33. Fiber Patch Cord (Single Mode)</b> Qty: 25	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	<b>Same as Copper cable Brand</b>
<b>Model</b>	<b>Please mention</b>
<b>Country of Origin</b>	<b>USA</b>
<b>General Specification</b>	LC - SC Duplex 50 $\mu$ m 3 m (10 ft.) OM3 Patch Cord 100% optically tested against industry standards — ensures reliability High quality ceramic ferrule — provides low insertion loss and durability Max Attenuation (dB/Km): 1.25 @ 1300nm Max Bandwidth (MHz/Km) : 500 @ 1300 nm Insertion Loss (dB) Guaranteed : 0.5 Reflectance (dB) : -20

<b>34: Server Rack with Console Monitor 42U</b> (Qty 1 Unit)	
<b>Required Specifications</b>	
<b>Brand: To be Mention by the bidder</b>	
Country of Origin: USA/Taiwan/China	
Part # To be Mention by the bidder	
42U, 800mm x 1000mm Network Device and Server Cabinet Each Cabinet Comes With Following Configuration: Elegance look, profound technique, precise dimension with world class standard. Loading capacity upto 800kg - Top Cover Fully Vented Top Fan Unit consist 4 x Exhaust Fans Front & Rear Vented Metal Door with Lock 2 x Side Cover Lift-off Type with Lock 1 x 10 Way high standard Aluminum PDU Install caster and support feet at the same time - Wire path on the top and botton can be closed - 2 x Fixed Tray - 1 x Sliding Tray - Comply with ANSI/EIA RS-310D, IEC297-2, DIN 41491, DIN41494, GB/T3047 Standard Color : Black Rack Console: 17" Rack Console Monitor with 8 Port USB KVM included with rack	

<b>35: Network Rack 42U</b> (Qty 1 Unit)	
<b>Required Specifications</b>	
<b>Brand: To be Mention by the bidder</b>	
Country of Origin: USA/Taiwan/China	
Part # To be Mention by the bidder	
42U, 800mm x 1000mm Network Device and Server Cabinet	

Each Cabinet Comes With Following Configuration:  
 Elegance look, profound technique, precise dimension with world class standard.  
 Loading capacity upto 800kg  
 - Top Cover Fully Vented  
 Top Fan Unit consist 4 x Exhaust Fans  
 Front & Rear Vented Metal Door with Lock  
 2 x Side Cover Lift-off Type with Lock  
 1 x 10 Way high standard Aluminum PDU  
 Install caster and support feet at the same time  
 - Wire path on the top and botton can be closed  
 - 2 x Fixed Tray  
 - 1 x Sliding Tray  
 - Comply with ANSI/EIA RS-310D,IEC297-2,DIN 41491, DIN41494, GB/T3047 Standard  
 Color : Black

**36: Wall Mount Rack- 12U  
 (Qty 9 Unit)**

**Required Specifications**

**Brand: To be Mention by the bidder**

Country of Origin: USA/Taiwan/China

Part # To be Mention by the bidder

12U, 600mm x 600mm Network Device Cabinet  
 Each Cabinet Comes With Following Configuration:  
 Elegance look, profound technique , precise dimension with world class standard  
 - Top Fan Unit consist 2 x Exhaust Fans  
 - Front Toughened Glass Door with durable key Lock Set  
 - Rear Vented Metal Door with Lock  
 - 2 x Side Cover Lift-off Type with Lock  
 1 x 5 Way high standard power socket  
 Wall and stand installation type, optional caster and support feet.  
 Wire path on the top and bottom can be closed  
 30 Sets Nuts and Screws  
 Colour: Black

**37. PVC Pipe  
 Qty: 1500 Rft**

Features	Specifications
Quantity	1500 Rft
Specification	PVC pipe (Size 1/1.5"); WATER QUALITY PIPE

38.PVC Flexible Pipe and Plastic channel : 1/1.5 inch dia Qty: 1300 Rft	
<b>Features</b>	<b>Specifications</b>
<b>Quantity</b>	1300 Rft
<b>Specification</b>	PVC Flexible Pipe and Plastic channel : 1/1.5 inch dia

