Standard Bidding Document

Tender No. P-34/2026 Procurement of Central Control Unit (CCU) Solution for Digital Interventions (Non-Consultancy Services)

National

Single Stage-Two Envelope

July 13, 2026

Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited),Manager
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Table of Contents

PROCUREMENT NOTICE

PROCUREMENT OF NON-CONSULTANCY SERVICES

1. The **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited)** has reserved Funds for the procurement planned for FY **2026-27**. The **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited)** intends to apply part of the proceeds of this Fund to cover eligible payments under the contract for the " **Tender No. P-34/2026 Procurement of Central Control Unit (CCU) Solution for Digital Interventions**" with the reference of **"P59201"**

2. The **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited)** invites Bids through **EPADS v2.0** from eligible Bidders registered on **EPADS v2.0** for provision of Non-Consultancy Services.

3. **Single Stage-Two Envelope** Procedure of Principal Method of Procurement (i.e. Open Competitive Bidding) will be used by adopting **Quality and Cost Based Selection (QCBS)** Technique for the subject procurement, in line with the Public Procurement Rules, 2004 and any Regulations, and Instructions issued by the Authority (from time to time).

4. All Bids must be accompanied by a Bid Security described in Bid Security Section in Bidding Document in the form of **Pay Order** or Bid Securing Declaration on the prescribed format described.

5. E-Bidding documents, containing detailed terms & conditions, specifications and requirements etc. are available on **e-Pak Acquisition and Disposal System (EPADS)** at **https://epads.gov.pk/opportunities/federal/procurements/59201**.

6. The e-bids, prepared in accordance with the instructions in the e-Bidding documents, must be submitted through **EPADS v2.0** on or before **Tuesday, July 28, 2026 11:00 AM**. E-bids will be opened on the same day at **Tuesday, July 28, 2026 11:30 AM**. Manual submission of Bids shall not be entertained. Those vendors who have not yet registered on the new version of **EPADS v2.0,** may register themselves on **https://vendors.epads.gov.pk/**. A

tutorial to explain the registration process is available at https://www.youtube.com/watch?v=MNW6T38v7tc

7. In terms of Rules 48 of Public Procurement Rules, 2004 Grievance Redressal Committee (GRC) is notified for the subject procurement and notification copy is available on the procuring agency's website and also available on **EPADS v2.0** as well as Authority's website at (www.ppra.org.pk).

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Instructions to Bidders

A. Introduction

1. **Scope of Bids**

1.1. The Procuring Agency (PA), as indicated in the **Bids Data Sheet (BDS)** invites Bids through **EPADS v2.0** for the provision of Non-Consultancy Services for as specified in the BDS and **in Section Evaluation Criteria, Specifications & Schedule of Requirements**. The name, identification, and number of items/deliverables are provided in the **BDS**. **Single Stage-Two Envelope** procedure of the open competitive method shall be used. The successful Bidders will be expected to provide the services within the specified period and timeline(s) as stated in the **BDS**.

2. **Source of Funds**

2.1. Source of funds is referred in Clause-1 of Invitation for Bids.

3. **Fraudualent & Corrupt Practices**

3.1. As defined under Rule 2(1)(f) of the Public Procurement Rules, 2004.

4. **Eligible Bidders**

4.1. A bidder is eligible to participate in a procurement process if the bidder:

4.1.1. possesses or has access to the technical competence, financial resources, equipment and other physical facilities, personnel, managerial capability, experience and reputation necessary to complete the procurement contract;

4.1.2. has the legal capacity to enter into a procurement contract;

4.1.3. is not insolvent, in receivership, bankrupt or being wound up and its activities or affairs are not suspended or being administered under any Act, by a court or by a judicial officer;

4.1.4. is not the subject of legal proceedings for any of the matters mentioned in sub-rule (c);

4.1.5. has fulfilled or has made substantial arrangements satisfactory to the relevant authorities, to fulfil its obligations to pay taxes and social security (where applicable) other contributions of its employees; and

