



SURVEY OF PAKISTAN
Rawalpindi

INVITATION TO BID
(Procurement of IT Equipment & Services)

Survey of Pakistan, a National Surveying & Mapping Agency invites sealed bids under the Project titled “**Cadastral Mapping**” under Single Stage-Two Envelop procedure (PPRA Rule 36 (b) from the Original manufacturers / authorized distributors / suppliers/ service providers etc., registered with Income Tax & Sales Tax Departments for supply of following items/services:

Sr. #	Equipment/ services	Quantity	Remarks	Closing Date
1.	Scanner 44 “	05		
2.	Plotter 44”	03		
3	Printer A-3 Size (colored)	02		
4	Printer A-4 Size (B&W)	5		
5.	Up-gradation of existing Networking with addition of nodes and miscellaneous items	Nodes 325-350 with installation of necessary hardware and cabling	Pre-bid meeting to assess requirement for sl. 5 & 6 will be held on 17-10-2022 at 11:00 hrs.	31-10-2022 At 10:00 hrs
6.	Upgrading of data center	Upgrading and scaling of hardware/ software, storage and archiving system etc		

2). Bidding documents, containing detailed terms and conditions, technical specifications, method of procurement, procedure for submission of bids, bid security, bid validity, opening of bid, evaluation criteria, clarification/rejection of bids, performance guarantee etc., are available for the interested bidders at website of Public Procurement Regulatory Authority and Survey of Pakistan website www.sop.gov.pk which can be downloaded.

3). The bids, prepared in accordance with the instructions in the bidding documents, must reach at Project Management Unit (PMU) of the Project located in **Survey of Pakistan Faizabad Rawalpindi** duly addressed to the Chairman Purchase Committee/ Project Director on or before **31-10-2022 at 10:00 hrs.** Bids will be opened on the same day at **10:30 hrs.**

(Nadeem Ahmad Ch)
Project Director
Chairman Purchase Committee
051-9290202

TERMS & CONDITIONS

1. Applications on prescribed form (attached) along with bidding document & Technical specifications (compliance sheet) and draft contract, can be downloaded from the website of PPRA, and Survey of Pakistan (www.sop.gov.pk).
2. The bids duly completed in all respect should reach the Chairman Purchase Committee, Cadestral Mapping Project, Survey of Pakistan Faizabad, Rawalpindi by registered post/courier **latest by 10:00 hours on 31-10-2022. No time relaxation for postage/delivery of bid.** These bids will be opened at 10:30 hours on the same day in the presence of bidders or their authorized representatives.
3. The method of procurement is **single stage – two envelopes** as per PPRA's Rule-36(b).
4. The Bidders will send their Proposals in two sealed envelopes, marked as "FINANCIAL PROPOSAL" & "TECHNICAL PROPOSAL" in bold and legible letters to avoid confusion. Initially, only envelopes marked as **Technical Proposal** shall be opened and envelopes marked as Financial Proposal shall be retained in the custody of Chairman Purchase Committee. After the **evaluation & recommendations by the concerned Technical Evaluation Committee**, Financial Proposals of only technically qualified bids will be opened. The Financial Proposals of bids found technically non-responsive shall be returned un-opened to the respective bidders.
5. 4% earnest money in shape of pay order/bank draft in the name of Chairman Purchase Committee, Cadestral Mapping Project, Survey of Pakistan Faizabad, Rawalpindi should be enclosed in the envelope containing Financial Bid. However, the certificate for attachment be indicated in technical bid, otherwise, the same will be rejected at the opening stage of technical bids.
6. Bidders will provide compliance sheet of each item of the equipment against specifications. Bidders response should be explicit for each component. Any ambiguous and implicit words in quotations (such as yes, ok, offered, available, provided, etc.) will be treated as 'non-responsive' and bid will be rejected at initial stage.
7. Bidder shall not submit any document after due date except in response to any clarification sought by Project Director in accordance with PPRA 31.
8. The firm/supplier/ service provider interested in more than one item may furnish separate tender for each item.
9. Procuring agency may reject any or all bids subject to the relevant provisions of PPRA Rules-33.
10. Quantity of items can be increased or decreased in accordance to PPRA Rules.
11. Only registered suppliers who are on Active Tax Payers List (ATL) of FBR are eligible to supply goods. The bidders/suppliers should attach a proof that he is on ATL of FBR Data Base otherwise the financial proposal will be rejected.

12. In Financial Proposal, the prices should be in Pak Rupees inclusive of all levy able taxes. The bidders should also provide the detail price analysis of the items/accessories in their Financial Proposal along with net quoted unit rate with GST and without GST showing complete pen picture of their quoted prices. Prices should be mentioned both in words & figures. In case of difference the amount given in words will be accepted.
13. Bids will be valid for 120 days from the date of opening of bid.
14. Display of the items/equipment & Software must be in English Version.
15. The bidders have to give demo (s) of their offered model during Technical Evaluation.
16. Successful bidder(s) will be required to execute agreement governing the terms & conditions of the contract.
17. The successful bidder shall be liable to give full/justifiable training of their approved model.
18. Bidder should provide OEM Tier 1 or Gold Partnership certificate of quoted network and storage equipment.
19. OEM should have experience in the installation of unified storage of at least 2PB in the last two years in Pakistan.
20. Bidder should have a financial turnover of over 150 Million in any of the last two years, Audited account statement to be annexed.
21. The age of the bidding company should be at least 05 years, and proof of SECP incorporation certificate to be annexed with the proposal.
22. Installation and integration with the existing network & storage will be the responsibility of the bidder.
23. The quote should accompany MAF/MAL of their quoted OEM, which will be duly verified by the OEM
24. Bidder will be responsible for Installation & migration services for 100TB of data.
25. Bidder must have passive work experience, the turn key supplier will be preferred.
26. The bidder must have 2 x CCIE or HCIE or Equivalent certified resources, the bidder to provide CV(s) & Certificates along with the proposal as evidence.
27. Bidder quoting the equipment from their OEM should also have experience in the installation of equipment of the same family.
28. Storage & Network quoted of the same brand shall be preferred.
29. The proposed OEM must have at least 5 deployment references in the government & defense sector of Pakistan.
30. The proposed OEM should have structured service delivery teams in offices in Islamabad, Lahore & Karachi.
31. The proposed OEM must have an in-country registered presence (office and depots) for at least 5 years.

