

**PAKISTAN BROADCASTING CORPORATION
HEADQUARTERS G-5 ISLAMABAD**

BIDDING DOCUMENTS

Tender Enquiry: ENG/PROC-4(264)/25

**Supply & Installation of Electrical & Electronic Equipment/Items alongwith allied accessories for PBC Peshawar under PSDP Project
“Rehabilitation of PBC Peshawar Building”**

On D.D.P Basis

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(Note: This Document contains 42 pages only)

1. DEFINITIONS AND INTERPRETATIONS:

Following words & expressions shall have the meaning assigned to them as defined hereunder:

- 1.1 “BOQ”** stands for Bill of Quantities of each job /work / service as mentioned in this contract and its annexes according to which Contractor supply equipment & services.
- 1.2 “GOODS”** means products, equipment, spares, and commodities including hardware, software. The Goods includes all the equipment, machinery, and any other material which the Contractor is required to supply to PBC mentioned in the BOQ under this Contract, including Hardware, Firmware and Software of all types specified explicitly or implicitly and/or required for a fully functional system (s) as per PBC specifications and performance objectives.
- 1.3 “GOOD RECEIPT CERTIFICATE/NOTE”** means Certificate/ Note issued by the end user certifying receipt of Goods in good order and condition
- 1.4 “CONTRACT’** means the conditions of agreement, scope of work, specifications, drawings, BOQ and all Annexes of contract documents signed between PBC and the successful bidder
- 1.5 “CONTRACT PRICE”** means the total price of contract for Goods and services on D.D.P basis as attached at **Annexure - “A”** and are firm, fix and final and no variations whatsoever shall be acceptable to the purchaser. All such charges, if levied, on consignments of replacements of defective and short supplies items/item will be borne by the Contractor.
- 1.6 “CONTRACT DOCUMENTS”** means the documents in Article (CONTRACT DOCUMENTS) including the changes made if any.
- 1.7 “DELIVERY CHARGES”** means local transportation, off shore shipment charges or any other way of transportation used to import the Goods including handling, storage, insurance and any other charges incidental to delivery of Goods their final destination.
- 1.8 “SITE”** means the land of locations, building and any other places including container etc. where the facilities/equipment has to be installed as per **Annex-A**
- 1.9 “SERVICES”** means supply & installation of electrical & electronic equipment alongwith accessories on D.D.P basis
- 1.10 “TIME OF COMPLETION”** means the time schedule within which completion of the work (equipment and services) as a whole as per provision of Contract.
- 1.11 “ORIGIN”** means the place where Goods are mined, grown or produced from where ancillary services are supplied, Goods are produced, when through manufacturing, processing or substantial and major assembling of components, commercially recognized products results that is substantially different in basic characteristics or in purpose of utility from its components.
- 1.12 “LIQUIDATED DAMAGES”** means the monetary damages imposed upon the Contractor and payable to PBC by the Contractor on account of its late delivery of a whole or part of project.
- 1.13 “PERFORMANCE GUARANTEE”** means a guarantee issued by a scheduled bank located in Pakistan in CDR form prior to the signing of the Contract for an amount equivalent to 10% of total contract amount which will serve two purposes
- a) It keeps the successful bidder on track if he fails to deliver & becomes defaulter/insolvent or deviates from any other obligation then his performance security will be forfeited.
 - b) In case the successful bidder/contractor successfully delivered the equipment, installed and PAC is issued then it will start from the date of issuance of PAC and remain valid until the issuance of FAC by the end user.
- 1.14 “WARRANTY PERIOD”** shall mean the period(s) be the warranty mentioned in the web site & technical brochures but should not be less than TWELVE (12) months starting from the date of PAC.

- 1.15** “PAC” means Provisional Acceptance Certificate which will be issued by end user.
- 1.17** “FAC” means Final Acceptance Certificate, which will be issued by end user to Controller Procurement after one month (30 days) of completion of specified continuous warranty period service (without any break due to faults in Software or Firmware/Hardware in the Goods) starts from the issuance of PAC.
- 1.18.** “BEC” The Bid Evaluation Committee approved by competent authority (DG PBC) for scrutiny and evaluation of bids legally, financially and technically.
- 1.19.** “GRC” The Grievance Redressal Committee (as per PPRA requirement) to address any grievances raised by any bidder/contractor
- 1.20.** “COMPANY” means a company formed and registered under the company law and includes but not limited to private limited company, public limited company, firm, association of persons or sole proprietorship or any other form of business organization.
- 1.21.** “BENEFICIAL OWNER (BO)” means Natural person who ultimately owns or controls the bidder’s company and / or the natural person on whose behalf a transaction is being conducted; or Natural person who exercise ultimate effective control over a legal person or legal arrangement
- 1.22.** “PUBLIC PROCUREMENT CONTRACT (PPC)” means the contract awards under Public Procurement Regulator Authority Ordinance, 2002, Public Procurement Rules, 2004 and the Regulations

2. GENERAL

2.1 Introduction

With independence on 14TH August-1947, the existence of Radio Pakistan also came into being parting ways with the then All India Radio. After rendering the service of around 26 years, Radio Pakistan was converted into a statutory body through a parliamentary Act No. XXXII-1973 in 1973 and Radio Pakistan became PAKISTAN BROADCASTING CORPORATION. The purpose of enacting Radio Pakistan as a “corporation” was to disseminate impartial news and analysis, besides education, information and entertainment, to general public through a vast network of broadcasting and transmitting equipment installed in many large cities of the country with its headquarters in capital city, Islamabad. In addition, the aims and objectives of this public sector state broadcaster include, promoting soft image of the country in terms of Islamic, social and cultural values in and outside its territorial boundaries. The administrative and financial affairs of PBC are governed by a Board of Directors (BoD) with Secretary Information as its Chairman. The appointment of BoD members is made by the federal government.

2.2 Scope of Work (SoW)

- 2.2.1** Supply & Installation of electrical and electronic equipment alongwith accessories on D.D.P basis as detailed below and as per **Annex-A:**

<i>Serial No.</i>	<i>Description</i>	<i>Quantity</i>
1.	10 KVA UPS	05
2.	10 KVA AVR	05
3.	Ceiling Fans	20
4.	Pedestrian Fan	10
5.	Security Search Lights	10
6.	Electrical Water Cooler	12
7.	Audio Consoles(16 Chanel)	06
8.	Podcast Camera	10
9.	Collar Mic.	06

10.	<i>Dynamic Microphone</i>	30
11.	<i>Audio Cable</i>	20
12.	<i>Desk Top Computer System(Core-I-7)</i>	02
13.	<i>XLR Jacks(M&F)</i>	100 Pair
14.	<i>Professional Audio Recorder for OB</i>	03
15.	<i>AC Split Inverter Units(For Studios & MCR) (1.5 Ton)</i>	10
16.	<i>AC Split Inverter Unit for booth</i>	07
17.	<i>Water Pump(Submersible-03 HP)</i>	02
18.	<i>Vacuum Cleaner(4000 Watt)</i>	02
19.	<i>Cordless Mic.</i>	06
20.	<i>Hybrid Telephone Set for Live Studio</i>	06
21.	<i>Professional Console for Auditorium Hall and Music Studio</i>	02
22.	<i>STL(459 &461 MHz)</i>	02
23.	<i>Radio Receiver for Monitoring</i>	20
24.	<i>Repair & Up-gradation of 02 No Passenger Lift</i>	01 Job
25.	<i>Supply and Installation of 30 KW Solar Panel</i>	01
26.	<i>Supply and Installation of 50 KW Solar Panel</i>	01
27.	<i>Supply and Installation of 100 KW Solar Panel</i>	01

2.2.2 In addition to above electrical & electronic equipment advertised in the tender notice in newspapers and on PPRA website, the bidders who might be interested may quote the following items/equipment:

S. No.	Description	Quantity
1.	Signal Strength Meter (For FM & AM)	01
2.	Earth Testing Meter	01

2.2.3 For the execution of the work the bidder shall undertake to supply all hardware and software including equipment, installation material, interfacing units etc. as detailed in (**Annex-A**), which shall be necessary to make the equipment fully functional & operative. Any other item (i.e. hardware or software) or any other entity which may not have specifically been mentioned in the Bill of Quantity (BOQ) (**Annex-A**), but which is/are necessary to meet the Specifications, Bill of Material and site requirements, shall be provided by the bidder without any extra cost to PBC. Following items (but not limited to) shall be required for the execution of the work:

- Hardware
- Software
- Power cabling
- Installation materials
- Services (Engineering, Installation, Integration, Support, etc.)
- Civil/Electrical works required at sites (if any).

2.2.4 The offered/quoted equipment shall comply & be in accordance with all the Technical provisions as enunciated in technical specifications (**Annex-A**) and **Special conditions** mentioned in (**Annex-B**).

2.2.5 Bidders may quote all or any item/equipment as per their field of expertise.

2.3 **General Instructions**

The bidder shall undertake to:

- 2.3.1 Keep PBC informed of technological and other developments in the products offered and methods of incorporating such developments economically.
- 2.3.2 The bidder must specify the Make & Model of the offered equipment
- 2.3.3 Each statement in the specifications must be complied with and supported by printed technical literature, technical data sheets, schematic drawings (if any), and technical manuals from the equipment manufacturer.
- 2.3.4 The proposed equipment (hardware and software) should be field proven especially in Pakistan. The seller/bidder will provide list of previously quoted equipment installed base references in Pakistan including the name & phone numbers of contact persons (if any).
- 2.3.5 The Supplied Equipment shall be flexible, efficient, rapid, accurate and reliable.
- 2.3.6 Equipment shall have low power consumption and energy efficient. The bidder shall indicate the power consumption, size, weight and space requirement of the offered equipment system.
- 2.3.7 Equipment shall be of the latest state-of-the-art technology, currently available in the international market & should have well reputed brands.
- 2.3.8 If the bid is submitted by a bidder other than the OEM, a certificate from the OEM confirming that the bidder can quote items directly from the OEM must be furnished.
- 2.3.9 No changes in the technical specifications format, language, parameters, or any other nature, including deletion of clauses, words, or lines in the compliance statement will be accepted. Any such changes will result in rejection of the tender.
- 2.3.10 Optional items will not be considered for ranking purposes.

2.4 Equipment/Item Installations

- 2.4.1 The bidder shall supply, install and configure the supplied equipment.
- 2.4.2 The bidder shall provide all cables, connectors, and installation materials required on D.D.P basis
- 2.4.3 Wiring /cabling shall be of flexible design that can be easily added, rearranged or removed.
- 2.4.4 Minor modifications in the building like making holes in the wall; roof or floors required for the execution of the works, shall be done by the bidder.
- 2.4.5 The bidder will be bound to replace the whole equipment, if a panel of constituted PBC engineer declares that there exists a manufacturing fault in the supplied equipment as a whole.

2.5 Maintenance Support

- 2.5.1 The bidder will clearly indicate the name, telephone number and email address of the persons (local or foreigners) for quick trouble shooting purpose.
- 2.5.2 The bidder will provide comprehensive hardware and software support to PBC during the warranty period.
- 2.5.3 The bidder shall repair the equipment with the fastest speed & return it back to PBC incase Equipment/Accessories cease to function due to minor faults in software or hardware or due to any reason. The repaired equipment must operate as per satisfaction of PBC.