4.1.6. has not, or in the case of a company, its owners and beneficial owners, directors or officers have not, been convicted of a criminal offence related to:

4.1.6.1. its professional conduct; or

4.1.6.2. a bidder (or, in the case of a company, its key individuals such as owners, beneficial owners, directors, or officers) must not have engaged in any prohibited practice, such as fraud, corruption, collusion, or coercion, within the time period stated in the bidding documents, which can be up to three years before the start of the procurement process. Additionally, the bidder must not have been debarred (i.e., banned) from participating in public procurement processes in Pakistan or by any international organization or country. If they have, they are ineligible to participate in the current bidding.

4.2. The procuring agency may require a bidder participating in the procurement process to provide the prescribed documentary evidence or other information to satisfy itself that the bidder is qualified in accordance with the criteria in sub-clause (1).

4.3. A procuring agency shall set out in the bidding document all the criteria for qualification to be applied in accordance with sub-clause (1).

4.4. Except as permitted under the Ordinance, Rules and Regulations, the procuring agency shall not establish a criterion for eligibility of a bidder that:

4.4.1. discriminates against or among a bidder or against categories of bidders; or

4.4.2. is not required for the performance of the procurement contract; or

4.4.3. is not related to the avoidance or management of legal, reputational or economic risk to the procuring agency unless it is in the national interest to do so, and the criteria is set out in the bidding documents.

4.5. A procuring agency shall assess the eligibility of a bidder for participation in the procurement process against the criteria for qualification under sub-clause (1).

4.6. In the case of a joint venture, consortium, or association, all members shall be jointly and severely liable for the execution of the contract in accordance with the terms and conditions of the contract. The joint venture, consortium, or association shall nominate a lead member as nominated in the BDS,

4.7. who shall have the Authority to conduct all business for and on behalf of any and all the members of Joint venture, consortium, or association during the bidding process, and in case of award of contract, during the execution of the contract.

4.8. The appointment of the lead Member in the joint venture, consortium, or association shall be confirmed by submission of valid power of Attorney to the procuring agency.

4.9. Subject to the limits specified in the BDS, the procuring agency may allow bidders to participate in the form of a Joint Venture (JV). However, each party in the JV must individually meet the eligibility criteria specified in the BDS

4.10. No Bidder can be a sub-contractor while submitting a Bids individually or as a member of a joint venture in the same Bidding process.

5. **Qualification of the Bidder**

5.1. All Bidders shall provide in Section VI, Bid Forms, a preliminary description of the proposed work method and schedule, including drawings and charts, as necessary.

B. Bidding Documents

6. **Contents of Standard Bidding Document**

6.1. The Services required, bidding procedure, and terms and conditions of the contract are prescribed in the bidding document. In addition to the Invitation for Bids, the bidding document which should be read in conjunction with any addendum issued by the Procuring Agency include:

Section I - Invitation to Bid
Section II Instructions to Bidders (ITB)
Section III Bid Data Sheet (BDS)
Section IV Eligible Countries
Section V Evaluation Criteria, Specifications, Schedule of Requirements, and Technical Specifications.
Section VI Bidding Forms
Section VII Fraudaulent & Corrupt Practices
Section VIII – Material & Non-material deviation
Section IX General Conditions of Contract (GCC)
Section X Special Conditions of Contract (SCC)
Section XI Contract Forms

6.2. The Bidder is expected to examine all instructions, requirements, forms, terms and specifications in the bidding documents. Failure to furnish all the information required in the bidding document will be at the Service provider's risk and may result in the rejection of his bids.

7. **Clarifications**

7.1. Clarifications of the bidding documents may be requested in writing through EPADS v2.0 by any bidder up to three days prior to the deadline for the submission of bids.

The procuring agency shall respond promptly and in writing to any request by a bidder for clarification of the bidding documents and, in any event, no later than two days prior to the deadline for the submission of bids or proposals.

Responses to requests for clarification shall be communicated simultaneously and in writing to all bidders participating in the procurement proceedings.