32. The proposed OEM must have a warehouse that is managed directly by OEM in Islamabad, Lahore and Karachi.

33. OEM must have depots in Karachi, Islamabad, and Lahore.

34. OEM must have offices in Karachi, Islamabad, and Lahore.

Bidders can visit the execution site for evaluation on the prescribed date

35. **Liquidation Damages:** The firm has to pay liquidation damages for the period of delays in supply of deliverables upto rate of 2% of the contract price per month or part of a month exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed 10% of the total contract price.

36. **Performance Guarantee:** The bidder shall provide to Survey of Pakistan (SoP), a Performance Guarantee issued by A-Plus Pakistani Scheduled Bank, having a value of 5% of the contract price and which is valid minimum for 12 months or beyond the expected date of delivery of the items/equipment. SoP shall confirm the authenticity / genuine of the Bank Guarantee from the concerned Bank. Performance Guarantee shall be submitted just after successful submission of deliverables and after obtaining Acceptance letter from SoP. 5% performance guarantee will remain held with SoP and be released on expiry of Support/ warranty Period.

a. Bank Guarantee furnished against this contract is un-conditional and encashable at the will of the firm. Firm will undertake not to hinder/restrain its encashment through court, extra judicial or any other way(including administrative process)

b. If the firm fails to produce the Bank Guarantee within specifies period, SoP reserves the right of cancelling the contract at the risk and expense of the firm. In the event of un-satisfactory performance or of any breach of terms of the contract, the bank guarantee shall be forfeited to the govt at the discretion of the firm.

37. **Confidentiality:** The firm shall not, during the process of execution or after expiration of this contract, disclose any proprietary or data without the prior written consent of SoP.

38. **Force Majeure:** Both the parties shall not be held responsible for any delay occurring in the Project due to event of Force Majeure such as acts of God, War, Civil commotion, Strike, Lockouts, Act of Foreign Govt and its agencies and disturbance directly affecting the parties over the events or circumstances where both the parties have no control. In such an event both parties will inform each other within 15 days of the happening and within the same timeframe about the discontinuation of such circumstances / happening in writing.

39. The bidder shall be responsible for provision of all accessories to make the items operational.

40. Every page of the original proposal documents should be signed and stamped by the bidder and proposal to be submitted in binded form otherwise bid will not be accepted.

41. Bidder(s) shall provide soft copy of compliance sheet and major supported documents to be used

42. For evaluation Any firm, which furnishes wrong information, will be liable for legal proceeding. Any contract awarded in such case when find out, will be cancelled.
43. The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder.
44. The bidder/lead should not be blacklisted by any of its clients. An affidavit to this affect must be submitted by the bidder
45. **Litigation:** In case any dispute, only court of law at Rawalpindi will have jurisdiction to decide the matter.
46. For more information, please contact Mr. Aftab Nazir Ahmed, Assistant Director at telephone/ Fax No. 051-9290212.

EVALUATION CRITERIA

1. **Technical Evaluation:** Technical Evaluation Reports of the Technical Proposals will be made as per tender specifications without the reference to the price as per PPRA Rule 36 (b)(v). The Technical proposal evaluation committee will evaluate the technical proposals and qualifications.
 - a). The firm will provide compliance of each items on Form-A as required.
If the firm qualifies on compliance on the basis of Form-A (attached with tender document), the firm has to demonstrate the performance to evaluate the user interface, quality, OEM/ Authorized Agent, Experience of the firm, Availability of after sale services/workshop and performance of the equipment.
 - b). On the basis of form-B (attached), the bidder obtaining 80 or more marks will be technically qualified.
2. **Evaluation of Financial Proposals / Bids**
 - a. Only the Financial Proposals of those bidders will be opened publically who's Technical Proposals and qualifications have been recommended by the Technical Evaluation Committee of the department as per PPRA Rule. For financial evaluation, the total cost including all items & taxes indicated in the Financial Proposal will be considered.
 - b. The Purchase Committee will determine whether the Financial Proposals are complete. The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of the equipment. Omissions, if any, in costing any item shall not entitle the firm to be compensated and the liability to fulfill its obligations within the total quoted price shall be that of the Vendor. The lowest financial bid will be considered most advantageous.
 - c. According to PPRA Rule 38-A, the bidder may offer un-conditional discount, in percentage of their quoted price or bids, **before opening of the financial proposal**. The discount bid price shall be considered as original bid for evaluation being an integral part of the bid. No offer of discount shall be considered after the bids are opened. The bidder will offer discount in term of percentage of financial bid in writing on Firm letterhead. **The bidder may not forget to bring Firm letterhead on the day and time of opening of Financial Bid.**

RESPONSIBILITY AGAINST DAMAGES/OWNERSHIP OF EQUIPMENT

The bidder shall be responsible for whole/any damage caused to the item(s)/equipment by accident / improper handling / loading, un-loading, before handed over to / taking charge by SoP. The bidder shall replace the same.