39. PVC white colored Plastic channel Qty: 1300 Rft	
<b>Features</b>	<b>Specifications</b>
<b>Quantity</b>	1300 Rft
<b>Specification</b>	PVC white colored Plastic channel : 1/2 , 1.5/2 inch dia

40. Accessories Qty: 1 Set	
<b>Features</b>	<b>Specifications</b>
<b>Quantity</b>	1 Lot
<b>Specification</b>	Required Accessories for Copper & Fiber Cable Installation (Cable Tie, Screw, GI wire, Royal Plug, Royal Bolt, PVC Pipe Joiner , Clump, PVC Tape, Masking Tape, Rivet, High quality Nylon fastener etc.)

41. Node Installation Qty: 200 Node	
<b>Features</b>	<b>Specifications</b>
<b>General Feature</b>	PVC pipe, channel laying UTP Cable laying, Patch panel and face plate fixing, installation and configuration, Labeling, Identification. Testing, Design and Documentation

42.Termination of Fiber/Splicing Qty: 110 Core	
<b>Features</b>	<b>Specifications</b>
<b>Specification</b>	Fiber Termination/ Fusion Splicing Work(All Splicing Should be done by Fujikura Machine)



43. Fiber cable Laying Qty: 1500 Meter	
<b>Features</b>	Specifications
<b>Specification</b>	Overhead fiber from Building Floor to Floor laying , Should follow proper method with required accessories

44. Monitor Qty: 01 unit	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	Any International Reputed Brand
<b>Model</b>	Please mention
<b>Country of Origin</b>	Korea
<b>General Specification</b>	40" LED Monitor with wifi & Lan Port support Provide with all required accessories like power cord, wall mount kit

45. Online UPS 10 KVA Qty: 01 unit	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	To be mention by the bidder
<b>Model</b>	Please mention
<b>Country of Origin</b>	USA/EU
<b>Specification</b>	Capacity: 10KVA
	Back up time: 30 Min for IT Load
	Double Conversion
	Single in Single out
	Input parameters:
	Rectifier Type: IGBT
	Input Voltage Range: Single-phase, 120VAC to 288VAC
	Input Frequency Range: 45Hz to 65Hz
	Input Power Factor: Single-phase $\geq 0.99$
	Output parameters:
	Rated Power: 10kVA / 9kW
	Rated Voltage: Single-phase, 220/230/240VAC
	Voltage Stability: 3%
	Frequency Stability: 0.25%
	Output Voltage THD: < 3% linear load, <5% non-linear load
Load Crest Factor: 3:1 (compliant with IEC 62040-3)	
Step Load Performance: 100%	
Overload Capacity:	

	Overload Capacity Performance (% rated load): 105%~125% 5mins, 125%~150% 1min, 500ms for over 150%
	System parameters and standard:
	Conversion Type: On-line double conversion
	Parallel Operation: 1+1 parallel operation
	System Efficiency: > 92.5%
	Transfer Time (power failure): No transfer time, on-line operation
	Safety Standards / Conformity: IEC/EN62040-1-1
	EMC: IEC/EN 62040-2, IEC/EN61000-3-11, IEC/EN61000-3-12, YD/T1095-2008
	Surge Protection: IEC/EN 62040-2,meeting IEC/EN61000-4-5
	Protection Level: IP20
	Communication (optional)
	SNMP/HTTP, Parallel Kit
	Battery
	Maintenance free Battery .
	Installation, testing and Commissioning of UPS including installation of,
	Related Input Output Cables Battery Cables Distribution Boxes Circuit Breakers, Etc.
Warranty	1 year

46. Auto Fire Detection & Suppression System (1 Set)	
<b>Features</b>	<b>Specifications</b>
<b>Brand</b>	Any International Reputed Brand
<b>Model</b>	Please mention
<b>Specification</b>	Fire Detection & Alarm Systems
	Conventional Fire Alarm Control Panel (1 Zone) Brand: <b>Specify</b> , Origin: USA/UK
	Heat Detector