3. ELIGIBILITY CONDITIONS OF BIDDERS

Invitation to submission of sealed bids is open to all OEMs (Original Equipment Manufacturers) and their authorized dealers/partners in Pakistan, Joint Ventures (JV) and the firms as well as potential bidders who have enough experience of relevant work and meet the following conditions:-

- 3.1 Have relevant experience of supply, installation & testing of broadcast electronic & electrical equipment, studio equipment, other equipment mentioned in scope of work & having experience **in public & private sectors within Pakistan**. Incumbent bidder shall provide all the record of its previous installations along with contracts/purchase orders detail (i.e. amount, date & time of completion, description of items) & contact details of concerned person for reference & verification. The relevant experience of the incumbent bidder will be evaluated.
- 3.2 In case of JV, it is mandatory to define the job description of both parties as Capital /Financial Partner and Operational Partner. The Operational Partner will carry out all the responsibilities

of supply & installation of the equipment i.e. technical work, whereas the Capital/Financial Partner will be responsible for arrangement of finance and completion of the project within given timeline. **it is also compulsory that neither party of the JV shall ever have failed any project in PBC previously nor be under legal proceedings in PBC.**

- 3.3 02% Bid security must be submitted by all participant bidders (including JVs or any Govt. / Semi Govt. Organization, Autonomous/non-Autonomous body etc.).
- 3.4 For the potential bidders who apply for the tender will obtain the authorized Dealers/partners, Certificate of Authorization by OEM along with the quotation.
- 3.5 The local office/authorized representative/dealer will be the nodal point for resolving issues related to after-sales support. It is the responsibility of the local office/authorized representative/dealer to arrange the repair/replacement of faulty items.
- 3.6 OEM/authorized sole distributor must be registered with taxation departments of Pakistan as active taxpayers. NTN number must be mentioned legibly. The firm will be bound to provide current and previous bank statements of his accounts and audit reports along with the quotation.
- 3.7 Mandatory condition for qualification for Solar Systems: EE04 (Low Voltage installation), EE05 (High Voltage installation) and EE11 (i). In addition, AEDB License/approval for C2 Category under 500KW or higher shall be acceptable.
- 3.8 The authorized sole distributor must ensure the installation & testing and after sales support to PBC by ensuring to have OEM's trained local engineers. The OEM/authorized sole distributor shall preferably possess a local service center.
- 3.9 The equipment shall be offered with all accessories required for operation. Items other than stated/specified in the tender may be offered as options.
- 3.10 Bidder should provide an undertaking on Judicial Stamp paper worth Minimum Rs.100 of the following points as per Performa attached at **Annex-C**: (Firm must read all clauses of this tender document carefully and if firm agrees with all clauses only then will submit tender documents with sign and company stamp).
 - a. Firm is financially sound enough; project will not be delayed / failed due to lack of finance.
 - b. Offered equipment is of latest version and the parts of the same will be available at reasonable price for a period of at-least more than 05 years without any major up-gradation /version change.
 - c. Technically qualified bidder's financial position must be strong enough to procure the tendered equipment and technically capable to supply and configure as per requirement of PBC. Under any circumstances the supply shall not be delayed due to dearth of bidder's financial position as well as due to his technical inability. The bidder shall also guarantee in the affidavit that he is financially and technically capable to resolve the discrepancies in the equipment and can replace with brand new equipment, keeping the faulty one at site.
 - d. The bidder under takes that he himself & his firm not involved in corrupt & fraudulent practices as described in PPRA rule 2004 clause 2 sub-clause (f)
- 3.11. In case OEM intends to participate, it must be registered with relevant taxation & registration authorities of Pakistan with registered offices.
- 3.12 The equipment brands that are already operating in PBC will be evaluated on the base of equipment's performance obtained through end-user and C (M&O)and responsiveness of supplier/bidders.
- 3.13 The bidder should not be black listed with any of Government, semi govt. and autonomous departments of Pakistan.
- 3.14 The bidders must quote the equipment in PKR in their proposals

Note: Prospective Bidder Must Provide Valid Documentary Proof against serial# (3.1 to 3.13) along with the bid. Non-Submission of any of above document will lead to consideration of a firm as NON-RESPONSIVE & Sub-sequent NON-CONSIDERATION for the evaluation.

- ✓ ***Bidder who did not fulfill agreement with PBC previously and found insolvent will not be entertained (straightaway).***

4. COST OF TENDERING

The bidder shall bear all costs associated with the preparation and submission of its bid and the PBC will, in no case, be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

5. CLARIFICATIONS OF TENDER DOCUMENTS

A prospective bidder requiring any clarification(s) regarding technical and commercial aspects of the tender document may notify to Controller (Procurement) PBC or Procurement Officers on Office # 217, 2nd Floor, Procurement Cell office, PBC, HQs, Islamabad or on Telephone Nos. 051-9215824 on working days. The concerned officer from PBC Procurement cell will respond to any request for clarification, which receives well before (approximate **05 working days** or more) to the deadline for the submission of bids. Copies of PBC's response will be forwarded to all prospective bidders (if not already clarified in the tender or deemed necessary for the bidder).

6. AMENDMENT OF TENDER DOCUMENTS

6.1 At any time prior to the deadline for submission of bids, PBC may, for any reason, whether at his own initiative or in response to a clarification requested by a prospective bidder, modify the tender documents by issuing addendum/amendment.

6.2 Any addendum/amendment thus issued shall be part of the tender documents with highlight and also will be emailed to the bidders who purchase the bidding documents. To afford bidders reasonable time in which to take an addendum into account in preparing their bids, PBC may at its discretion extend the deadline for submission of bids.

7. PREPARATION OF BIDS

7.1 TECHNICAL PROPOSAL PREPARATION OF BID:

Bids should be prepared considering "***Single Stage-Two Envelope***" procedure.

- (i) (i) The bid shall comprise a single package containing two separate e-files. Each e-file shall contain separately the financial proposal and the technical proposal;
- (ii) The e-files shall be marked as "FINANCIAL PROPOSAL" and "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion;
- (iii) Initially, only the e-file marked "TECHNICAL PROPOSAL" shall be downloaded and opened;
- (iv) The e-file marked as "FINANCIAL PROPOSAL" shall be retained in the custody of the procuring agency without being downloaded/opened;
- (v) The procuring agency shall evaluate the technical proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements;
- (vi) During the technical evaluation no amendments in the technical proposal shall be permitted;
- (vii) The financial proposals of bids shall be opened publicly at a time, date and venue announced and communicated to the bidders in advance.
- (viii) After the evaluation report of Bid Evaluation Committee (BEC) about the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted bids only. The procuring agency will follow the PPRA RULE 2004 clause # 48 sub clause # 3. The financial proposals of bids found technically nonresponsive shall be returned unopened to the respective bidders.
- (ix) The bid found to be most advantageous evaluated bid shall be accepted as described in PPRA rule 2004 clause # 2 sub clause (h).

7.2 **FINANCIAL PROPOSAL PREPARATION OF BID:**

In preparing the Financial Proposal, participating Bidder / Firms or Agencies are expected to take into account the requirements and conditions outlined in the RFP document. E-file of Financial Proposal should include:

- (i) Complete cost of the project with break-up of costs for each of the items of work listed in the Scope of Work is to be submitted as per Annexure-E.
- (ii) The cost quoted will be firm and fixed for the duration of performance of the contract. At no point of time will any deviation from the quoted rate be entertained by PBC.
- (iii) The Financial Bid shall not include any conditions attached to it and any such conditional financial proposal shall be rejected summarily.
- (iv) If the Financial Bid is not submitted in a separate e-file, this will constitute grounds for declaring the Bid nonresponsive.
- (v) After the evaluation report of BEC about the technical proposal the procuring agency, shall at a time within the bid validity period, publicly open the financial proposals of the technically qualified bids only. The procuring agency will follow the PPRA RULE 2004 clause # 48 sub clause #3. The financial proposals of bids found technically nonresponsive shall be returned un-opened to the respective bidders.

7.3 **Following documents shall be submitted with the proposal:**

- a. Duly filled Bill of Quantity (BOQ) **without prices** with technical proposal.
- b. Duly filled Bill of Quantity (BOQ) same as mentioned above but with prices with financial proposal as per **Annex-A & Annex-D**.
- c. Duly filled technical compliance statements as per **Annex-A** with proper reference in the technical proposal/bid.
- d. Technical brochures of offered/quoted equipment.
- e. Bid security 2% of total quoted price for all items shall be submitted in shape of CDR from any scheduled bank of Pakistan in favor of "The Controller (Procurement), PBC, HQs, Islamabad".
- f. Valid certificate of authorization/sole distributorship from the OEM to sell the equipment in Pakistan.
- g. Duly filled commercial compliance statement as per **Annex-F**.
- h. Certificates as per **clause # 3**.
- i. Supply record for verification of experience.

8. LANGUAGE OF BID DOCUMENTS

- 8.1 Bid documents and all correspondence will be in English language.
- 8.2 The bid should have a covering letter on printed letter pad of the firm. All pages of the bid shall be initiated/signed and official seal be affixed by the person(s) authorized to sign.

9. PRICE

- 9.1 Prices should be quoted in PKR on DDP basis for project site PBC, Peshawar as per **Annex-A**.
- 9.2 The price should be inclusive to supply, testing & installation with all required material/accessories.
- 9.3 The price quoted should be firm, final, and clearly written/typed without any ambiguity.
- 9.4 The price should include all the applicable government taxes, duties, freight charges and insurances both local & offshore etc.
- 9.5 The rates / prices shall be entered as per Annex-D in the Bill of Quantity (BOQ) as per **Annex-A** against each item. Any item against which no rate or price is entered and left blank by the bidder shall be deemed covered by the bidder in offered price.

9.6 The bidder shall be deemed to have obtained all information as to all the requirements thereto which may affect the bid price.

10. BID SECURITY

10.1 The bidder shall furnish 2% tender security in the form of Cash Deposit Receipt (CDR) issued by a scheduled bank of Pakistan.

10.2 The Bid security CDR shall be enclosed in the sealed financial envelope and also a photocopy of the bid security CDR must be attached in the technical bid envelope.

10.3 Any bid not accompanied by tender security shall be rejected by the PBC as non-responsive (this applies to all Govt. institutions too).

10.4 The bid securities of the unsuccessful bidders will be returned after award of contract to the successful bidder. The bid securities of bidders, who are not in competition, can be returned earlier at PBC's discretion upon receiving a request.

10.5 The bid security of the successful bidder will be returned when the bidder furnishes the required Performance Guaranty and signed contract agreement.

10.6 All correspondence regarding release/extension of bid security shall be made with Controller (Procurement) PBC HQ Islamabad.

10.7 **The bid security may be forfeited:**

i. If a bidder withdraws his bid during the period of bid validity.

ii. If the bidder does not accept the correction of his bid price.

iii. In the case of successful bidder, if he fails to furnish the required performance security or sign the contract agreement.

iv. If bidder does not respond to clarifications called by PBC.

v. If bidder deviates from his proposal/offer

11. VALIDITY OF BIDS

Bid shall remain valid for a period of **180** days from the date of tender opening.

12. DEADLINE FOR SUBMISSION OF BID

12.1 The e-bid shall be uploaded on EPADS and a copy (sealed envelope) be submitted or sent by the registered mail which should reach the office of The Controller Procurement Cell, Room # 214, second floor, PBC HQ, G-5/I, Islamabad till **11:00 a.m.** on dated **07-03-2025**.

12.2 Sealed bids should be submitted at the office of The Controller (Procurement Cell) PBC HQs on or before the prescribed time on given date.