PAYMENT:

- i. Payment shall not be made in advance and against partial deliveries.
- ii. The bidder shall provide necessary and supporting documents along with invoice.
- iii. The bidder shall submit an application for payment to the Project Director, Cadestral Mapping Project, Survey of Pakistan Rawalpindi. The application shall be accompanied by such invoices, receipt or other documentary evidences as require, state the amount claimed and particulars of items supplied/equipment up to the date of application for payment.
- iv. SoP shall get verified the details of items delivered. Payment shall be made on complete delivery of items/services after issuance of satisfactory certificate by concerned technical committee/Project Director. Technical Inspection of items will be made in the presence of bidder or his authorized representative.
- v. SoP shall make payment for items supplied/services provided to the bidder as per Govt. policy in Pak Rupees through cross Cheque.
- vi. All payment shall be subject to any and all taxes, duties and levies applicable under the laws of Pakistan for the whole period starting from issuance of Supply Order till delivery of the items/services.

SUPPLY PERIOD:

- i. The firm will provide items within a period of two months of the tender.
- ii. The most advantageous bidding firm/vendor shall be responsible to deliver goods/services within due time as given in Supply Order/Tender document.

WARNING: Any information about the sale/purchase of the stores under this contract shall not be communicated to any person, other than the manufacturer of the stores or to any press or agency not authorized by the Surveyor General of Pakistan/Ministry of Defence to receive it. The breach of the undertaking shall be punishable under the Official Secrets Act, 1923

CONTRACT CONDITIONS/CLAUSES:

Sr. #	Equipment/ services	Quantity
1.	Name of Consignee	Project Director, Cadestral Mapping Project, Survey of Pakistan. Rawalpindi
2.	Cost debitable to head	
3.	Supplier's Name and address	
4.	Supplier NTN. No.	
5	Supplier Sales Tax Reg. No.	
6	Date of delivery	
7	Makers Name & Brand	
8	Dispatch instruction	The stores will be dispatched to the consignee under firm's own arrangements. No part supply will be allowed in any case.
9	Packing & Marking Instructions	Each item will be packed/marked as per relevant paper's particulars governing the supply of store/standard/trade marking worthy of transportation by Rail/Road/Air within Pakistan so as to ensure their safe arrival at ultimate destination without any loss or damages
10	Inspection	<p>a). Inspection Authority: Technical Evaluation Committees (TECs)</p> <p>b) Inspection Officer: Chairman Technical Evaluation Committees</p> <p>c) Place of Inspection: Consignee's Premises</p> <p>d) The Inspecting Officer will be informed 02 working days in advance about the time for inspection</p>

11) **Checking of Stores at Consignee's End:** All stores will be checked at consignee's premises in the presence of supplier's representatives. If, for the reasons of economy or other the supplier decides not to nominate his representative for such checking, then advance written notice to this effect will be given by the supplier to the **Project Director, Survey of Pakistan Rawalpindi** under intimation to **CPC** prior to or immediately on delivering stores. In such an event, the supplier will clearly under take the decision of consignee with regard to quantities and description of a consignment, which will be taken as final and if any discrepancy found will according be made up by the supplier.

12). **Terms of Payment:**

- a) Payment (as per contract document) of value of the stores supplied will be paid to M/s. -----, through Cheque by submission of bills duly supported by the **NOC** from concerned **TEC**
- b) Bill will be furnished to the Project Director, SoP, Rawalpindi, which will subsequently be submitted to AGPR, Islamabad by the consignee.

13). **Taxes & Duties:**

- a) **Duties & Taxes Applicable:** The prices quoted are inclusive of all kinds of duties and taxes. The purchaser shall not be liable for reimbursement of duties and taxes on the contracted goods other than those given in the quoted rates. The payment of element of taxes and duties, which are included in quoted rates, will be made to the supplier only after production of duly authenticated documentary proof of its payment to the respective department. In case fresh taxes and duties are levied by the government after opening of the tender will signing of the contract and during the currency of the contract 9i.e. within the original delivery period) or if the existing rates of taxes are increased after opening of the tender and during the currency of the contract, liability shall be of the purchaser and the same shall be reimbursed by the AGPR, Islamabad to the supplier at actual, on production of documentary proof of his payment duly authenticated. In case of any subsequent decrease in existing or future duty or taxes by the Govt. after opening of tender and during the currency of the contract the liability shall be of the supplier and the supplier shall reimburse the same to AGPR, Islamabad under intimation to purchaser.
- b) For release of payment, the supplier would be required to furnish the following documents to **Project Director, Cadestral Mapping Project**.

- i. Proof of registration with Sales Tax Department (Copy of registration certificate)
- ii. Sales Tax Invoice in original showing description/quantity/value of goods and current amount of Sales Tax levy able thereon.

14). **Bank Guarantee Clause:**

- a). To ensure timely and correct supply of stores and smooth execution of warrantee conditions the firm will furnish a bank guarantee/draft from a schedule bank for an amount of 5% of the total value of the contracted stores amounting to

Rs. ----- to **CPC**. After completion of warranty period i.e. 01 years from the date of signing of NOC by **PC** the supplier will request the **CPC** through **Project Director, Cadastral Mapping Project** for the withdrawal of bank guarantee/draft. The bank draft will be encased/deposited in SoP's bank account. The bank draft shall be produced by the supplier within 07 days from the date of issue of letter of intent/signing of contract deed and shall remain in force till completion of the warranty period beyond the date of inspection

- b) If the supplier fails to produce the bank guarantee/draft within the specified period, the Project Director reserves the right of canceling the contract at the risk and expense of the supplier. In the event of un-satisfactory performance or of any breach of terms of the contract, the bank guarantee/draft shall be forfeited to the government at the discretion of the purchaser. On satisfactory performance of the contract the bank guarantee/draft will be returned to the supplier by CPC, on receipt of clearance from the Consignee.
- c) Bank guarantee/draft furnished against this contract is un-conditional and encashable at the will of purchaser. Supplier undertakes not to hinder/ restrain its encashment through court, extra judicial or any other way (including administrative process).