No bidder shall be allowed to alter or modify his bid after the bids have been opened however, the procuring agency may seek and accept clarification to the bid that do not change the substance of the bid, through EPADS v2.0.

7.2. Procuring Agency's response will be uploaded on the EPADS v2.0, including a description of the inquiry.

7.3. Should the Procuring Agency deem it necessary to amend the bidding document as a result of a clarification, it shall do so following the procedure under **ITB 1.1.**

7.4. If indicated **in the BDS**, the bidder’s designated representative is invited at the bidder’s cost to attend a pre-bid meeting at the place, date and time mentioned **in the BDS**. During this pre-bid meeting, prospective bidder(s) may request clarification(s) regarding the schedule of requirements, the Evaluation Criteria or any other aspects of the bidding document.

7.5. Minutes of the pre-bid meeting, if applicable, including the text of the questions asked by bidders, and the responses given, together with any responses prepared after the meeting will be uploaded on EPADS v2.0. Any modification to the bidding document that may become necessary as a result of the pre-bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum.

7.6. To assist in the examination, evaluation and comparison of Bids of the Bidders, the Procuring Agency may, ask any Bidder for a clarification of its bid including breakdown of prices, through EPADS v2.0. Any clarification submitted by a bidder that is not in response to a request by the Procuring Agency shall not be considered.
No change in the prices or substance of the bid shall be sought, offered, or permitted.
The alteration or modification in the bid which in any way affect the following parameters will be considered as a change in the substance of a

bid:

7.6.1. evaluation & qualification criteria;

7.6.2. required scope of work or specifications;

7.6.3. all securities requirements;

7.6.4. tax requirements;

7.6.5. terms and conditions of bidding documents; and

7.6.6. change in the ranking of the bidders.

From the time of bid(s) opening to the time of contract award, if any bidder wishes to contact the procuring agency on any matter related to the bid, it should do so in writing or through electronic form that provides record of the content of communication.

8. **Amendment of Bidding documents**

8.1. Before the deadline for submission of bids, the procuring agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder or pre-bid meeting may modify the bidding documents by issuing addendum.

8.2. Any addendum issued including the notice of any extension of the deadline shall be part of the bidding document and shall be uploaded on EPADS v2.0 as well as Authority's website. The procuring agency shall promptly publish the addendum at the procuring agency's website indicated in the **BDS**:

Provided that the bidder who had either already submitted his bid, shall have the right to withdraw his already submitted bid and submit the revised bid, prior to the original or extended bid submission deadline.

8.3. To give prospective bidders reasonable time in which to take an addendum/corrigendum into account in preparing their bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of bids:

Provided that the Procuring Agency shall extend the deadline for submission of bids, if such an addendum is issued within last three (03) days of the bid submission deadline.

C. Preparation of Bids

9. Documents Constituting the Bids

9.1. The bids prepared by the bidders shall constitute the following components: -

9.1.1. Forms of bid and Bid Prices completed in accordance with ITB BDS, GCC and SCC;

9.1.2. Documentary evidence established in accordance with BDS that services to be provided by the bidder are eligible services, and conform to the bidding documents;

9.1.3. Documentary evidence established in accordance with BDS that the bidder is eligible and/or qualified for the subject bidding process;

9.1.4. Documentary evidence established, that the bidder has been authorized to provide the services;

9.1.5. Bid security or Bids Securing Declaration furnished in accordance with BDS; and

9.1.6. Any other document required in the BDS.

10. **Documents Establishing Eligibility of the Services and Conformity to bidding documents**

10.1. To establish the conformity of the Non-Consulting Services to the Bidding document, the bidder shall furnish as part of its bid the documentary evidence that services provided conform to the requirements.

10.2. Standards for the provision of the Non-Consulting Services are intended to be descriptive only and not restrictive.

11. **Documents Establishing Eligibility and Qualification of the Bidder**

11.1. Pursuant to BDS, the bidder shall furnish, as part of itsbid, all those documents establishing the bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if its bid is accepted.