12.3 Bid should be submitted in sealed envelope having necessary information regarding tender notice and warning message "**DO NOT OPEN BEFORE 07-03-2025**."

12.4 No open, e-mailed or faxed bid will be accepted.

12.5 Any bid received by the PBC concerned officer after the date and time of tender opening will be returned unopened to such bidder.

13. MODIFICATION & WITHDRAWAL OF BID

13.1. Any bidder may modify or withdraw his bid after bid submission provided that written notice of the modification or with-drawl is received by the concerned officer prior to the deadline for submission of bids.

13.2 No bid may be modified or withdrawn by a bidder after the deadline for submission of bids.

14. OPENING OF BIDS

14.1 The PBC tender committee will download and open the technical bids at **11:30 a.m.** on dated: **07-03-2025** in the presence of bidder representatives at PBC HQ G-5 Islamabad whereas the financial bids will be retained by PBC. The financial bids of technically qualified bidders will be opened later. The financial bids opening schedule will be conveyed accordingly.

14.2 The bidder's name, brand name / model, bid prices, presence or absence of tender security, and

such other details as the committee at its discretion may consider appropriate, will be announced at the tender opening.

- 14.3 The tender committee will resolve any issue raised by the bidders, on the spot.
- 14.4 The tender committee reserves the right to reject any one or all bids prior acceptance of a bid / proposal.

15. RESPONSIVENESS OF BIDS

- 15.1 The tender security is submitted
- 15.2 The bid is valid till required period
- 15.3 The bid prices are firm during its validity and inclusive of all taxes, duties etc.
- 15.4 Completion period offered is within specified limits.
- 15.5 The bidder is eligible to tender and possesses the requisite experience
- 15.6 The bid does not deviate from basic technical requirements
- 15.7 The bid is generally in order etc.

16. EVALUATION CRITERION (in accordance with PPRA Rules Clause 29 & 30)

- 16.1. Prior evaluating the proposals, the eligibility conditions of incumbent bidders will be evaluated according to clause # 3 and as per section I-V of Annex-A any firm found non-complaint will not be considered for further evaluation proceedings.
- 16.2 After evaluating the eligibility conditions, proposals will be evaluated both on technical & financial grounds. For this purpose bidder's data mentioned in technical compliance statement will be compared with the technical literature & clarification will be sought in case compliance is not evident from the literature. After successful compliance with the technical specifications and special condition (**Annex-A & B**), the **BEC** will submit report regarding qualified & non-qualified bidders. The conclusion of report will be sent to all participant bidders in the light of **PPRA Rule 35** in line with **PPRA Rule 48 sub clause (3)**. Any technical proposal which does not conform to the technical specs (**Annex-A**) will be rejected by PBC's BEC.
- 16.3 Contract will be awarded to technically qualified **financially and technically most advantageous bid** vide S.R.O. No. 442(1)/2020 dated 15th May, 2020 as per PPRA rule clause No. 36 (C) viii.
- 16.4 Moreover, it will be examined in detail whether the bids comply with the commercial / contractual conditions of the tender documents.
- 16.5 The cost of making good any deficiency resulting from any quantifiable variations and deviations from the tender schedules and conditions of the order, as determined by the PBC will be added to the corrected total bid price for comparison purpose only. Adjustment for commercial compliance will be added to the corrected total bid prices. Adjustment factor will be calculated by committee as deemed appropriate.

17. CLARIFICATIONS / CORRECTIONS OF BID

- 17.1 To assist in the examination, evaluation and comparison of the bids the committee, at its discretion, may ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in the price or substance of the bid shall be sought, offered or permitted.
- 17.2 Arithmetical errors will be rectified on the following basis:
- 17.3 If there is a discrepancy between unit price and total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and total price shall be corrected. If there is a discrepancy between the words and figures the amount in words shall prevail. If there is a mistake in addition / totaling that will be corrected.
- 17.4 If the bidder does not accept the corrected amount of bid, his bid will be rejected and his tender security will be forfeited.

18. COMMERCIAL COMPLIANCE STATEMENT

The bidder will furnish a compliance certificate with the bid as per enclosed format (**Annex-**

E).The fields of the compliance certificate Performa must be filled appropriately by the bidder with proper reference given in the technical documents.

19. VARIATION ORDER

PBC reserves the right to place variation order (increase or decrease in the quantities of BOQ) as per requirement of PBC Management and P&D wing and as per availability of PSDP Funds. The contractor shall be bound to accept the variation order by PBC.

20. AWARD CRITERIA & PBC'S RIGHT

20.1 Evaluation of the Proposals

On expiry of the date for submission of the Proposals, the evaluation process will begin. The bids shall be evaluated using 'Quality and Cost Based Selection' method of PPRA whereby the bidder securing the highest weighted marks as per the prescribed Technical and Financial Criteria and if the proposal found to be responsive shall be declared as the successful bidder and the others shall follow accordingly. Technical Proposal marks shall be given 80% weightage and Financial Proposal marks shall be given 20% weightage. The bidder needs to secure at least 60% marks in the Technical Proposal to be considered as an eligible bidder for the opening of its Financial Proposal. Accordingly, the date for opening of Financial Proposals shall be communicated to the eligible bidders and the Financial Proposals of the non-eligible bidders shall be returned unopened.

20.2 The contract will be awarded to substantially responsive most advantageous evaluated bidder, provided that such bidder has been determined to be qualified to satisfactorily perform the order.

20.3 The PBC reserves the right to accept or reject any bid, and to annul the tendering process and reject all bids, at any time prior to acceptance of bid and signing of contract agreement without thereby incurring any liability to the affected bidders or any obligation to inform the affected bidders of the grounds for the PBC's action as per PPRA Rule 2004 clause#33.

Muhammad Rafiq
Controller (Procurement Cell)
Ph.: 051-9215824

SECTION-II

GENERAL TERMS & CONDITIONS OF CONTRACT

1. PERFORMANCE GUARANTY/SECURITY

- 1.1 The successful bidder shall furnish to the PBC a performance guarantee equivalent to **10%** of the total quoted value, in the shape of CDR issued from any scheduled bank of Pakistan valid for the entire warranty period as mentioned at the time of signing of contract agreement which will remain valid till the issuance of FAC.
- 1.2 The performance security shall be further extended accordingly if the delivery is delayed.
- 1.3 Failure of the successful bidder to furnish acceptable performance shall constitute sufficient grounds for the annulment of the award and forfeiture of the performance guarantee.
- 1.4 The performance guarantee will be forfeited if:
 - a) The successful bidder/ contractor becomes defaulter/insolvent or deviates from any other obligation and not able to deliver the equipment as a whole or partially and equipment is delivered but not able to install and test the equipment at project site and consequently PAC is not issued by end user.
 - b) In case the equipment is delivered& installed & PAC are issued then performance guarantee will be retained for the entire warranty period. The performance guarantee will be forfeited when the performance is not satisfactory during the warranty period.
- 1.5 All the correspondence regarding release of performance guarantee shall be made with Controller (Procurement) PBC HQ.
- 1.6 The Successful bidder should provide an “Integrity Pact” prior to the contract agreement with PBC. i.e. (i) The Declaration of fees, commission and Brokerage and (ii) The Declaration of Beneficial Ownership Information as described in PPRA-2004 Rule-7.
- 1.7 In-case of joint venture, the “Integrity Pact” shall be signed by the lead partner of the successful firm & stamped on judicial Affidavit with PBC.

2. CONTRACTOR’S RESPONSIBILITIES

- 2.1 The contractor shall supply& installation of the equipment in accordance with the contract & responsibility matrix.
- 2.2 The contractor shall not subcontract the whole of the works or the contractor shall not subcontract any part of the works without the consent of the PBC.

3. TRANSPORTATION / PACKING

- a) All types of transportation for delivery of equipment at final destination will be the responsibility of the contractor. Contractor shall ensure proper / international packing of equipment to avoid deterioration of equipment etc.
- b) The supplier will be responsible to see that the material is sufficiently and properly packed for international Sea Freightening so as to ensure it being free from loss or damage.
- c) In case of any damage to the equipment, the contractor/successful bidder shall be held responsible and shall make goods such damages free of charge to the PBC/buyer.
- d) Each packing shall be clearly and legibly marked in English with the name of the Contractor, the Consignee, Contact number, date and quantity of the equipment.
- e) Every package will be clearly marked with the words “**PAKISTAN BROADCASTING CORPORATION** “, also the Name, Address of the consignee and the Name of Contractor.
- f) The Contractor shall indicate/mark the following details on the individual carton and a tag to be attached to each component of stores on the four (4) adjacent sides of each package with indelible paint in conspicuous printed words:
 - i. PBC Order No. and Date
 - ii. Item No. of Packing List

- iii. Description of Stores
- iv. Name of the equipment to which the items pertain. One copy of box wise packing slip provided in the individual case with full details of the contents of the case in question.
- v. gross/net weight(kg)

4. TIME FOR COMPLETION, DELIVERY AND PENALTY

- 4.1 The contractor shall supply the equipment within 60 days or earlier from the date of signing of contract. The Contractor shall install the equipment within 30 days after the delivery; however incumbent bidder must also specify the timelines in which he can execute the whole work. The timeline can be finalized by mutual consent of both parties.
- 4.2 The prices stipulated in this tender are for delivery on the D.D.P basis.
- 4.3 If the contractor fails to execute the work within the agreed time, or unless the delay in completion is due to force majeure as mentioned in clause # 12 of this tender document, the contractor's only liability to the PBC for such failure shall be to pay an amount equivalent to 0.167% of contract value per day but maximum to 10% of total contract value.

5. WARRANTY / SERVICES:

5.1 GENERAL.

Bidder warrants and guarantees to purchaser, its successors and assigns that the goods and services covered by the Contract will:

- a) Conform to the applicable specifications, drawings (if any) and other descriptions.
- b) Be sufficient and suitable for Purchaser/Buyer's intended purpose.
- c) Be of good material and workmanship; and be free from defect & brand new. Seller's responsibility under this warranty shall include without limitation, all parts, labor and transportation cost in the event the goods must be returned to bidder for repair or replacement. The warranty means the warranty that OEM gives in his website and/or in the brochure of the equipment quoted which must not be less than one year.
- d) The Purchaser/Buyer will notify the seller/bidder in writing of any claims arising under the warranty period and seller/bidder will repair/replace the defective store within 48 hours or earlier without any cost effect to purchaser.
- e) The bidder, for technical assistance at the highest level shall provide high-level support/technical assistance on 24 x 7 bases during the warranty period.

5.2 Warranty Remedies.

If any goods or services fail to conform to the warranties during the applicable warranty period, bidder/Seller will service, adjust or replace any non-conforming goods or re-perform nonconforming services at no charge to purchaser/Buyer as soon as possible upon written notice from purchaser. For goods installed by Seller/ bidder, on-site repair, limited to servicing, adjusting or replacing part(s), will be performed at no additional cost to Buyer/Purchaser. For the goods installed by Buyer/Purchaser, non-conforming goods shall be returned by Buyer to Seller, at Seller's cost, and repaired or replacement parts shall be shipped by Seller to Buyer, on D.D.P. The removed store/spare by the Buyer to be returned to Seller for repair or replacement and the installation by Buyer of replacement or repaired parts shall be at Seller's expense.

5.3 Remedies and Damages.

In addition to Seller's obligations described in Section 5.1 if any goods are reasonably determined to fail to conform to the warranties set forth in this Contract, Seller shall reimburse Buyer for all reasonable losses, costs and damages caused by such nonconforming goods. Such costs and damages may include, without limitation, costs, expenses and losses of Buyer and/or its customers arising from production interruptions or slowdowns.