15) Supplier Warranty/Guarantee:

- a) The supplier shall furnish warranty for the stores under supply against defects in material workmanship, and satisfactory performance for ----- year(s) with parts and one year free service. The stores will be of the high-test grade and consistent with general expectable standard for the stores of type ordered in full conformity with governing specifications and performance of stores with the liability of replacing defective/unacceptable part free of cost within **07 days** by the supplier on receiving the discrepancy report, failing which the purchaser shall have the right to purchase the stores (against the stores declared defective) at the suppliers risk and expense. The supplier also undertakes to make good the deficiency in supply, if any.
- b) Supplier's warranty shall be provided to the consignee along with the store.

16) Inspection after Expiry of Delivery Period: Unless informed and directed to the contrary during the currency of the contract, the Inspection Officer will continue the inspection of the stores at firm's risk even after expiry of delivery period. Such acceptance will not prejudice the purchaser's right to cancel the contract or to extend the delivery period with or without liquidated damages.

17) Failure and Termination: Should the supplier fail to deliver the stores within stipulated period of supply, on the expiry; the purchaser shall be entitled at his option to take either of the following actions:

- a) To cancel the contract or purchase from elsewhere the stores not delivered, at risk and expense of the supplier and without notice to him. The supplier shall also be liable to any loss which purchaser sustains on this account but shall not be entitled to any gain of repurchase.
- b) To make the supplier pay liquidation damages for the period of delays in supply up to the rate of **2%** of the contract value un-supplied stores per month or part of

a month for the period exceeding the original delivery period subject to the provision that total liquidation damages thus levied will not exceed **10%**of the total contract value.

- c) If contract of the firm is cancelled at 'Risk and Expense' then the latest equivalent of their cancelled stores will be purchased at 'Risk and Expense' of the concerned firm if the cancelled type/category is not available in the market. Similarly an item of contract on FOR (indigenous) basis may be produced at risk and expenses of the firm on FOR (Imported) basis and vice-versa in the interest of the state.

18). **Force Majeure:** Force Majeure shall mean any event, act or other circumstances, not being an event, act or circumstance, under the control of the purchaser or of the supplier. Non-availability of raw material from the manufacturer of stores, or of export permit for the export of the contracted stores from the country of its origin, shall not constitute Force Majeure.

19). **Special Instructions:**

Warranty/Guarantee:

- a) The supplier has to provide warranty/guarantee of the stores supplied for a period of 01 year standard warrantee including repair, servicing and replacement of parts from the date of issuance of NOC by the **CPC** The supplier shall replace the defective stores free of cost. Warranty/Guarantee Certificate with regards to all items being supplied would be provided to the consignee along-with the stores.
- b) Trade mark of all items should be quoted clearly. On receipt, if any stores are found to be otherwise it will be changed/ replaced free of cost.
- c) The Supplier will be strictly bound to supply the contracted stores as per tendered specifications, and fulfill all responsibilities in this regard.

20). **Litigation:** In case of any dispute, only court of jurisdiction at Rawalpindi/ Islamabad shall have the jurisdiction to decide the matter.

Signatures

Purchaser		Suppliers
Designation.	Chairman Purchase Committee	
Name		
Signature & Seal		
For and on behalf of the President of Islamic Republic of Pakistan.		

PRESCRIBED APPLICATION FORM FOR TENDERING OF PROCUREMENT OF EQUIPMENT

(To be printed on firm/supplier's letter head duly signed by the authorized representative)

The Chairman Purchase Committee,
Cadastral Mapping Project,
Survey of Pakistan
Rawalpindi.

In response to press advertisement dated: - -2022 appeared in the daily we M/s..... have downloaded Tender Documents consisting of Contract Proforma for Tendering under Purchase of stores including the detail and specifications from PPRA's website/ web site of Survey of Pakistan.

We have gone through all the terms and conditions contained in above mentioned documents and those, which are the part of tender.

We fully agree to abide by the terms and conditions contained in the said documents and therefore hereby submit Technical as well as Financial Proposals for the following:

**AUTHORISED SIGNATURE
NAME & SEAL OF FIRM/SUPPLIER**

Technical Specifications

SPECIFICATION OF SCANNER- SIZE 44”

(Quantity: 01-05)

Sr.	Peripherals/Functions	Specifications	Compliance
1.	Brand	Renowned Brand commonly used in Pakistan	
2.	Enhanced resolution	9600 dpi	
3.	Optical resolution	1200 x 1200 dpi	
4.	Document Thickness	max. 2.5 mm (0.1 inch)	
5.	Imaging technology	CIS scanning technology	
6.	Accuracy	± 0.1% ± 1 pixel	
7.	Scan Speed Color	200 dpi - 7.5 inch/s or better	
8.	Scan Speed BW	200 dpi - 15 inch/s or better	
9.	Data capture(color/mono)	48-bit/16-bit gray scale	
10.	Maximum scan width	1270 mm (50 inch) width Max. 1220 mm (48 inch)	
11.	Paper Path	Face up, Front entry, Front or rear exit	
12.	Scan direction	± 0.08% across 44 inch scanning width	
13.	Supported file formats	PDF, TIFF, JPEG, JPEG2000, DWF, multi-page PDF generation	
14.	Scan to	File, email, USB, HDD, network folder, FTP, print	
15.	Settings	Type of original-preset, color mode, resolution (dpi), batch, single/multi-page, file format, customizable file naming, customizable default settings, image crop and align preview, enlarge/reduce, blueprint, lightness, saturation and RGB controls, white point and black point adjust, sharpen/blur, background removal, invert, mirror, accounting	
16.	Copier specific settings	Print mode, for printer output destination	
17.	Maximum scan size ⁷	0.91 x 26 m (36 x 1204 in); 0.6 x 37.9 m (24 x 1491 in); 0.3 x 75.8 m (12 x 2991 in)	
18.	Batch	Available with scan and copy	
19.	Preview	Scan, copy and print after previewing the original in the advanced touchscreen controller	
20.	Size detection	Automatic width detection. Manual size selection also possible	
21.	Applications Media	Line drawings, Maps, Office Graphics, Posters, Presentations	
22.	Handling	Straight-through scan paper path for sheet and cardboard originals. Face-up, front entry, rear exit, rewind to front, use document return guide for front-return	
23.	Types	Non-abrasive paper, sepia, blueprints,	