11.2. The documentary evidence of the bidder's eligibility to bids shall establish to the satisfaction of the procuring agency that the bidder, at the time of submission of its bid, is from an eligible country as defined in Section-IV titled as "Eligible Countries".

11.3. The documentary evidence of the bidder's qualifications to perform the contract if its bid is accepted shall establish to the satisfaction of procuring agency that:

11.3.1. the bidder has the financial, technical, and supply/production capability necessary to perform the Contract, meets the qualification criteria specified in BDS.

11.3.2. that the bidder meets the qualification criteria listed in the Bids Data Sheet.

12. **Form of Bid**

12.1. **The bidder shall fill the Form of Bid furnished in the bidding documents. The Bid Forms must be completed without any alterations to its format and no substitute shall be accepted.**

13. **Bids Prices**

13.1. The Bids Prices quoted by the bidder in the Forms of Bid and in the price schedule shall conform to the requirements specified or exclusively mentioned hereafter in the bidding document.

13.2. All items in the Schedule of Requirements must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced and neither explicitly mentioned, their prices shall be construed to be included in the prices of other items.

13.3. The Bid price to be quoted in the Forms of Bid shall be the total price of the bid, excluding any discounts offered.

13.4. The bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total bid price of the services, it proposes to provide under the contract.

13.5. Prices quoted by the bidder shall be fixed during the currency of the contract and not subject to variation on any account. A bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, unless otherwise price adjustment is permissible under Conditions of the Contract. (May be reviewed)

14. **Price Adjustment**

14.1. Price adjustment shall not be applicable.

14.2. Procuring agency may increase the remuneration of the human resources involved in non-consultancy services on annual basis as per agreement.

14.3. **Procuring agency shall incorporate the provisions to allow wage rate in compliance with Federal Government's minimum wage notification, subject to the applicability in that case.**

15. **Bids Currencies**

15.1. Prices shall be quoted in Pakistani Rupees unless otherwise specified in the BDS.

16. **Bid Validity Period**

16.1. Bid(s) shall remain valid for the period specified in the BDS after the bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive. The period of bid validity will be determined from the complementary bid securing instrument i.e. the expiry period of bid security or bid securing declaration as the case may be.

17. **Bid Security or Bid Securing Declaration**

17.1. Unless otherwise specified in the BDS, the bidder shall furnish as part of its bid, in the amount and currency specified in the BDS or Bid Securing Declaration on the format provided in Section VI (Bid Forms) The scanned copy of the Bids Security shall be uploaded in the EPADS v2.0 while submitting bid, whereas the original forms of Bid Security shall be submitted to the procuring agency before the bid submission deadline. The bidder who failed to submit the original bid security before the submission deadline shall be disqualified straightaway.

17.2. The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture.

17.3. The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in BDS, GCC and SCC are invoked.

17.4. Unsuccessful Bidders' Bid Security will be discharged or returned as promptly as possible after the award of contract, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring Agency. The Procuring Agency shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, whichever of the following that occurs earliest:

17.4.1. the expiry of the Bid Security;

17.4.2. the entry into force of a procurement contract and the provision of a Performance Guarantee, for the performance of the contract if such a guarantee, is required by the bidding document;

17.4.3. the rejection by the Procuring Agency of all Bids;

17.4.4. the withdrawal of the Bid prior to the deadline for the submission of bids, unless the bidding document stipulate that no such withdrawal is permitted.

17.5. The Bid Security may be forfeited or the Bid Securing Declaration executed:

17.5.1. if a bidder:

17.5.1.1. withdraws its bid during the period of bid validity as specified by the Procuring Agency, and referred by the bidder in the Forms of Bid, except as provided for in the ITBs; or

17.5.1.2. does not accept the correction of errors, or

17.5.2. in the case of a successful bidder fails:

17.5.2.1. **to sign the contract in accordance with SCC; or**

17.5.2.2. **to furnish Performance Guarantee in accordance with BDS and SCC.**

17.6. **The bid security shall be valid for a period specified in BDS. Bids with shorter bid security validity period shall be rejected straight away.**

18. **Alternative Bids by Bidders**

18.1. Alternatives will not be considered, unless specifically allowed for in the BDS.

18.2. When alternative times for completion are explicitly invited, a statement to that effect will be included in the BDS and the method of evaluating different time schedules will be described in Evaluation and Qualification Criteria.