6. PROVISIONAL ACCEPTANCE CERTIFICATE

- 6.1. The contractor/ seller will inform PBC procurement cell as well as the end user about 15 days prior to the delivery of equipment at site essentially required to obtain necessary approvals and completion of processes procedure as per SOP within the PBC.
- 6.2. The contractor will deliver the equipment as per check list (as per BOQ) at the site and handover the equipment accordingly & obtain signed and stamp, delivery Note from end user. Detailed inspection is responsibility of end user & only satisfactory receiving of equipment may be taken over and same may be conveyed to procurement cell then the contractor may be allowed for installation of equipment as per agreement.
- 6.3. The end user will issue PAC thirty days (10) satisfactory performance of the installed equipment. In case PAC is not issued within two (02) weeks, after completion of 10 days PAC period, upon the contractor's written request to this effect the end user shall inform in-writing of the specific reason(s) for not issuing PAC. Furthermore, the ultimate consignee will notify the contractor that the work is not fully complete and contractor will rectify the discrepancies.

7. TERMS OF PAYMENT

- 7.1 The supplier will open irrevocable letter of credit (LC) confirmed by a bank in the country of OEM (as informed by OEM) (where and if applicable).
- 7.2 Payment of contract price shall be made on the completion of task (i.e. supply and installation) and on the availability of PSDP funds. The payment against installation will be made after 15 continuous days' satisfactory performance & issuance of PAC by end-user (in accordance PPRA Rule clause 39).
- 7.3 In case delivery of equipment is late due to any condition of force majeure, advance payment will be made to the successful bidders against equal amount CDR of contract value through AGPR as this is a PSDP Project. In that case clause No. 7.2 shall not be applicable.
- 7.4 Payment of contract price shall be made as per rules and policy of D.D.P basis.
- 7.5 All the payments shall be made in PKR.
- 7.6 Taxes will be deducted as per government rules at the time of payment.
- 7.7 Note: The payment of the Tower/Mast shall be made as per actual installed height of the Mast/Tower (i.e. 150-250 as per requirement of the site)

8. FINAL ACCEPTANCE CERTIFICATE (FAC)

The contractor may notify the PBC concerned officer at-least 15 days before the expiry of warranty period for the issuance of FAC. Upon such notification from contractor, the Controller (P&D) will obtain FAC from the PBC concerned officer (End User) who will issue FAC in favour of contractor subject to satisfactory completion of warranty period within 30 days as per requirement of contract. Alternatively the PBC concerned officer (End User) will notify the contractor for the discrepancies that still remain un-resolved and contractor will rectify the discrepancies.

9. DEFAULT BY CONTRACTOR

- 9.1 If the contractor fails to supply the equipment, refuses or fails to comply with a valid instruction of the PBC, the PBC may give notice stating the default.
- 9.2 If the contractor has not taken all practicable steps to remedy the default within 14 days after receipt of PBC notice, the PBC may by a second notice cancel the order and performance security will be confiscated.

10. ARBITRATION AND AMICABLE LAW

- 10.1 The Contract will be construed under and governed by THE LAWS OF THE ISLAMIC REPUBLIC OF PAKISTAN.
- 10.2 PBC and the Contractor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

10.3 Any dispute, disagreement or question arising out of or relating to or in consequence of the contract or relating to its execution or performance which cannot be settled amicably, shall be referred to arbitration to Director General (DG) PBC. Only DG PBC will have sole authority in arbitration to decide.

10.4 **Redressal of grievances by procuring agency** shall be carried out as per **PPRA rule No.48**.

11. FORCE MAJEURE

11.1 The Contractor shall not be liable for forfeiture of its performance guaranty/ security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the contract is the result of an event of Force Majeure.

11.2 If either party is temporarily rendered unable, wholly or in part by Force Majeure to perform its duties or accept performance by the other party under the Contract it is agreed that on such party, giving notice with full particulars in writing of such Force majeure to the other party within 14 (fourteen) days after the occurrence of the cause relied on, then the duties, of such party as far as they are affected by such Force Majeure shall be suspended during the continuance of any inability so caused but for no longer period and such cause shall as far as possible be removed with all reasonable speed. Neither party shall be responsible for delay caused by Force Majeure.

11.3 The terms "Force Majeure" as used herein shall mean Acts of God, strikes, lockouts or other industrial disturbance, act of public enemy, war, blockages, insurrections, riots, epidemics, landslides, earthquakes, fires, storms, lightning, flood, washouts, civil disturbances, explosion, Governmental Export/Import Restrictions (to be supported by a letter from the relevant Authority and verified by the Diplomatic Mission in Pakistan), Government actions/restrictions due to economic and financial hardships, change of priorities and any other cause similar to the kind herein enumerated or of equivalent effect, not within the control of either party and which by the exercise of due care and diligence either party is unable to overcome.

11.4 The term of this Contract shall be extended for such period of time as may be necessary to complete the work which might have been accomplished but for such suspension. If either party is permanently prevented wholly or in part by Force Majeure for period exceeding 60 days from performing or accepting performance, the party concerned shall have the right to terminate this contract immediately giving notice with full particulars for such Force Majeure in writing to the other party PBC will not pay any amount or entertain any claim of the Contractor.

11.5 If a Force Majeure situation arises, the Contractor shall promptly notify PBC in writing of such conditions and the cause thereof. Unless otherwise directed by PBC in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practicable, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

12. TERMINATION FOR INSOLVENCY

The PBC may at any time terminate the contract by giving written notice to the bidder, without any compensation to bidder if the bidder becomes bankrupt or otherwise insolvent, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to action to the PBC.

13. TERMINATION FOR CONVENIENCE

The PBC may send a written notice to the bidder; terminate the contract in whole or in part any time for its convenience. The notice of termination shall specify that the termination is for the PBC's convenience, the extent to which performance or work under the contract is terminated and the date upon which such termination becomes effective.

14. ULTIMATE CONSIGNEE & END USER

THE CONTROLLER (P&D) PBC, HQ Islamabad (Ultimate Consignee)
Engineering-Incharge at project site/ Project Officer/Concerned unit (End User)

15. DEBARMENT / BLACKLISTING OF FIRM

- 15.1 As per clause-19 of the PPRA rules 2004,PBC reserves the right of debarment ‘or’ blacklisting of a firm, association, corporation, joint venture, company, partnership or any other legal entity according to the PBC’s approved **blacklisting policy 2021** which may be enforced subject to any of the following acts or more:-
- a. Consistent failure to provide satisfactory performance.
 - b. Contractor becomes insolvent.
 - c. Successful bidder/ contractor found involve on corrupt & fraudulent practices as defined in PPRA Rule 2004 clause#2 sub clause (f), part i, ii, iii, iv & v.
 - d. Submission of false and spurious documents, making false statements and allegations to gain undue advantage.
 - e. Commission of fraud.
 - f. Contractor abandons the contract.
 - g. Contractor without reasonable excuse fails to commence the work ‘or’ suspends the progress of work for 14 days.
 - h. Contractor is not executing the work in accordance with the contract or is persistently or flagrantly neglecting to carry out his obligations under the contract.
 - i. Commission of embezzlement, criminal breach of trust, theft, cheating, forgery, bribery, falsification or destruction of records, receiving stolen property, false use of trademark, securing fraudulent registration with sales tax authorities, Pakistan Engineering council etc. giving false evidence, furnishing of false information of serious nature.
 - j. The bidder submit the claims, accept& compliance the tender documents to get qualify himself but after announcement of qualified bidder by procurement cell delays the proceedings by one way or other or refuses to comply as per tender documents.
- 15.2 DG PBC will constitute a committee comprising of three PBC officers and they will investigate the matter in connection with allegation of corrupt, fraudulent, coercive or collusive practices or illegally harassment or threat. Moreover, the committee shall also accord adequate opportunity of being heard to the contractor who is to be debarred / blacklisted. The said committee will forward its clear recommendations for the approval of DG PBC.
- 15.3 The debarment shall be for a reasonable specified period of time, commensurate with the seriousness of the cause as defined in PPRA RULE 2004 clause 19 amended on 28th June 2021.
- #### **16. REPEAT ORDER**
- Repeat Order may be placed in accordance with Public Procurement Rules 2004.

SPECIFICATIONS OF ELECTRICAL & ELECTRONIC EQUIPMENT

1.10 KVA UPS:

Specification	Details
Topology	Online/Double-conversion
Form Factor	Tower
Power Rating	10 kVA / 8 kW
Input Voltage Range	176–276 V
Input Frequency Range	45–66 Hz
Input Power Factor	>0.99
Output Voltage	220-240 V \pm 2%
Output Frequency	50 Hz, pure sine wave
Output Power Factor	0.8 Or better
Efficiency	Up to 92% (Online mode); 96% (Eco mode)
Overload Capacity	availability of overload protection
Battery Type	Sealed
Runtime at Full Load	6-10 minutes
Runtime at Half Load	10-20 minutes
Communication Ports	USB port, Serial port (RS232), Mini-terminal block for remote power off
Display	Digital display for input and output voltage
Expansion Slots	One slot for optional communication card
Operating Temperature	0°C to 50°C
Relative Humidity	0–95% non-condensing
Noise Level	<55 dB at 1 meter
BYPASS SELECTOR	UPS SHOULD HAVE BUILT IN BYPASS SELECTOR
Certifications	CE Marked, IEC/EN 62040-1, IEC/EN 62040-2

2. 10 KVA AVR

Specification	Details
Capacity	10 kVA
Input Voltage Range	80–260 V
Output Voltage	220 V \pm 3%
Frequency	50 Hz
Transformer	100% Copper
Voltage Stabilization	Pure sine wave output
Efficiency	\geq 95%
Protections	Over-voltage, under-voltage, over-current, short circuit, over-temperature
Response Time	\leq 1 second for \pm 10% voltage variation
Delay Timer	Available
Display	Digital display for input and output voltage
Operating Temperature	0°C to 50°C
Relative Humidity	\leq 95% (non-condensing)
BYPASS SELECTOR	UPS SHOULD HAVE BUILT IN BYPASS SELECTOR

3. Ceiling Fan

Specification	Details
Brand	GFC or Equivalent
Model	Energy Saver Ceiling Fan
Fan Size	56 inches (1400 mm)
Power Consumption	50 W
Speed	310 RPM
Air Delivery	270 CFM (Cubic Feet per Minute)
Voltage	220–240 V
Frequency	50 Hz
Motor Type	Energy-efficient motor with copper winding
Material	High-grade metal and aluminum blades
Noise Level	Low noise operation
Efficiency	Energy-saving design
Warranty	2 years
Finish	Corrosion-resistant and durable paint
Design Features	Sleek and modern aesthetics, balanced blades for smooth operation
Applications	Suitable for homes, offices, and commercial spaces

4. Pedestrian Fan

Specification	Details
Brand	GFC or Equivalent
Type	Pedestal Fan
Fan Size	24 inches (600 mm)
Power Consumption	65–75 W
Speed	1350–1450 RPM
Air Delivery	220–260 CFM (Cubic Feet per Minute)
Voltage	220–240 V
Frequency	50 Hz
Motor Type	Energy-efficient motor with copper winding
Blade Material	Aluminum / Plastic
Height Adjustment	Yes, adjustable pole for desired height
Oscillation	90° smooth oscillation
Noise Level	Low noise operation
Base Type	Heavy-duty base for stability
Control Options	Speed control via rotary knob / remote control (on some models)
Finish	Powder-coated, rust-resistant frame
Warranty	2 years
Applications	Ideal for homes, offices, and commercial spaces