		plastic, plastic laminate, foam board, cardboard, newspaper	
24.	Processor	Intel Core i7 or latest	
25.	Memory	4 GB memory, 500 GB hard disk or more	
26.	Connectivity	Dual Gigabit Ethernet (1000 Base-T), Hi-Speed USB 3.0 certified	
27.	Drivers (included)	Windows 10 version drivers for compatible HP Page Wide XL and HP Design Jet Printers	
28.	User Interface	15.6-inch (396-mm) large touchscreen to preview and enhance images	
29.	Software	Scanning software compatible with windows 10	
30.	Calibration Sheet & Software	Calibration Sheet along with calibration software	
31.	Stand	Standard brand specific Stand	
32.	Power Requirements	Input voltage (auto rang Ving): 240 VAC ($\pm 10\%$), 50/60 Hz, 5 A max, or Pakistan Compatible	
33.	Warranty	01 Year on site comprehensive	
34.	Dealership	Authorized Dealership Platinum/Gold with principle authorization letter	

Note:- At least 05 years supply and service profile in Pakistan.

PLOTTER 44" SIZE

(Quantity: 01-03)

SI #	Functions / Peripherals	Specifications	Compliance
1.	Brand	Renowned Brand commonly used in Pakistan	
2.	Model size	44" or above	
3.	Print speed	180 A1/hr, 19.3 sec/A11	
4.	Print resolution	Up to 2400 x 1200 optimized dpi	
5.	Nozzle Pitch	1200 dpi (2 lines)	
6.	Technology	Pigment based Inkjet	
7.	Ink types	Dye-based (C, M, Y, pK, G); Pigment-based (mK)	
8.	Ink Droplet Size	5 pl	
9.	Print heads	1 universal print head	
10.	Line accuracy	±0.1% or better	
11.	Minimum line width	0.02 mm (PDF addressable at 1200 dpi);	
12.	Handling	Sheet feed, automatic front-loading roll feed, smart roll switching ³ , integrated output stacker, media bin, automatic horizontal cutter	
13.	Standard sheets	A4, A3, A2, A1, A0	
14.	E-print Capability	Yes	
15.	Media Roll Outer	170 mm	
16.	Grammage	60 to 328 g/m ²	
17.	Thickness	Up to 31.5 mil	
18.	Memory	128GB	
19.	Hard disk	500 GB self-encrypting	
20.	Media Type	Bond And coated paper (bond, coated, heavy weight coated, super heavy weight plus matte) Technical Paper(natural tracing, translucent bond) film(clear comma matte), photographic paper(satin, gloss, semi-gloss, matte, high gloss), backlit, self-adhesive(polypropylene, vinyl), blueprint	
21.	Interfaces	Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, Boot IP/DHCP (IPv4 only), DHCPv6, TFTP (IPv4 only), SNMP (v1, v2c, v3), Apple Bonjour Compatible, WS Discovery, line printing daemon, Inter printing protocol, NTLM v2, SMBv3, authentication (LEAP, PEAP, EAP-TLS), and wifi.	
22.	Print languages	PostScript Printer: Adobe PostScript 3,	

	(standard)	Adobe PDF 1.7, HP-GL/2, HP-RTL, TIFF, JPEG, DWG, CALS G4; Non-PostScript Printer: HP-GL/2, HP-RTL, TIFF, JPEG, CALS G4	
23.	Print languages (optional)	Non-PostScript Printer: Adobe PostScript 3, Adobe PDF 1.7	
24.	Printing paths	Direct printing from USB flash drive, print from network shared folder, email printing, driver for latest Windows,	
25.	A0 size drawing print	37 sec	
26.	Non Printable Area(cut-Sheet)	3x17x3x3mm	
27.	Drivers	PostScript Printer: Raster, PostScript and PDF drivers for Windows 10 or later, Non-PostScript Printer: Raster drivers for Windows 10 or later,	
28.	Environmental	ENERGY STAR, ErP, WEEE, RoHS (EU), REACH, EPEAT	
29.	Power Consumption	<100W(printing), <24W(Ready), <0.3W(Sleep) Power cable Round Pin Pakistan compatible	
30.	Warranty	One-year hardware warranty.	
31.	Dealership	Authorized Dealership platinum/Gold / with a principal manufactural authorization letter	
32.	Cartridges	One set of extra cartridge	

Note:- At least 05 years supply and service profile in Pakistan.
One extra ink Cartridges Set.