19. **Withdrawal, Substitution, and Modification of Bids**

19.1. Before Bids submission deadline, any bidder may withdraw, substitute, or modify his bid after it has been submitted.

20. **Format and Signing of Bids**

20.1. The bidder shall prepare and submit his bid with due diligence after carefully reading all the terms and conditions before submission through

EPADS v2.0.

20.2. Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person(s) signing the forms of bid.

D. Submission of Bids

21. **Submission of Bids through EPADS v2.0 before Dead deadline**

21.1. The Technical and Financial Bids as the case may be, shall be submitted in the due portion of the EPADS v2.0, before bid submission deadline. The bid submission option shall be automatically disabled once the deadline is over.

21.2. The Procuring Agency may, under exceptional circumstances and at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents. In such a case, all rights and obligations of the Procuring Agency and the Bidders that were previously subject to the original deadline shall thereafter be subject to the revised deadline.

E. Opening and Evaluation of Bids

22. **Opening & Evaluation of Bids by the Procurement Cell/Evaluation Committee**

22.1. The Procuring Agencies to constitute odd number Bid Evaluation Committee for the purpose of bid opening and evaluation of all procurements. As per Rules 29 & 30 of Public Procurement Rules, 2004,
The Procuring Agencyis required to establish a Procurement Cell/Evaluation Committee which shall Evaluate the Bids inaccordance with the evaluation criteria, terms and conditions given in the bidding documents.

23. **Opening of Bids**

23.1. The Bid Evaluation Committee of the Procuring Agency will open all bids through EPADS, in the presence of bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the bid proceedings at the place, on the date and at the time, specified in the **BDS**. The Bidders’ representatives present shall sign attendance sheet as proof of their attendance.

23.2. The bids shall be opened one at a time, and the following read out and recorded: (a) the name of the bidder; (c) the presence of a bid security, if required; and (d) any other details as the procuring agency may consider appropriate.

23.3. No bid will be rejected at the time of bid opening except for bids whose bid security has not been provided to the procuring agency before submission deadline**.**

23.4. The procuring agency shall prepare minutes of the bid opening. The record of the bid opening shall include, as a minimum: the name of the bidder and the bid price, if applicable.

24. **Confidentiality**

24.1. Information relating to the examination, clarification, evaluation and comparison of bids and recommendation of contract award shall not be disclosed to bidders or any other person(s) not officially concerned with such process, until the time of the announcement of the respective evaluation report.

24.2. Any effort by a bidder to influence the procuring agency processing of bids or award decision may result in the rejection of his bid.

25. **Preliminary Examination of Bids**

25.1. Prior to the detailed evaluation of bids, the procuring agency will determine whether each bid:

25.1.1. meets the eligibility criteria defined in **BDS**;

25.1.2. has been prepared as per the format and contents defined by the procuring agency in the bidding document;

25.1.3. is accompanied by the required securities; and

25.1.4. is substantially responsive to the requirements of the bidding document.

25.2. The procuring agency will confirm that the documents and information specified under **BDS, GCC and SCC** have been provided in the bids. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the bids shall be rejected.

25.3. If a bid is not substantially responsive, it will be rejected by the procuring agency and may not subsequently be evaluated for complete technical responsiveness.

26. **Examination of Terms and Conditions, Technical Evaluation**

26.1. The procuring agency shall evaluate the technical aspects of the bids submitted in accordance with **BDS,** to confirm that all requirements specified in **Evaluation Criteria, Technical Specifications and Schedule of Requirements**, prescribed inthe bidding document have been met without material deviation or reservation.