5. Security search light

Specification	Details
Type	Searchlight / Flashlight
Model Options	Light hawk LED Gen II, Intrinsically Safe, Portable Searchlight Models
Power Source	Rechargeable Battery (Lithium-Ion) / D-Cell Batteries
Battery Life	20 hours (depending on model and power setting)
Brightness	1000–3500 Lumens (depending on model)
Beam Distance	Up to 1000 meters (depending on model)

Light Settings	Multiple settings: High, Low, Strobe
Water Resistance	IP67 Waterproof (some models)
Operating Temperature	-20°C to 50°C (depending on model)
Material	Rugged, corrosion-resistant materials (Polycarbonate, Aluminum, Steel)
Charging Time	5 hours or less (for rechargeable models)
Special Features	Intrinsically safe, durable, shock-resistant, remote switch, ergonomic handle
Warranty	2 years
Certifications	UL Class I, II, III Div 1 (Intrinsically Safe models)

6. Electric water cooler

Specification	Details
Type	Electric Water Cooler
Cooling Capacity	300 liters per hour (L/h)
Cooling Technology	High-efficiency cooling system
Power Consumption	500 W–1000 W (depending on the model)
Water Tank Capacity	300L
Voltage	220–240 V
Frequency	50 Hz
Water Flow Rate	5–8 liters per minute (depending on model)
Material	Stainless steel tank with durable outer body
Temperature Control	Adjustable thermostat to set desired water temperature
Cooling Efficiency	High-efficiency cooling with fast water temperature reduction
Installation	Wall-mounted / Floor-standing (depending on model)
Noise Level	Low noise operation (below 45 dB)
Special Features	Anti-rust coating, energy-saving design, and high durability
Applications	Ideal for high-traffic areas like offices, factories, mosques, and malls
Warranty	05 years depending on the model
Dimensions	Varies by model (available in different sizes)
Certifications	CE, ISO certified
Safety Features	Overload protection, automatic cut-off to prevent overheating
Design	Ergonomic, compact, and easy to clean

7. Audio Console (16 Channel)

Specification	Details
Type	Professional 16-channel Audio Mixer
Channels	16 channels (Mono & Stereo Inputs)
Mic/Line Inputs	12 mono inputs (XLR/Jack Combo), 2 stereo line inputs
Input Impedance	10 k Ω (Mic) / 20 k Ω (Line)
EQ	3-band EQ per channel (Bass, Mid, Treble)
Aux Sends	2 Aux sends per channel (pre-fader, post-fader)
Group Outputs	4 group outputs (balanced XLR)
Master Outputs	2 main stereo outputs (balanced XLR), 1 headphone output
Stereo Inputs	2 stereo line-level inputs (RCA or ¼" TRS)
Phantom Power	+48V for microphone inputs
Built-in Effects	No built-in effects (external effect processors supported)
Monitor Outputs	1 stereo monitor output (XLR)
Headphone Output	1 Headphone output with volume control
LED Metering	10-segment LED meters for output level monitoring
Signal Routing	Flexible signal routing with matrix-style assignment for inputs and outputs
Power Supply	100-240V AC, internal power supply (switching type)

8. Podcast Camera

Specification	Details
Processor (CPU)	Qualcomm Snapdragon 8 Series for efficient performance
Image Sensor	Sony 1/2" CMOS sensor for high-resolution imaging
Camera Resolution	12 Megapixels effective resolution
Lens	24–70mm lens with versatile focal lengths
Aperture	Adjustable aperture ranging from f/6.3 to f/10
Minimum Focus Distance	50 cm
Field of View (FOV)	80° horizontal, 46° vertical
Zoom Capabilities	6x zoom (3x optical, 2x digital)
Autofocus System	Fast hybrid autofocus (focus in ~0.08 seconds)
Display	5-inch LCD touchscreen (1080 x 1920 pixels) for intuitive control
Operating System	Holly OS 2.0 (user-friendly interface with streaming/recording features)
Connectivity Ports	DC power input, 3.5mm audio out, HDMI out, SD card slot, USB-C, USB-A, LAN port
Power Consumption	≤ 15W (energy-efficient)
Operating Temperature	-10°C to 40°C

9. Collar Mic.

Specification	Details
System Type	Wireless Microphone System (Bodypack Transmitter + Receiver)
Frequency Range	518 – 876 MHz (varies depending on region)
Transmission Range	Up to 100 meters (328 feet) in optimal conditions
Modulation	Frequency modulation (FM)
Audio Frequency Response	80 Hz – 18 kHz
Total Harmonic Distortion	< 1% (at 1 kHz, typical)
Microphone Type	Lavalier Clip-on Microphone (Omnidirectional)
Microphone Sensitivity	-40 dB re 1 V/Pa
Transmitter Battery Life	Approx. 8 hours (depending on usage and conditions)
Receiver Display	LCD with backlight, displaying battery life, frequency, and audio level
Receiver Power Supply	12 V DC (via included power supply) or 2 AA batteries
Transmitter Power Supply	2 AA Batteries
Weight	Transmitter: 168 g (with batteries)
Receiver Weight	332 g (with batteries)
Audio Input	3.5mm locking jack (receiver)
Output Connectors	1/4" jack, XLR balanced output (receiver)
Operating Temperature	-10°C to +55°C
Key Features	- True Diversity Reception
	- Auto Frequency Scan & Synchronization
	- Wide RF range
	- Multi-channel operation (up to 12 systems)
Included Accessories	Bodypack transmitter, receiver, lavalier microphone, belt clip, power supply, batteries

10. Dynamic Microphone

Specification	Details
Microphone Type	Dynamic (Cardioid)
Frequency Response	40 Hz – 16 kHz

Sensitivity	2.7 mV/Pa (at 1 kHz)
Impedance	350 ohms
Polar Pattern	Cardioid
Output Connector	XLR 3-pin
Max SPL (Sound Pressure Level)	154 dB SPL (at 1 kHz)
Recommended Load Impedance	1000 ohms or higher
Material	Metal housing, durable and robust design

11. Audio Cable

Specification	Details
Cable Type	XLR (Balanced Audio Cable)
Conductor Material	Oxygen-Free Copper (OFC) for high conductivity
Conductor Size	20 AWG (for typical XLR cables)
Cable Insulation	Polyethylene (PE) insulation for better signal clarity
Shielding	Spiral shielding to reduce noise and interference
Cable Jacket Material	Flexible PVC or rubberized exterior for durability
Connectors	Neutrik XX Series XLR connectors (Gold-plated pins)
Connectors Plating	Gold-plated contacts to prevent corrosion and improve conductivity
Cable Length	Available in various lengths (e.g., 1 meter, 3 meters, 6 meters)
Cable Diameter	Approximately 6 mm – 8 mm (varies depending on the model)
Impedance	110 ohms (typical for XLR cables used in professional audio systems)
Maximum Operating Temperature	-10°C to 60°C
Durability	High durability; designed for professional, heavy-duty applications

12. Computer System (Complete Set)

Component	Specification
Processor (CPU)	Intel Core i7-12700K 12 th Generation
RAM	16 GB DDR4 (expandable to 32 GB for better multitasking)
Storage (HDD/SSD)	1 TB SSD (for faster boot and load times) + 1 TB HDD (for storage)
Graphics Card (GPU)	NVIDIA GeForce GTX 1660 Super or AMD Radeon RX 6600 (for content creation)
Motherboard	Compatible with chosen processor
Power Supply	650W–750W PSU (for reliable and efficient power supply)
Operating System	Windows 11 Pro (depending on the ecosystem)
Wi-Fi / Bluetooth	Built-in Wi-Fi 6 and Bluetooth 5.0
Ports	USB 3.0, USB-C, HDMI, Display Port, Audio In/Out, Ethernet
Case	Mid Tower with good airflow and cooling system (e.g., Corsair, NZXT)
Keyboard & Mouse	Ergonomic Wireless Keyboard & Mouse set for comfortable use
LED Monitor	32-inch LED 4K Monitor with IPS panel (1440p or 4K resolution for sharp visuals)
Monitor Features	75 Hz refresh rate, Low Blue Light Technology, adjustable stand

13. XLR (M&F)

Specification	Details
Connector Type	XLR 3-pin Male/Female
Body Material	Zinc die-cast or thermoplastic (depending on model)
Contact Material	Gold-plated copper alloy (for better conductivity and corrosion resistance)
Contacts	3-pin, silver-plated contacts
Rated Current	15 A (maximum)
Rated Voltage	50 V AC/DC (maximum)
Insulation Resistance	> 10 MΩ

Dielectric Strength	1.5 kV (minimum)
Temperature Range	-30°C to +80°C
Insertion/Withdrawal Cycle	1000 cycles
Contact Resistance	≤ 5 mΩ
Weight	Approx. 40 g (per connector)
Locking Mechanism	Secure latching mechanism to prevent accidental disconnection
Durability	High durability, designed for heavy-duty use in professional environments

14. Professional Audio Recorder

Specification	Details
Brand	Tascam or equivalent
Model	DR-70D (Portable Recorder for DSLR, Field Recording)
Recorder Type	Digital 4-Channel Portable Audio Recorder
Microphone Inputs	4 x XLR/TRS combo inputs with phantom power (48V)
Input Gain Control	Independent gain controls for each input
Audio Format	WAV (BWF-compliant), MP3
Maximum Sampling Rate	96 kHz / 24-bit
Record Modes	Stereo, Dual Mono, Four-Channel Recording
Signal-to-Noise Ratio	100 dB (A-weighted)
THD (Total Harmonic Distortion)	< 0.03% (at 1 kHz, 0 dBFS)
Storage Media	SD/SDHC/SDXC cards (up to 128GB)
Outputs	2 x XLR Outputs (Balanced), 2 x 1/4" TRS Outputs
Power Supply	4 x AA Batteries or DC Input (5V via USB or external adapter)
Display	Backlit LCD Screen with Clear View
Audio Processing	Low-cut filter, limiters, and compressor built-in
Phantom Power	+48V Phantom Power for Condenser Mics
Operating Temperature	-10°C to +50°C
Durability	Rugged design suitable for outdoor and harsh environments
Additional Features	- Real-time monitoring with headphone out - Multi-track recording for complex audio sources

15. AC Split (1.5 ton)

Specification	Details
Cooling Capacity	18,000 BTU (1.5 Tons)
Energy Efficiency	Inverter Technology (Energy-saving)
Compressor Type	DC Inverter(Hot and cool)
Voltage	220-240V, 50Hz
Airflow Rate	800-1000 m³/h (depending on fan speed and mode)
Refrigerant	R32 (Environmentally friendly refrigerant)
Power Consumption (Cooling)	1.0 – 1.4 kW (approx.)
Cooling/Heating Mode	Cooling, Heating (Heat pump functionality)
Air Filter	Anti-bacterial, anti-dust filter for improved air quality
Display	LED Display on indoor unit
Temperature Control	Smart temperature control with Auto mode, Sleep mode, Turbo mode
Noise Level	Indoor Unit: 23-43 dB(A) (depending on speed)
Energy Star Rating	5-Star energy efficiency (depending on region and model)
Warranty	1 year on parts and 5 years on compressor