COLOR LASER PRINTER A-3 SIZE

(Quantity: 01-02)

SI #	Functions/Peripherals	Specifications	Compliance
1.	Printing Method	Colour Laser Beam Printing	
2.	Print Speed	A4	26 / 26ppm (mono / colour)
		A3	15 / 15ppm (mono / colour)
3.	Print Resolution	600 × 600dpi	
		1,200×1,200dpi	
		9,600 (equivalent) × 600dpi	
4.	First Print Out Time (FPOT)	Approx. 7.9 / 9.9secs.	
		(mono / colour)	
5.	Print Language	UFR II	
		PCL6 (45 scalable fonts)	
6.	Warm-up Time (from power on)	29secs. or less	
7.	Recovery Time (from sleep mode)	Approx. 9secs.	
8.	Auto Duplex Printing	Standard	
9.	Available Paper Size for Auto Duplex Print	A3, B4, A4, B5, A5, Legal*1, Letter, Executive, Foolscap	
Paper Handling			
10.	Paper Input	Standard Cassette	250 sheets
		Multi-Purpose Tray	100 sheets
		Maximum Paper Capacity	2,000 sheets
11.	Paper Output	250 sheets (face down)	
12.	Paper size	Standard Cassette	A3, B4, A4, B5, A5, Legal*1, Letter, Executive, Foolscap
			Custom: width 210 – 297.0mm, length 148.0 – 431.8mm
		Multi-Purpose Tray	A3, B4, A4, B5, A5, Legal*1, Letter, Executive, Foolscap, Index Card (3 x 5")
			Envelope: ISO-C5, No.10, Monarch, DL
		Custom: width 76.2 – 304.8mm, length	

			120.0 – 457.2mm	
13.	Paper Weight	Standard Cassette	60 – 128g/m2	
		Multi-Purpose Tray	60 – 220g/m2	
14.	Paper Type	Plain, Heavy, Label, Envelope		
Connectivity & Software				
15.	Standard Interface	USB 2.0 High Speed		
		1000Base-T		
16.	Network Interface	Supported protocol:		
		TCP / IP (Frame type: Ethernet II)		
		Print application:		
		LPD, RAW, IPP/IPPS, FTP, WSD		
17.	Compatible operating systems	Windows® 10 or more (32 / 64-bit) Windows® Server 2012 (64-bit) Windows® Server 2008 R2 (64-bit)		
General Specifications				
18.	Device Memory	512MB		
19.	Operation Panel	5-line LCD Display		
20.	Dimensions (W x D x H)	545 x 591 x 361.2mm		
21.	Weight	34kg		
22.	Power Consumption	Maximum	1,420W or less	
		During Operation	Approx. 530W	
		During Standby	Approx. 22.5W	
		During Sleep	Approx. 3W (USB connection) Approx. 1.5W (Wired LAN connection)	
23.	Noise level*3	During Operation	Sound Power: 6.6B or less	
			Sound Pressure: 51dB	
		During Standby	Inaudible*4	
24.	Power Requirement	220 – 240V, 50 / 60Hz		
25.	Operating Environment	Temperature: 10 – 30°C		
		Humidity: 20 – 80% RH (no condensation)		
26.	Toner Cartridge *5	Standard	Cartridge 335E Black: 7,000 pages	

			(bundled: 7,000 pages)	
			Cartridge 335E C / M / Y: 7,400 pages (bundled: 7,400 pages)	
		High	Cartridge 335 Black: 13,000 pages	
			Cartridge 335 C / M / Y: 16,500 pages	
27.	Waste Toner	Waste Toner WT-722 (150,000 impressions)		
28.	Monthly Duty Cycle*6	75,000 pages		
Optional Accessories				
29.	Paper Feeder PF-E1	Paper Capacity	550 sheets	
		Paper Size	A3, B4, A4, B5, A5*7, Legal*1, Letter, Executive, Foolscap	
			Custom: width 210.0 – 297.0mm, length 148.0 – 431.8mm	
		Paper Weight	60 to 128 g/m2	
30.	Warranty	One-year hardware warranty.		
31.	Dealership	Authorized Dealership Gold / Higher with manufactural authorization letter		

BLACK PRINTER A4 SIZE

(Quantity: 01-05)

Sr.	Functions/Peripherals	Specifications	Compliance
1	Printer	Black	
2	Size	A4 and below	
3	Print	Automatic Duplexer both side print (two sides printing)	
4	Resolution	1200x1200 dpi	
5	Print Technology	Laser	
6	Print Resolution Technology	Image	
7	Print Cartridges Number	1	
8	Language	Standard print Language used in Pakistan	
9	Print Management	Default installed SNP, Toolbox FX	
10	Print Speed	Normal up to 52 ppm or above	
11	Connectivity	<ul style="list-style-type: none"> • 1 Hi-Speed USB, 1 Fast Ethernet 10/100 /1000 Wireless (Wifi) • Wireless direct3 and NFC touch-to-print4 	
12	Memory	512 MB or above	
13	Processor	800 MHz or above	
14	Duty Cycle	Heavy duty professional	
16	Input	02 Input tray	
17	Output	About 250 sheets output bin, 50- sheets multipurpose tray	
18	Media type	Baond, brochure, coloured, glassy, letter head, photo, plain, recycled, films, transparency, label, envelopes, etc.	
19	Driver	CD/DVD, software / driver compatible with windows 8, 10 or above and LINUX with user guide, documentation, etc.	
20	Other Accessories	01 cartridges sets in addition to pre-installed, Power cords round and flat pins both pakistan compatible, network cable, all trays, and other relevant accessories.	
21	Warranty	01 year on site comprehensive	
22	Dealer ship	Authorized Dealership Gold / Higher with manufactural authorization letter	