26.2. If after the examination of the terms and conditions and the technical evaluation, the procuring agency determines that the bid is not substantially responsive in accordance with BDS**,** it shall reject the bids.

27. **Correction of Errors**

27.1. Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: -

27.1.1. if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the procuring agency there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected;

27.1.2. if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and

27.1.3. where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.

27.1.4. Where there is discrepancy between grand total of price schedule and amount mentioned on the Forms of bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.

27.2. The amount stated in the bid will be adjusted by the procuring agency in accordance with the above procedure for the correction of errors and, with the concurrence of the bidder that shall be considered as binding upon the bidder. If the Bidder does not accept the corrected amount, his bid will then be rejected, and the Bid Security may be forfeited or the Bid Securing Declaration may be executed.

28. **Conversion to Single Currency**

28.1. As per Rule 30 of Public Procurement Rules, 2004.

29. **Evaluation of Bids**

29.1. The procuring agency shall evaluate bids in accordance with Rule 30 of Public Procurement Rules, 2004 and compare only those bids determined to be substantially responsive.

29.2. In evaluating the Technical Bids of each Bidder, the Procuring Agency shall apply the evaluation criteria and methodologies specified in the Bid Data Sheet (BDS) and in accordance with the Statement of Requirements and Technical Specifications. No other evaluation criteria or methodologies shall be permitted.

29.3. In case of tie of bids, the bidders shall be provided an opportunity to offer their best and final monetary offer through EPADS. However, in no case the rates shall be higher than the original financial bids.

29.4. The Procuring agency evaluation of a bid will take into account:

29.4.1. the bid price, excluding provisional sums and the provision, if any, for contingencies in the summary bill of quantities, but including day work items, where priced competitively;

29.4.2. price adjustment for correction of arithmetic errors in accordance with **ITB 6;**

29.5. converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with **ITB 7**;

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

29.7. If these bidding documents allow bidders to quote separate prices for different lots, and the award to a successful bidder of multiple lots, the methodology of evaluation to determine the lowest evaluated lot combinations in the Form of Bid, is specified in the **BDS.**

30. **Determination of Most Advantageous Bids**

30.1. Selection technique will be adopted for determining the Successful Bid in accordance with the criteria referred in the **BDS** or prescribed in the separate section titled as Evaluation Criteria.

31. **Abnormally Low Financial Bids**

31.1. Procuring agency may reject a bid if it has determined that the price, in combination with other constituent elements of the bid, is abnormally low in relation to the subject matter of the procurement, such that it raises material concerns on the part of the procuring agency, as to the ability of the bidder to perform the procurement contract satisfactorily for the offered price.

A procuring agency shall not reject a bid as abnormally low under sub-clause (1) above unless the procuring agency –

31.1.1. requested in writing through EPADS from the bidder a written clarification of his bid, including a detailed price analysis of his bid price in relation to the subject matter of the procurement contract, scope, methodology, schedule, allocation of risks and responsibilities and any other requirements of the bidding document; and

31.1.2. having taken account, the information provided by the bidder in response to a request under paragraph (a) and the information included in the bid, the procuring agency determines that the bidder has failed to demonstrate its ability to perform the procurement contract satisfactorily for the offered price.

The procuring agency shall promptly communicate to the bidder concerned its decision to reject the bid, including the reasons for the decision.

32. **Rejection of Bids**

32.1. As per Rule 33 of the Public Procurement Rules, 2004

33. **Single Responsive Bid**

33.1. The procuring agency may consider single responsive bid subject to underlying conditions of Rule 38(b) of the Public Procurement Rules, 2004.

34. **Arbitration**

34.1. As per Rule 49 of Public Procurement Rules, 2004.

F. Award of Contract

43. **Criteria of Award**

43.1. The procuring agency will award the Contract to the bidder whose bid has been determined to be substantially responsive to the bidding document and who has been declared as most advantageous Bid.