16. Water Pump (Submersible)

Specification	Details
Power	3 HP
Motor Type	High-efficiency, three-phase motor
Voltage	380-415V (Three-Phase)
Frequency	50 Hz
Cooling Type	Liquid-cooled
Flow Rate	10-50 L/min (depends on head and model)
Head	Varies depending on model and application (typically 10-50 meters)
Pump Type	Submersible centrifugal pump
Impeller Material	Stainless steel or bronze
Body Material	Cast iron or stainless steel
Suction/Discharge	Suction: 1.25" - 4" NPT, Discharge: 1.5" - 4" NPT (depending on model)
Refrigerant	Not applicable (liquid-cooled system)
Energy Efficiency	High efficiency, designed to reduce energy consumption
Applications	Agricultural irrigation, water supply, wastewater, industrial use
Phases	Three-phase
Operating Temperature Range	-10°C to +50°C
Certifications	CE, ISO certified

17. Vacuum Cleaner (4000Watt)

Specification	Details
Model	4000 Watt Vacuum Cleaner
Power Consumption	4000 Watts
Motor Type	High-efficiency motor for powerful suction
Voltage	220-240V (AC), 50-60Hz
Suction Power	3000-3500 Watts (varies depending on model)
Dust Capacity	20-30 Liters (depends on model)
Filtration System	HEPA Filter, Carbon Filter, Cyclonic Filtration
Noise Level	65-85 dB
Cord Length	8-10 meters (depending on model)
Hose Length	1.5-2 meters
Airflow Rate	30-45 liters/second
Bag Type	Bagged
Energy Efficiency	High-efficiency energy-saving design
Attachments	Floor brush, upholstery brush, crevice nozzle, dusting brush
Cable Rewind	Automatic cable rewind feature
Applications	Suitable for home, office, industrial cleaning, construction sites, etc.
Warranty	2 years, depending on the brand

18. Cordless Mic.

Specification	Details
Type	Wireless Microphone System (UHF)
Frequency Range	518 MHz to 866 MHz (varies by region)
Transmission Range	Up to 100 meters (328 feet) (depending on conditions)
Modulation	FM (Frequency Modulation)
Audio Output	Balanced XLR or unbalanced 1/4" jack
Signal-to-Noise Ratio (SNR)	> 110 dB (A-weighted)
Dynamic Range	> 120 dB

Audio Frequency Response	25 Hz to 18 kHz
Transmitter	Bodypack Transmitter (SK 100 G4), Handheld Transmitter (SKM 100 G4)
Transmitter Battery	2 x AA (Alkaline or rechargeable)
Receiver	Receiver Unit (EM 100 G4)
Receiver Power Supply	12-18 V DC (via external power supply)
Receiver Output	XLR balanced and 1/4" jack (unbalanced)
Receiver Display	LCD screen with backlight, displays frequency, signal strength, and battery status
Channel Selector	Up to 12 compatible channels in one location (depending on region and frequency range)
Transmitter Display	LCD display showing battery life, group/channel, mute status
Audio Mute Function	Yes (mute control on the transmitter or receiver)
Antennas	Fixed antennas on both transmitter and receiver (removable antennas on receiver)
Power Consumption	Transmitter: 30 mA, Receiver: 350 mA
Operating Temperature	-10°C to +55°C

19. TELEPHONE HYBRID LINE (FOR LIVE SETUP)

Specification	Details
Type	Hybrid Telephone Interface
Connection Type	Analog (PSTN), VoIP (SIP), Mobile Network (optional)
Audio Quality	20Hz - 20kHz frequency response, 16-bit, 44.1kHz
Echo Cancellation	Integrated high-performance echo cancellation
Noise Reduction	Automatic noise reduction for clear audio
Dual Hybrid Ports	Two independent hybrid ports for simultaneous call handling
Call Management	Automatic call routing, call volume control, mix-minus for calls
Simultaneous Call Handling	Supports up to 6 simultaneous calls
Inputs	Analog XLR input, 3.5mm jack (for VoIP or mobile integration)
Outputs	Balanced XLR output, unbalanced RCA/1/4" jack
Display	LCD screen with backlight for call information and volume levels
Control Interface	Front panel controls, web-based interface for remote control
Network Integration	IP-based control and monitoring via LAN/WAN (Ethernet)
Power Supply	110V - 240V AC, optional DC power supply (12V)
Rack-Mountable	Yes, 1U rack mount design for easy installation
Operating Temperature	0°C to 40°C
Compatibility	Fully compatible with mixing consoles, broadcast equipment, and digital audio systems

20. PROFESSIONAL AUDIO Mixer (32 CHANNEL)

Specification	Details
Brand	Various leading brands (e.g., Yamaha, Allen & Heath, Sound craft, Midas, Behringer or equivalent)
Model	32-Channel Professional Audio Console
Channels	32 mono channels or 16 stereo channels
Input Type	XLR balanced inputs, TRS, Line level
Preamps	High-quality, low-noise preamps for each input
EQ	3-band or 4-band EQ (Low, Mid, High, with sweepable mids in some models)
Faders	32 motorized faders for precise level control
Auxiliary Sends	4-8 auxiliary sends, with pre/post-fader switching
Built-in Effects	Reverb, delay, compression, EQ, or optional external effect routing

Outputs	XLR balanced main outputs, TRS outputs, USB (direct recording), and digital outputs (AES/EBU, SPDIF)
Monitoring	Dedicated headphone and monitor outputs with independent level control
Digital Connectivity	Dante, MAD1, AES/EBU, USB, optional network protocols
Recording Capabilities	Multi-track recording to DAW via USB or digital outputs
Power Supply	250V AC
Power Consumption	30-50 watts (depending on model)
Additional Features	- Built-in channel muting and solo buttons
	- Phantom power for condenser mics.
	- Grouping functions for sub-mixes (drums, vocals, etc.)
	- Remote control via mobile app or computer (on certain models)

21. STL

Specification	STL Transmitter and Receiver System
Brand	Apt, Comrex, Tieline, Elenos, GatesAir, Shure, Sennheiser or equivalent
Transmission Type	FM
Audio Inputs	Analog (XLR, TRS, RCA), Digital (AES/EBU, IP via Ethernet)
Audio Outputs	Analog (XLR, TRS), Digital (AES/EBU, IP via Ethernet)
Compression/Encoding	Apt-X, G.711, G.722, MP2, AAC (lossy or lossless compression)
Transmission Mode	Stereo or Multichannel (supports multiple audio channels)
Latency	Low latency (typically 1-50 ms, depending on model)
Error Correction	Forward Error Correction (FEC) for stable transmission over unreliable networks
Redundancy	Optional dual transmission paths for failover (e.g., backup receivers or transmitters)
Output Power (Transmitter)	Typically 50W to 100W (higher power for long-distance links)
Power Supply	AC (110V-240V), DC options available depending on transmitter/receiver model
Connectivity	Analog (FM, AM), IP-based (Ethernet, Wi-Fi, Satellite, Microwave, 3G/4G)
Monitoring & Control	Remote monitoring via web interface or dedicated software
Mounting	Rack mountable, standalone units
Receiver Sensitivity	Typically -80dBm to -40dBm depending on transmission medium (Microwave, Satellite, etc.)
Receiver Features	High-quality audio decoding, error correction, signal monitoring
Receiver Outputs	XLR, AES/EBU, IP, TRS for compatibility with broadcasting equipment
Frequency Band	Typically UHF, VHF, 2.4 GHz, 5.8 GHz, or microwave frequencies
Built-in Features	Automatic frequency selection, bandwidth management, built-in diagnostics
Environmental Rating	Weather-resistant options for outdoor installations
Signal Monitoring	Built-in diagnostics and remote control options
Receiver Output Features	AES/EBU, balanced analog, IP outputs for broadcast integration
Frequency Range (Audio)	20Hz to 20kHz for full-range audio
Frequency Range (Transmission)	UHF, VHF, 2.4 GHz, 5.8 GHz, Microwave (varies by model)
Power Output	50W-100W (Transmitter), N/A (Receiver)
Receiver Redundancy	Dual-redundant system for reliable signal reception
Transmission Features	High-quality audio, error correction, low-latency reliable transmission

22. Radio Receiver

Specification	Details
Brand	(e.g. Sennheiser, Sony, Tascam, Comrex, Shure) or equivalent
Model	(Model name)
Type	Professional Radio Receiver (FM/AM)

Frequency Range	FM (88 MHz to 108 MHz), AM (530 kHz to 1700 kHz),
Tuning Method	Manual, Digital, Preset Stations
Audio Output	XLR, 3.5mm Jack, RCA, Wireless Output (Bluetooth, RF)
Modulation	FM, AM, DAB, HD Radio
Signal-to-Noise Ratio (SNR)	> 90 dB (A-weighted)
Audio Deviation	± 24 kHz
Sensitivity	< 3 μV (for 52 dB S/N ratio)
Power Supply	Rechargeable Battery, AA Batteries, DC Input
Battery Life	Approx. 8-12 hours depending on battery type and operating conditions
Display	LCD or LED Display (showing frequency, signal strength, audio levels)
Operating Temperature	-10°C to +55°C (14°F to 131°F)
Intermodulation Protection	Built-in circuitry for noise and interference reduction
Noise Reduction	Automatic gain control, noise filtering
Wireless Connectivity	Bluetooth or RF output for wireless audio transmission
Additional Features	Automatic station scanning, clear channel detection, low battery indicator, tone control
Mounting Options	Rack-mountable or portable (depending on model)

23. Repair & Up gradation of 02 Nos. Schneider Passenger Elevator

No.	Description of Items	QTY (Nos.)
1	Supplying & Installation of 02 No's gearless machine 1000Kg.	02
2	02 No's Electronic control VVF	02
3	02 No's Car board (COP) G to 04 Floor	02
4	10 No's push button plate for landing door with LCD Indicator (LOP)	10
5	10 No's landing stainless steel Doors with complete accessories 2100X800mm	10
6	1800 ft. 10mm Hosting ropes	1800 ft.
7	20 No's Connecting Rods for ropes	20
8	02 No's doors operator 2100X800mm with stainless steel panel's	02
9	02 No's Speed governor & pit pulley set	02
10	900 ft. 6mm ropes for speed governor	900 ft.
11	02 No's gearless Motor base channel Iron 6 Inch & 8 inch	02
12	08 no's Counter weight guide shoe 5mm (2 set)	08
13	08 no's 10mm guide shoe for cabin	08
14	Landing push button Complete shaft wiring	02
15	02 no's cabin's for internal lighting system	02
16	02 no's cabin ceiling blower fan	02
17	02 no's ARD (Auto landing device) 11KW	02
18	06 Nos. Dividing Pulley 300mm Teflon	06
19	02 Nos. Door Sensor and door safety	02

24. TECHNICAL SPECIFICATION FOR 30KW SOLAR SYSTEM

Item	Specification
System Capacity	30 kWp Solar Grid & Genset Synchronized System
Solar PV Modules	Longi/Jinko or equivalent, 545-610W, ≥22% efficiency
Solar Inverter (Hybrid Systems)	Huawei or equivalent, ≥30 kW or 15% downsizing, >98% efficiency

PV Module Mounting Structure	Hot-dip Galvanized Iron (14 gauge), $\geq 26^\circ$ tilt, wind resistance 40 m/s
Civil Work	Trench formation, cable tray installation, etc.
DC & AC Cables	Newage/Fast/Pakistan Cable or equivalent, tinned copper, 6mm ² , XLPO insulation
Electrical Safety	DC Isolators, Surge Protection, Earthing Failure Relay, AC Circuit Breakers, Emergency Shutdown Switch, DC/AC Disconnect switches
Electrical Panel	Schneider or equivalent, 100A Magnetic Contactor, MCCB 100A, Synchronization modules
Plant Monitoring	Compatible with inverter, Intel Core i5 PC, 32-inch HD LED, remote/local connectivity
Protection & Grounding	Surge protection, Lightning Arrestors, separate earth pits, total resistance ≤ 3 ohms
Synchronization with Generator	Preferably same brand as inverter
Cable Ties & Ducting	UV-resistant, high-temperature cable ties and trays
Plastic Pipes, Cable Tray & Laying	PVC/HDPE pipes for DC/AC cables, water and rodent protection
MC4 Connectors	Original MC4 connectors, IP67 certified
Fire Alarm System	Smoke detectors, fire alarm sounder for panel room
PV Module Cleaning Network	Water reservoirs, walkway for panel cleaning, and water network design
Documentation	Test reports, certification reports, O&M manuals, civil work drawings
Civil Work (Waterproofing)	Waterproofing for rooftop drilling, concrete blocks at footings
System & Safety Signs	Safety signs, cleaning guidelines, shock treatment charts
Installation & Commissioning	Handled by installer, including net-metering
Spares	Spares for electrical and fire protection system for two years
Training Staff	Emergency shutdown protocols, plant monitoring

Note: All the WAPDA issues including to net metering must be dealt by the successful bidder itself.