	Flashing LED, Supply Voltage: 9to 33V, Alarm Current at 24V: 52mA, Alarm Indication: Red LED Brand: <b>Specify</b> , Origin: USA/UK
	Photo electric smoke detector Flashing LED, Supply Voltage: 9to 33V, Alarm Current at 24V: 52mA, Alarm Indication: Red LED Brand: <b>Specify</b> , Origin: USA/UK
	Alarm Bell Output: 1Meter@95dBA, 3Meter@92dBA, Current Consumption : 25mA, Dimensions: 6" Brand: <b>Specify</b> , Origin: USA/UK
	Manual Release or Break Glass Brand: <b>Specify</b> , Origin: USA/UK
	Auto Exit Sign
	Caution Sign
	1.5rm BYA FR Cable, Brand: BRB
	<b>Fire Suppression Systems</b>
2	Supply of Fire Suppression Aerosol Type: Pyrogen EXA-30E (With integrated junction Box, Brackets & PCB Card) Materials: M/S, Nozzle Outlet: Lateral , Temperature Range: -50 °C to+65 °C, Model: <b>Specify</b> Brand: <b>Specify</b> Origin: Malaysia
	Thermal Activation Device, TAD-72 (activation temp. point 72 °C) with Brackets, Connectors and FR Flying Lead, Model: <b>Specify</b> Brand: <b>Specify</b> , Origin: Malaysia
3	Installation & commissioning

47. Raised Floor for Server Room Qty: 100 sq.ft	
Features	Specifications
<b>Brand</b>	Any International Reputed Brand
<b>Model</b>	Please mention
<b>Country of Origin</b>	Please mention
<b>General Specification</b>	HPL Panel : FS: 800
	FS Panels combine and advanced steel panel design consisting of uniformly drawn cups with a newly formulated cementitious core
	Breadth Size: 600 mm x 600mm
	Panel Thickness: 35mm
	Finished Floor Height: FFH 300-450mm
	Concentrated Load: 800lbs
	Pedestal, Stringer and fasteners & other, materials will be in accordance to match for the above

	Systematically anti-static
	Fire-proof, Damp proof
	Support heavy load, easy to install, disassembly and interchange.
	Difficult to be dirty, easy to clean, decorative appearance and durable using term.
	With one Panel Lifter Double Cup Suction Type

48. Electrical Goods (lighting etc.) for Server Room			
Qty: 1 Set			
Features		Specifications	
<b>Brand</b>		Any International Reputed Brand	
<b>Model</b>		Please mention	
<b>Quantity</b>		1 Set	
General Specification			
Item	Description of Items	QTY	UoM
Controlling Equipment			
Distribution Box	DB Box with BUS-BAR:	As required	
	Sheet steel fabricated, Powder coated wall mounting, tropicalized design, indoor type, low tension switchgear Panel		
Circuit Breaker. Brand: ABB, Origin: EU			
Circuit Breaker		AS required	
Cable: Brand: BRB, Origin: Bangladesh			
Cable		As required	
Industrial/Commando Socket.			
Socket		As required	
Lighting. Brand: Energy plus or Equivalent			
Lighting	23 Watt CFL with casing	4	PCS
Accessories			
Cable Ladder & Accessories	Supply & Installation of Cable Ladder & Accessories	As required	
Installation			
Installation	Installation, Testing and Commissioning	1 Job	