1. ACCESS SWITCHES

Item	Specifications	QTY	Item vise Compliance
Fixed port	Forty-Eight 10/100/1000Base-T ports and four 10G SFP uplink ports with 2 SMF and 2 MMF 10G SFP+ modules	03 x 48 Port Access switch	
Power Supply	AC Power Supply		
Layer 2 functions	≥ 32K MAC address entries		
	Switching capacity ≥ 160 Gbps		
	IEEE 802.1d, IEEE 802.1w, IEEE 802.1s		
	≥ 4K active VLANs		
Layer 3 functions	≥ 4K FIBv4 entries		
	≥ 1K FIBv6 entries		
	Static routes, RIP V1/2 and RIPng, OSPF and OSPFv3		
QoS/ACL	Rate limiting for incoming and outgoing packets on an interface		
	802.1p and DSCP priority re-marking		
	Queue-based rate limiting and traffic shaping on an interface		
Security features	MPF		
	NAC function		
	AAA authentication and RADIUS authentication		
	IEEE 802.1X/MAC/Portal authentication		
	SSH V2.0/HTTPS		
Reliability	Eth-Trunk		
Management and maintenance	LLDP, EFM, CFM, Y.1731, SNMPv1/v2c/v3, RMON		
Qualification	Proposed OEM must be in leaders/challengers/Visionaries of latest Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure		
Warranty Service	1-year 9x5xNBD		

2. AGGREGATION SWITCHES

Item	Spec	QTY	Item vise Compliance
Fixed Ports	24 x 10 GE SFP+, 6 x 40QSFP28, can upgrade to 6 x 100G ports with license	2 x 24 Port Aggregation Switch	
SFPs	20x SMF 10G SFP+, 20x MMF 10G SFP+, 8x 1G Copper SFP		
Power Supply	1+1 AC power supply backup		
Layer 2 functions	≥ 300K MAC address entries		
	Switching capacity ≥ 2.0 Tbps		
	≥ 4094 VLANs		
	IEEE 802.1d, IEEE 802.1w, IEEE 802.1s		
Layer 3 functions	IPv4 routes ≥ 256K		
	Static routes, RIP v1/2 and RIPng, OSPF and OSPFv3		
	IS-IS and IS-ISv6, BGP and BGP4+, MLDv1/v2 snooping,		
	IGMPv1/v2/v3 snooping		
	IGMPv1/v2/v3, PIM-SM, and PIM-SSM		
	MSDP Multicast VPN		
MPLS & VPN	MPLS LDP, MPLS-TE		
	PWE3/VLL/VPLS		
	MPLS L3VPN		
QoS/ACL	Rate limiting for incoming and outgoing packets on an interface		
	802.1p and DSCP priority re-marking		
	Packet redirection		
	Layer 2 to Layer 4 packet filtering		
	Queue-based rate limiting and traffic shaping on an interface		
Security features	MFF, NAC function, AAA authentication and RADIUS authentication, IEEE 802.1X/MAC address/Portal authentication, SSH V2.0 and HTTPS		
	Threat deception		
Reliability	BFD for BGP/IS-IS/OSPF		
	LACP		
	E-Trunk		
	LLDP		
Network virtualization	VXLAN function		
	VXLAN Layer 2 gateway and Layer 3 gateway		
	BGP EVPN		
	Configuration through NETCONF/YANG		
Management and maintenance	SNMPv1/v2c/v3		
	RMON		
	NetStream/Netflow or similar technologies Telemetry		
Qualification	Proposed OEM must be in leaders/challengers/Visionaries of latest Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure		
Warranty Service	1-year 9x5xNBD		

3. UNIFIED (SAN+NAS) STORAGE NVMe

Items	Item Description	QTY	Items vise Compliance
ARCHITECTURE	The proposed array should be an enterprise class storage with 2 Active-Active Controllers. LUNs should not belong to any controller. Service loads should be balanced among all controllers. The proposed solution should be able to support 99.9999% availability.	1 x Unified (SAN+NAS) Storage NVMe	
NVMe	The proposed array should provide end-to-end NVMe multi-controller architecture.		
NO SINGLE POINT OF FAILURE	The proposed array should be with No Single Point of Failure (SPOF). All the components should be redundant and hot swappable including Redundancy is available for controllers, cache, interface modules, disks, power modules, fans, and other components to avoid single point of failure. All assembly unit can be replaced online without any business interruption.		
DRAM CACHE	Required 256GB or more per controller cache (excluding any performance acceleration module, FlashCache, PAM card, SSD cache, etc).		
CAPACITY DENSITY	29*7.68TB NVMe Disks. The proposed array also must be scalable to 2PB usable capacity and must be scalable to 500 Disks. Quoted Disk Size should only be 7.68 TB or Lesser		
VAULTING	The storage system should offer protection measures against component and power failures, and uses advanced technologies to minimize risks of disk failures and data loss. Built-in backup battery units (BBUs) supply power to controller enclosures in the event of unexpected power failures. The storage system should write cache data to disks to prevent data loss.		
MULTIPROTOCOL SUPPORT	The proposed array should support NVMeOF, FC, iSCSI connectivity.		
FRONT END PORTS	The proposed array should provide at least 2 X 4 X 32Gb FC Port & 2 X 4 X 10GE ISCSI port & 2 X 4 X 25GE ISCSI port		
NVMe FLASH DISKS	The proposed array must be dual ported native NVMe disks. All Flash disks should support two independent I/O channels with automatic failover and fault isolation.		
RAID level & Disk Failure Protection	The system should support RAID 5, RAID 6 or better.		
DATA EFFICIENCY	The proposed array should support inline compression and deduplication of application data for space efficiency.		
PLATFORM SUPPORT	The proposed system should support popular operating system platforms such as Windows, HP-UX, Linux, Solaris, IBM AIX etc.		
DATA ENCRYPTION	The proposed array must be encryption enabled disks/controllers. Preferably data at rest encryption		
VIRTUALIZED ENVIRONMENT	The proposed array must support system supports HyperVisor like VMware vSphere and Windows Hyper-V. VMware vSphere: VMware VAAI, VASA, SRM and vCenter plugin. Windows Hyper-V: Windows Thin Space recycling technology, Windows ODX, System Center plugin.		
NON-DISRUPTIVE MIGRATION	The proposed array should provide the capability to seamless migrate data from other vendor's array		