25. TECHNICAL SPECIFICATION FOR 50KW SOLAR SYSTEM

S.No.	Item	Specification
1	System Capacity	50 kWp Solar Grid & Genset Synchronized System
2	Location	PBC BH Peshawar
3	Mode of Operation	Grid-Tied with Generator Synchronized to reduce fuel cost

4	Operating Voltage	<ul style="list-style-type: none"> - Nominal AC Voltage: 380-480 V / 3 N / PE - Grid Frequency Range: 45Hz - 55 Hz - Option for Generator synchronization
5	Solar PV Modules	<ul style="list-style-type: none"> Longi/Jinko or equivalent - N-Type Technology, Dual-Sided Power: 545-610W - Efficiency $\geq 22\%$ - 12-year warranty - 30-year linear performance output warranty
6	Solar Inverter (Hybrid System)	<ul style="list-style-type: none"> Huawei or equivalent - At least 50 kW or 15% downsizing - Efficiency $>98\%$ - Night consumption $>2W$ - 5-year standard warranty - Extended warranty option
7	PV Module Mounting Structure	<ul style="list-style-type: none"> Hot-dip Galvanized Iron (14 gauge) with Powder Coating - Tilt $\geq 26^\circ$ - Wind resistance 40 m/s
8	Civil Work	All associated civil works like trench formation, cable tray installation, etc.
9	DC Cables	<ul style="list-style-type: none"> Newage/Fast/Pakistan Cable or equivalent - Tinned copper, 6mm² - XLPO insulation - Operating temperature: 120°C - Cable warranty: 2 years
10	AC Cables	<ul style="list-style-type: none"> Newage/Fast/Pakistan Cable or equivalent - Copper conductor, - Cable warranty: 2 years
11	Electrical Safety	DC Isolators, Surge Protection, Earthing Failure Relay, AC Circuit Breakers, Emergency Shutdown Switch, DC/AC Disconnect switches
12	Electric Panel	<ul style="list-style-type: none"> Schneider or equivalent - 100A Magnetic Contactor, NSX 100F, MCCB 100A - Synchronization modules with genset
13	Plant Monitoring	<ul style="list-style-type: none"> Compatible with inverter - Monitoring system with local and remote connectivity - Intel Core i5 PC, 32-inch HD LED
14	Protection & Grounding	Surge protection on DC/AC sides, Lightning Arrestors, separate earth pits for DC/AC sides, total resistance ≤ 3 ohms
15	Synchronization with Generator	Preferably same brand as inverter
16	Cable Ties & Ducting	UV-resistant, high-temperature cable ties and cable trays for DC/AC cables
17	Plastic Pipes, Cable Tray & Laying	<ul style="list-style-type: none"> PVC/HDPE pipes for DC/AC cables - Properly sized, unions, and elbow bending pipes for water and rodent protection
18	MC4 Connectors	<ul style="list-style-type: none"> Original MC4 connectors - IP67 certified connectors
19	Fire Alarm System	Smoke detectors, fire alarm sounder for panel room
20	PV Module Cleaning Network	Water reservoirs, walkway passage for panel cleaning, and water network design

21	Documentation	Test reports, certification reports, drawings, O&M manuals, civil work drawings, simulation reports for performance guarantee
22	Civil Work (Waterproofing)	Waterproofing for rooftop drilling, concrete blocks at footings
23	System & Safety Signs	Safety signs, cleaning guidelines, shock treatment charts in local languages (Urdu & English)
24	Installation & Commissioning	Installation, commissioning, and net-metering handled by the installer
25	Spares	Spares for electrical, inverter and fire protection system for two years
26	Training Staff	Emergency shutdown protocols, plant monitoring

Note: All the WAPDA issues must be dealt by the successful bidder itself.

26. TECHNICAL SPECIFICATION FOR 100KW SOLAR SYSTEM

Component	Specifications
Capacity	100kWp Solar Grid & Genset Synchronized System.
Location	PBC BH Peshawar
Mode of Operation	Grid-Tied with Generator Synchronized to reduce fuel cost.
Operating Voltage	For Inverter: Nominal AC Voltage: 380-480 V / 3 N / PE; Nominal Grid Frequency: 50 Hz; Grid Frequency Range: 45Hz - 55 Hz; Generator synchronization option.
Solar PV Modules (100KW)	Manufacturer: Longi, Jinko, or equivalent. Specifications: N-Type Technology, Dual-Sided Power 545-610W preferred, HOT 3.0 Technology, Efficiency $\geq 22\%$, 12-Year Product Workmanship Warranty, 30-Year Linear Performance Warranty, MC4 Connectors and DC Cables.
Solar Inverter 110-KW (Hybrid System)	Manufacturer: Huawei, Fox, or equivalent. Capacity: At least 110kW with 15% downsizing permissible, Efficiency: Maximum $\geq 98\%$, Euro Efficiency $\geq 98\%$, Night Power Consumption $< 2W$, Warranty: 5 Years standard + extended options.
PV Module Mounting Structure	Material: Hot dip galvanized iron (minimum 14 gauge) with powder coating (RAL 9004). Specifications: Tilt angle $\geq 26^\circ$, Salt spray test, Wind resistance up to 40m/s Guarantee against sagging and rusting
Civil Work	Includes trench formations, cable trays, laying/terminations of cables, and concrete blocks for PV frame mounting. Waterproofing for rooftops included.
DC Cables	Manufacturer: Newage, Fast, Pakistan Cable, or equivalent. Specifications: Tinned Copper 6mm ² , XLPO insulation and sheeting, Operating Temperature: Up to 120°C, UV and ozone resistant, Maximum Voltage: 1500VDC, Warranty: 2 Years.
AC Cables	Manufacturer: Newage, Fast, Pakistan Cable, or equivalent. Specifications: Copper (99.99% Pure), Warranty: 2 Years.
Electrical Safeties	Manufacturer: Schneider or equivalent. Includes DC isolators, surge protection devices, earthing failure relay, AC circuit breakers, and emergency shutdown switch.

Electric Panel	Manufacturer: Schneider or equivalent. Specifications: Integrated Solar-Genset synchronizing modules, 100A Magnetic Contactor, NSX 100F MCCB Adjustable, Compliant with IEC standards.
Plant Monitoring	Compatible with inverter, string-level monitoring, Local and remote connectivity, Includes Intel Core i5 PC and 32-inch HD LED for monitoring.
System Protection	Dedicated DC and AC earthing pits (resistance ≤ 3 ohms), Surge protection on DC and AC sides, Lightning arresters, Proper grounding as per DISCO net-metering SOP.
Grid and Generator Synchronization	Solar PV system synchronized with existing gensets, preferably same brand as inverter.
Additional Components	Includes high-temperature resistant cable ties, UV-protected ducting, smoke detectors, fire alarms, and water reservoirs for cleaning.
Simulation and Guarantees	Simulation for average generation of 4kWh/kWp/day for the first three years, backed by PVSys or equivalent software.
Documentation and Training	Detailed test reports, schematic drawings, operation manuals, and staff training on emergency protocols and plant monitoring.
Installation & Commissioning	Complete system commissioning and grid connectivity (PESCO net-metering handled by Successful bidder).

Note: All the WAPDA issues must be dealt by the successful bidder itself.

Signal Strength Meter (For FM and AM):

Feature	Specification
Frequency Range	8 kHz to 8 GHz (extendable up to 33 GHz with appropriate antennas)
Real-Time Bandwidth	Up to 40 MHz
Minimum Detectable Pulse Duration	1.5 μ s
Sensitivity (DANL)	Typically -160 dBm (1 Hz)
Third-Order Intercept (TOI)	≥ 5 dBm (35 MHz to 3.3 GHz, low distortion mode)
Second-Order Intercept (SOI)	> 30 dBm (35 MHz to 8 GHz)
Noise Figure	≤ 10 dB (35 MHz to 3.3 GHz, low noise mode)
LO Phase Noise	≤ -85 dBc (1 Hz) at 10 kHz offset (35 MHz to 8 GHz)
Attenuation Range	Up to 40 dB, in 1 dB steps
Tuning Resolution	1 Hz
Frequency Accuracy	$\pm 2 \times 10^{-12}$, $\pm 1 \times 10^{-12}$ (typical) with GPS aid, averaged over 24 hours

Display	6.5" color TFT LCD, 640 × 480 pixels
Battery Life	Approximately 3.5 hours in receive mode
Power Consumption	Typically 16 W
Operating Temperature	-10°C to +55°C
Storage Temperature	-20°C to +70°C
GNSS Receiver	Supports GPS, GLONASS, BeiDou, Galileo
Interfaces	USB, LAN, audio out

Earth Testing Meter:

Feature	Specification
Measurement Modes	3-Pole, 4-Pole, Selective, Stakeless, Soil Resistivity
Resistance Range	0.001 Ω to 50 kΩ
Accuracy	±2% of reading + 3 digits
Test Voltage	20V or 48V AC
Test Frequency	94 Hz, 105 Hz, 111 Hz, 128 Hz (Auto selection)
Interference Rejection	Up to 40V peak-to-peak
Data Storage	Up to 1,500 measurements
Display	Digital LCD with backlight
Power Supply	8 x AA batteries
Battery Life	Approx. 800 tests (with 30-second measurements)
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Protection Rating	IP56 (Dust and water-resistant)
Included Accessories	4 ground stakes, 3 test leads (50m, 25m, 5m), 2 clamps, carrying case, user manual

SPECIAL TERMS & CONDITIONS (IF AND WHERE APPLICABLE):

1. All the **international standards** must be complied as defined in the specification sheet.
2. Bidder shall ascertain to provide complete **after sales technical and backup service/support** on-site to PBC.
3. End-to-end principal support for the offered Equipment (24x7). Service & support with warranty.
4. Adequate **protection system** should be provided to safeguard the system from damage. The protection system should be fast acting to safeguard the system and components.
7. The successful bidder/supplier must ensure that the equipment / items provided must be achieved in a plug and play operation without any complexity and shall be responsible for supply & installation including to civil/electrical works to put the equipment operational.
8. Equipment alongwith all accessories including cables, connectors, allied equipment, installation and Maintenance manual, technical drawings etc. should be provided alongwith supply & installation including to civil and electrical works related to supplied equipment (if any).
9. The successful bidder will be responsible for electrical works including wiring, connection from DB etc.
10. Bidders must indicate on the specifications sheets whether the equipment offered comply with each specified requirement.
11. All configuration files and software (if any) must be provided by the OEM free of charge under warranty period.
12. Local partner must ensure timely availability of OEM technical team for remote assistance to PBC technical team free of charge.
13. Bidders must provide evidence of experience for supply of concerned equipment/items and submit list of previous comparable works for evaluation.
14. All the **international standards** must be complied as defined in the specification sheet, any deviation with the terms and specifications of the tender shall be highlighted by the bidder. Any discrepancy found at a later stage will lead to disqualification of the bidder.
15. All the terms & conditions of tender notice and general terms & conditions including to bidding document clauses shall be applicable to successful bidder.