49. Access Switch Type 2	
Specification	Details
Quantity	Twenty Four (24)
Brand	Any international reputed brand

Country of Origin	USA
Enclosure Type	1 RU, 19-in. rackmountable
Switch Architecture	24 Ethernet 10/100 Base-T Ports, 2 10/100/1000 Ethernet port & 2 combo mini-GBIC port, Min.16 MB flash, 128 MB RAM, Packet Buffer 4 Mb, Min. Forwarding bandwidth 12.5 Gbps, Min. Forwarding Rate (64-Byte Packet) 9.5 Mpps, Jumbo Frame: Frame sizes up to 10 KB supported on 10/100 and Gigabit interfaces
L2 Features	VLAN: 4096, MAC addresses: up to 16000, Standard 802.1d Spanning Tree support Fast convergence using 802.1w (Rapid Spanning Tree [RSTP]), enabled by default Multiple Spanning Tree instances using 802.1s (MSTP), GVRP/ GARP , IGMP. Voice VLAN
Quality Of Service	4 hardware queues, Strict priority and WRR Queue assignment based on DSCP and class of service (802.1p/CoS), Port based; 802.1p VLAN priority based; IPv4/v6 IP precedence/type of service (ToS)/DSCP based; Differentiated Services (DiffServ); classification and re-marking ACLs, trusted QoS, Ingress policer; egress shaping and rate control; per VLAN, per port, and flow based
Security	SSH secures Telnet traffic; SSH v1 and v2, SSL, 802.1X, MD5 hash; guest VLAN; unauthenticated VLAN, Supports time-based 802.1X Dynamic VLAN assignment, BPDU Guard, Protected ports, supports multiple uplinks, TCP congestion avoidance
Management and Maintenance	Configuration utility for easy browser-based device configuration (HTTP/HTTPS). Supports configuration, system dashboard, system maintenance, and monitoring. SNMP versions 1, 2c, and 3 with support for traps, and SNMP version 3 user-based security model (USM). RMON software agent supports RMON groups (history, statistics, alarms, and events). Web browser upgrade (HTTP/HTTPS) and TFTP Upgrade, Dual images for resiliency. Traffic mirroring. Up to 8 source ports can be mirrored to one destination port
Warranty	Should have minimum 1 year Warranty with Manufacturing services.

#### 50. OS for Server: Microsoft Windows Server 2012

Specification	Details
Quantity	Five (05)
Brand	Microsoft
Country of Origin	USA
General Specification	Microsoft Windows Server 2012 Standard Edition OS for Server

#### 51. Database: Microsoft SQL Server 2012

Specification	Details
Quantity	One (01)
Brand	Microsoft
Country of Origin	USA
General Specification	Microsoft SQL Server 2012 License for Database

## 1. Scope of Works

### Implementation of LAN and WAN (Server and Network Infrastructure)

SL. No.	Description
1.1	Establishment of Server room and support infrastructure facilities including intranet web service, File/web service, Configuration of DHCP and DNS services
1.2	Installation of Structured cabling system for head office LAN
1.3	Establishment of network infrastructure
1.4	Establishment of WAN functionality
1.5	Configure backup and storage system
1.6	Establishment of functional environment for server room
1.7	Establishment of operational environment
1.8	Establishment of server and backup system
1.9	Installation of storage server system
1.10	Recognition of worldwide standard

## 2. Project Implementation Time Schedule

The complete system should be installed and commissioned within the specific time frame as stated in section 6 from the date of issuing Work Order.

## 3. Survey and Appraisal

The vendors will be allowed to carry out a physical survey and to get any clarification from the IT department of BPC to ascertain the exact scope of work and understand fully the implications of the assignment. Vendors will be allowed for the appraisal presentation on implementation plan within 05 days of the survey.

## 4. Installation, Commissioning and Provisional Acceptance

The vendor will provide all the facilities required for supply, installation and integration of the proposed works. The supplier has to officially inform the purchaser in writing about the Commissioning Date of the complete system. The commissioning date will remain valid if and only if, the complete system qualifies the Provisional Acceptance Test (PAT) conducted by the BPC authority and Provisional Acceptance Certificate (PAC) is issued by the purchaser.

## **5. Final Acceptance**

5.1 Final Acceptance Certificate (FAC) will be issued by the purchaser after installation, commissioning and deployment of the entire work.

5.2 FAC will initiate both the equipment warranty and O&M responsibility period of the supplier for next 1 year of the completion of works.

## **6. Equipment Warranty**

**Warranty:** The term 'warranty' here in this purchase means that the supplier will replace all the equipment, modules, cables, fibers, power supplies, accessories etc as applicable under this procurement with the same or higher equipment, modules, accessories etc free of cost in case of any defect or failure during the warranty period.