	without service interruption.		
SNAPSHOTS & THIN PROVISIONING	The proposed array must include licenses to provide snapshots, must include instant activation of point-in-time copies for read/write access of LUNs and also is able to thin provision the LUNs.		
INSTANT ACCESS OF COPY	The proposed array local replication solution should support instant activation of point-in-time copies for read/write access, while coping can continue in the background.		
STORAGE MANAGEMENT SOFTWARE	The proposed array should be supplied with Storage management software capable of generating customized reports, real time monitoring, historical performance data for analysis and trending, capacity utilization monitoring and SSD service life monitoring (monitors the lifespan and displays the wear level and estimated remaining service life of each SSD).		
Warranty	3 Years comprehensive warranty backed by principal		

4. SUPPLY, INSTALLATION OF PASSIVE FOR DATA & NETWORK

S/N	Items Name Description	Unit	QTY	Item vise Compliance
1	Supply Of Branded UTP Cat-6 RJ-45 Toolless I/O With Shuttered White, 1G Supported	Nos	320-350	
2	Supply Of Branded 24 Port Patch Panel with Top Label Holder including 24 Cat-6 Toolless I/O With Shuttered Fully Loaded, 1G Supported	Nos	17	
3	Supply Of Branded FrontCable Manager Horizontal, IU, PVC	Nos	19	
4	Supply Of Branded Copper Patch Cord, UTP Cat-6 Patch Cord, RJ45 to RJ45, 1-Meter, PVC, 1G Supported	Nos	320-350	
5	Supply Of Branded Copper Patch Cord, UTP Cat-6 Patch Cord, RJ45 to RJ45, 3-Meter, PVC, 1G Supported	Nos	320-350	
6	Supply Of Branded 4-Pair UTP Cat-6 Cable, Solid Copper, PVC, 305-Meter Box, 1G Supported	Roll	69	
7	Power PDU C13 to C14 (09 Ports)	Nos	4	
8	Supply Of PVC Pipe 1" With Fixing Material Socket, Bend, Clip and Wall Chiseling Work (10feet Length) branded	Length	100	
9	Supply of PVC Pipe 1" Flexible With Fixing Material Socket, Bend, Clip and Wall Chiseling Work (10feet Length) branded	Feet	1000	
10	Supply Of PVC Pipe 2" With Fixing Material Socket, Bend, Clip and Wall Chiseling Work (10feet Length) Branded	Length	150	
11	Supply of PVC Pipe 2" Flexible With Fixing Material Socket, Bend, Clip and Wall Chiseling Work (10feet Length) Branded	Feet	200	
12	Supply of PVC Duct 16x38 (10feet Length) With Fixing Material Branded	Length	130	
13	Supply of PVC Duct 40x40 (10feet Length) With Fixing Material Branded	Length	120	
14	Supply of PVC Duct 60x60 (10feet Length) With Fixing Material Branded	Length	10	
15	Supply of Cable Tray 18 SWG 4"x12" Powder Coated with Cover all Accessories and Complete Fitting Material Road, Anchor Bolt, Rawal Bolt, Hanging Patti and Complete Nut Bolt (Local)	Feet	60	
16	Supply of Branded Rack Mounted ODF 12 Port with Adopters, Sleeves, Splicing Tray, Fully Loaded	Nos	1	
17	Supply of Branded Fiber Patch Cord 1 Meter SC/LC 10G Supported	Nos	18	
18	Data Cat-6 Cable Laying, PVC Duct and PVC Pipe Fixing and Cable Tray Fixing Complete Installation of All Above Material	Job	1	
19	Termination/Tagging/Hanging of Material Face Plate End and Patch Panel End Data, Telephone, Wifi Points	Point	400	
20	Fluke Testing Charges with DTX-1800	Point	400	
21	Fiber Splicing With Testing	Splice	12	
22	UPS 3KW with 5 minutes backup Time	Nos	1	

Technical Evaluation Parameter Marks / Score Allocation

Sr	Assessment Parameters	Status	Marks/Score
1	OEM Certification	Gold/Tear 01	5
		Silver	2
		Register	1
		None	0
2	OEM Authorization Letter/ Ownership for bid	OEM ownership for bid	3
		None	0
3	Financial Status / Business Turnover	1000 Million or more	4
		700-999 Million	3
		500-699 Million	2
		Less than 500 Million	0
4	Income Tax Paid during last 3 years	20 Millions & above	7
		15-19 Million	5
		10-14 Million	3
		05- 09 Million	1
5	Product Sale Reference/Experience	OEM Sale of product more than 5 firms	4
		4-3 firms	2
		Less 3 firms	0
6	Firm Reputation	Very Good	4
		Good	2
		Satisfactory	1
		Poor/otherwise	0
7	Equipment Brand/Make	Renowned	3
		Non-renowned / poor experienced in SoP	0
8	After Sales Service Support	Very Good	10
		Good	7
		Satisfactory	3
		None	0
9	Instrument installation capacity/Experience	15 or more Sources/Eng. Technicians	10
		10-14 Sources/Eng. Technicians	7
		7-9 Sources/Eng. Technicians	4
		Less than 7	0
10	Compatibility with the existing system/Equipment installed in SoP	100%	10
		85-99 %	7
		Less than 85%	0
11	Technical Compliance	100%	40
		85-99 %	30
		Less	0