**CERTIFICATE OF AFFIDAVIT/DECLARATION
(To be printed on Stamp Paper worth Minimum Rs. 100)**

In response to tender inquiry No. _____ We, solemnly declare that Mr. _____ S/O _____ CNIC _____ is the Designation of Company Name offer to provide the Equipment in accordance with your tender notice published in daily newspaper and as per **Annexure-A** of tender documents under tender inquiry No. ENG/PROC-4(264)/25. We are hereby submitting our proposal, which includes the Technical Proposal and the Financial Proposal sealed in two separate envelopes.

Moreover, we also confirm that the prices quoted to Pakistan Broadcasting Corporation, Islamabad are not more than the prices quoted to any other Government / Autonomous organization. In case of any over pricing we shall be bound to refund the exceeding amount to PBC in the best interest of the Government. We also confirm to abide by all the terms and conditions laid down in the Tender documents or time to time changed by the Government. In case of any violation on any terms and condition, our bid security / call deposit may be forfeited, and we shall not challenge it in any court of Law.

I/We also undertake:-

- i. All clauses of this tender document have been read carefully and our firm agrees with all clauses of tender documents with our sign and company stamp.
- ii. Our firm has neither been blacklisted nor having any dispute with any Government, Semi Government and Autonomous Organization and also there is no litigation against the firm.
- iii. Our firm has not been debarred by any Government, Semi Government and Autonomous Organization.
- iv. Our Firm has not been bankrupted.
- v. Our equipment to be supplied has not been manufactured in India or Israel. Furthermore, our firm has not any linkage with Israel or India regarding ownership, sponsoring and financing.
- vi. Offered equipment is of latest version and the spares of the same will be available in Pakistan at reasonable price for a period of more than 05 years without any major up-gradation / version change.
- vii. Our firm's financial position is strong enough to provide the tendered equipment and technically capable to supply, configure and test as per requirement of PBC. Under any circumstances the delivery and testing shall not be delayed due to dearth of financial position as well as due to technical inability. We assure that firm is financially and technically capable to resolve the discrepancies/faults in the equipment and can replace with brand new equipment, keeping the faulty one at site.

Whatever stated above is true and correct to the best of my/our knowledge and belief

Authorized Signature

Stamp

PRICE SCHEDULES (BOQ)
(To be printed at Company Letter Head)

1	2	3	4	5	6	7	8	9
S. No.	Item / Description	Country of Origin	Unit Price without GST PKR	Installation Charges (including to civil/electrical works & material)	Total price without GST PKR	Quantity	GST in PKR	Total Price With GST PKR
					4 + 5	6x7		7+8
Grand Total in Figures								
Grand Total in Words								
Net Amount in Figures with GST								
Net Amount in Words with GST								

1. Please mention the transportation, installation and any other charges separately (if any) otherwise please mention that all the charges are included in the total quoted price.
2. If not specified and mentioned clearly then all the charges would be considered as included.
3. Site survey is must for Sr. No. 24 to 27. Please quote after site survey. No additional charges will be accepted after opening of financial bids.

COMMERCIAL COMPLIANCE STATEMENT

Bidder shall submit this form duly filed and signed with the bid.

Clause.#	Description	Complied	Not Complied	Partially complied (give details)
1	General			
2	Eligibility Conditions of Bidders			
3	Cost of tendering			
4	Clarifications of Tender Documents			
5	Amendment of Tender Documents			
6	Preparation of Bid			
7	Languages			
8	Price			
9	Tender Security/Earnest Money			
10	Validity of Bids			
11	Deadline for submission of bids			
12	Modification & Withdrawal of bid			
13	Opening of Bid			
14	Responsiveness of Bids			
15	Evaluation Criterion			
16	Clarifications / Correction of Bid			
17	Commercial Compliance Statement			
18	Variation Order			
19	Award Criteria & PBC's Right			
20	Site Survey			
	Contract Conditions			
1	Performance Security			
2	Contractor responsibilities			
3	Transportation / Packing			
4	Time for Completion			
5	Warranty / Services			
6	Provisional Acceptance Certificate			
7	Terms of Payment			
8	Final Acceptance Certificate			
9	Default by contractor			
10	Arbitration & Amicable Law			
11	Force Majeure			
12	Termination for Insolvency			
13	Termination for Convenience			
14	Local Training			
15	Project Director/Ultimate Consignee			
16	Debarment/Blacklisting of Firm			
17	Repeat Order			

“TECHNICAL EVALUATION CRITERIA”

1. Experience				
Sr. No.	Description	Category Points	Total Points/ marks obtained	Documents Required
1	Company Profile of the Consultant/Firm	15		Company Profile documents
1.1 (a)	Experience of technical persons/engineers for Installation of tendered equipment if the experience of technical persons is more than 03 years	20	-	
1.1 (b)	If the experience of technical persons/engineers is more than 02 but less than or equal to 03 years	15	-	
1.1 (c)	If the experience of technical persons/engineer is more than 01 but less than or equal to 02 years	10		
1.3 (a)	Participating bidder/firm did not delay the execution of work and no LD charges deducted in PBC or any public sector in more than 3 consecutive contracts.	15		(Note: Those firms will not be entertained who failed any project in PBC). Their bid will be rejected straightaway.
1.3 (b)	If more than 2 but less than or equal to 3	10		
1.3 (c)	If more than 1 but less than or equal to 2	5		
Sub Total:		50		
2. Financial Capability				
Sr. No.	Description	Category Points	Total Points	Documents Required
2.1 (a)	Participating bidder/ Firm's annual turnover, if greater than 40 million (it may vary as per budgeted cost of tender and qualification for the procurement goods)	10		Bank Statements, audit reports& income tax return statements of last two years
2.1 (b)	If greater than 30 million but less than or equal to 40 million	7		
2.1 (c)	If greater than 20 million but less than or equal to 30million	6		
Sub Total:		10		
3. Bidders attitude & response				
Sr. No.	Description	Category Points	Total Points/ marks obtained	Documents Required
3.1	Participating bidders if not involved in disputes & litigation with PBC on already agreed terms within two years period of procurements/consultancy and in case bidder is new in PBC than certificate from public sector procuring Agency	2		(Note: Those firms who are in litigation process with PBC or involved in any dispute due to failure of any project will be rejected straightaway)
3.2	Participating bidder found responsive to the RFP and did not involve prolonging agreement signing by any means & Must submit Detailed Project Execution Plan / Work Breakdown Structure.	4		

3.3	After Sales support	4		
Sub Total:		10		
4. Operational Capability				
Sr. No.	Description	Category Points	Total Points obtained	Documents Required
4.1(a)	Degree/ diploma in Engineering Professionals (Preferably). If more than 05 qualified engineers and 02 DAE	15		Detailed CV's of professional staff are required
4.1(b)	If more than 03 qualified engineers and 02 DAE	10		
4.1(c)	If more than 02 qualified engineers and 01 DAE	5		
Sub Total		15		
5 Performance				
Sr. No	Description	Category Points	Total Points obtained	Documents Required
5	Performance			
5.1 (a)	If no fault observed in the Installation of the equipment (brand) in PBC/ public sector organization in Pakistan after the Installation of three years	8		
5.1 (b)	If no fault observed in the installation of equipment in PBC after the Installation of two years	5		
5.1 (c)	If no fault observed in the installation of equipment in PBC after the installation of one years	3		
Sub Total		8		
5.2	Extended Warranty Period			
5.2 (a)	More than two year but less than or equal to three year	7		
5.2 (b)	More than one year but less than or equal to two year	5		
5.2 (c)	Equal to one year	4		
Sub Total			7	
Total marks of technical selection criteria			100	
For Qualifying			60%	

FINANCIAL EVALUATION CRITERIA (20 MARKS/score)

S. No.	Name of bidder	price quoted	Lowest bidder	Marks obtained	TOTAL MARKS: 20
1					20
2					20
3					
4					

(Note: The financially lowest, technically qualified most advantageous bid will be accepted as the successful bidder and will be awarded the tender).

Organizational Information”

Form “A” : Firm Profile		
S #	Required Information	Response
1	Legal name of the organization	
2	Year of Registration / Establishment of the Organization	
3	National Tax Number	
4	GST Number	
5	Core business area/s of the organization	
6	What is the legal status of your organization? Tick the relevant box (one box only). (Attach Copy/Copies of Registration Certificate/s)	Public Sector Organization
		Section 42 Company
		Public Ltd. Company
		Private Ltd. Company
		Partnership Firm
		Others (Please specify)
7	Name and designation of ‘Head of Organization’	
7	Mobile:	
	Phone/s:	
	Email:	
	Fax:	
	Address of organization:	
	Website address:	
8	Name and designation of ‘Contact Person’:	
	Phone/s:	
	Mobile:	
	Email:	
	Fax:	

“RELEVANT EXPERIENCE”

Form “B” : Relevant Experience			
Sr. #	Required Information	Response (Please provide exact information with task title, organization, location/s and duration)	
1	Task Title and duration (The task title means the name of Corporate Portfolio/ Profile Books)		
2	Organization		
3	Duration of task completion		
4	Location/s (districts/tehsils)		
5	Any other experience	Relevant	Not Relevant

CERTIFICATES FROM (C) PUBLIC SECTOR PROCURING AGENCIES (PA)

Sr. No.	1 Description	2 Name of public sector with whom bidder participated in response of RFP of procuring organization	3 kindly attached certificate from procuring organization having information regarding column Sr. No. 1, 2,3 & 4	4 Contact No of concerned procurement officer with email address
1	Participating bidder/firm did not prolong signing of agreement in PBC/Public sector Organization			
2	Participating bidders if not involved in disputes & litigation with the procuring Agency.			
3	Participating bidder found responsive to the RFP and did not involve to prolong agreement signing by any means PA			
4	After sale service/support of the bidder PA			

“KEY MANAGEMENT STAFF INFORMATION”

Form “D”: Key Management Staff Information (Sheet 1¹)			
Sr. #	Required Information	Response	
1	Name		
2	Position		
3	Firm Name		
4	Age		
5	Years of association with the firm		
6	Core professional area of work		
7	Assigned tasks in this firm		
8	Please name similar assignment undertaken by the individual		
10	Specific role of the individual in this Activity		
11	Please provide information on additional experience in HR cases		
	Position	Employer	Duration
			From To
12	Educational Qualifications		
	Degree/Diploma/Certificate	Year	Institution Specialty

¹Please mark the other two sheets as Sheet 2 and Sheet 3 respectively for each individual.