## **7. Delay in Warranty**

If product replacement is required during the warranty period and the delivery time is longer, alternative product should be installed until the new product arrives.

## **8. Warranty Identification**

Successful supplier must paste Warranty Information (Equipment Serial No, Warranty Contacts, Warranty Expire Date, Max Time for Replacement, Authorized Signature & Seal) at top/bottom of the products by attaching a warranty label / disc or stencil.

## **9. Documentations**

The vendor should submit a 'Network Configuration and Operation Guide' once the Server room, WAN/LAN installations and integration are done. The document should include but not limited to the following:

- (9.1) Design Principles
- (9.2) Configuration of the Switches and the Routers
- (9.3) Design of load-balancing and fail-overs if any
- (9.4) Configuration of authentication, authorization and accounting
- (9.5) Design of Routing protocols
- (9.6) Network address assignments
- (9.7) Detail Network Design with Port, VLAN, Routing, and Security Template.

## **10. Compliance Document**

The vendor should write either '**Complied**' or '**Not-complied**' in a separate paper addressing each specification of products stated in section 7. No conditional compliance accepted.

## **11. Project Implementation Plan**

The vendor has to submit an implementation plan mentioning time frame of supply, installation, integration and project hand over works mentioned at Scope of Works.

## **12. Reporting Requirements**

The following reporting / documentation would need to be maintained by the vendor:

- a. **Project Implementation Plan (PIP)** laying down all the project activities, the expected durations and the dependency relationships between these activities and who is responsible for each activity. PIP also lays down all target milestone dates.
- b. **Systems Manual** detailing the hardware and System software related documentation and guidelines.
- c. **Operations Manual** providing instructions for installing the application, troubleshooting, interpreting message logs, and FAQs (Frequently Asked Questions).
- d. **Periodic Status Reports** communicating the status of activities, completed activities, in progress, outstanding issues and risks, and any impact or potential impact to the project schedule.
- e. **Request(s) for Change** documenting any deltas to the original contractual requirements.
- f. **User Feedback Forms** documenting things that went well and those that didn't and opportunities for improvement.

## **13. Manuals and Publications**

Manuals/books/publications written in English both as hard and soft copy to be supplied free of cost.



## **14. TECHNICAL REQUIREMENTS**

### **CONVERGED INFRASTRUCTURE COMPUTE AND STORAGE SOLUTION**

**Solution Features:** The solution should provide the following features:

- a. **Modular Environment Growth** IT managers can easily add more virtual servers as their needs grow simply by moving to larger or adding similar converged infrastructure platform which can still continue to be managed, monitored and provisioned using the currently proposed management platform.
- b. **Rapid Provisioning and Decommissioning of Servers** Deploy and decommission virtual servers much faster than traditional virtual servers infrastructure environments.
- c. **Management Simplicity** It should have simplified management of the compute, servers, network, and storage.
- d. **Self-curing Architecture** It should have self-curing architecture that accommodates unplanned events such as spikes and boot storms to ensure a consistent high performance virtual server experience to the clients.
- e. **Seamless Support** It should provide single point of configuration validation, ordering, delivery, support and warranty for the coalition converged infrastructure solutions.
- f. **Complete System Integration** It should deliver integrated product roadmaps inclusive of all major components of the converged infrastructure.
- g. **Consolidated High Density Infrastructure** It should support for a large number of virtual servers on a single converged infrastructure.

## **15. Core Network**

- Shall require non-blocking 1Gbps Ethernet connectivity between all network elements on the Core Network.
- High availability of traffic path that ensure network reachability.
- WAN/internet firewall should be placed to protect traffic from WAN/internet and server firewall should be placed to protect server traffic security
- Full redundancy of Processor modules of the core router and switch. In the event of failure of any one processor, the Network Device should automatically switch-over to the redundant processor without dropping any traffic. There should not be any impact on the performance in the event of active processing engine failure
- Ensure 1+1 power supply redundancy protection mechanism.

# Section 8. Drawings

## Network Diagram