44. **Procuring Agency’s Right to reject All Bids**

44.1. The procuring agency reserves the right to reject all the Bids and to annul the procurement process at any time prior to acceptance of the bid(s), without thereby incurring any liability to the affected bidder(s).

44.2. Notice of the rejection of all bids shall be given promptly to all bidders that have submitted the bids. The procuring agency shall upon request communicate to any bidder the grounds for the rejection of his bid, but is not required to justify those grounds.

45. **Notification of Award**

45.1. Prior to the award of contract, the procuring agency shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids.

45.2. Bidder whose bid has been accepted, will be notified for the award by the Procuring Agency prior to expiration of the Bid Validity period through EPADS. The Letter of Acceptance will state the sum that the procuring agency will pay the successful bidder in consideration for the execution of the scope of works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).

45.3. The notification of award will constitute the formation of the Contract, subject to the condition that bidder furnish the Performance Guarantee and signing of the contract.

46. **Signing of Contract**

46.1. Promptly after notification of award, Procuring Agency shall send the successful bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract. The successful bidder and the procuring agency shall sign the contract.

47. **Performance Guarantee**

47.1. After the receipt of the Letter of Acceptance, the successful bidder, within the specified time, shall deliver to the Procuring Agency a Performance Guarantee in the amount and in the form stipulated in the **BDS**

and SCC, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.

47.2. Failure of the successful bidder to comply with the requirement of **BDS, SCC and GCC** shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the procuring agency may make the award to the next ranked bidder or call for new bids.

48. **Corrupt & Fraudulent Practices**

48.1. Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

G. Grievance Redressal & Complaint Review Mechanism

53. **Constitution of Grievance Redressal**

53.1. Procuring agency shall constitute a Grievance Redressal Committee (GRC) comprising of an odd number of persons with proper power and authorization to address the complaint. The GRC shall not have any of the members of Procurement Evaluation Committee.

54. **GRC Procedure**

54.1. Any aggrieved party or bidder as the case may be, may file grievance in accordance with Rule 48 of the Public Procurement Rules, 2004 and Redressal of Grievance Regulations, 2022

H. Blacklisting/ Debarment

55. **Procedure for Blacklisting/Debarment**

55.1. The procuring agency may initiate blacklisting proceedings against contractor/supplier in accordance with Rule-19 of the Public Procurement

Rules, 2004 , Mechanism for Blacklisting, Debarment Regulations, 2024 and Regulation on "procedure for filling and disposal of review petition under rule-19(3) of the Public Procurement Rules, 2004.

Bid Data Sheet

Bids Data Sheet (BDS)

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

BDS Clause Number
ITB Number

Amendments of, and Supplements to, Clauses in the Instruction to Bidders

A. Introduction

BDS Clause Number 1

Name of Procuring Agency: **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited)**

The subject of procurement is: **Tender No. P-34/2026 Procurement of Central Control Unit (CCU) Solution for Digital Interventions**

Expected commencement date: **Wednesday, August 12, 2026**

BDS Clause Number 2

Financial year for the operations of the Procuring Agency: **2026-27**

Name and identification number of the Contract: **P59201**

BDS Clause Number 3

JV/Consortium or Association Allowed: **Yes**
Number of JV/Consortium Members: **03**

B. Bidding Documents

BDS Clause Number 4

The Bidders may seek clarifications through **EPADS v2.0**: Clarification Date: Friday, July 24, 2026

Pre-Bid Meeting: Monday, July 20, 2026 02:30 PM
Venue: PRAL Head Office, STP Building, Sector I-9/3, Islamabad

BDS Clause Number 5

Any addendum, in case issued, shall be published on **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited)** website and on **EPADS v2.0**.

BDS Clause Number 6

List of documents required along with the bid:

1. Warranty of the proposed solution must be 3years.

2. Bid declaration Form must be attached duly signed and stamped.

BDS Clause Number 7

The qualification criteria to establish the supply / production capability of the bidder.

see Eligibility Criteria

BDS Clause Number 8

Services and Their related documents:
See section Required Services and Scope of Work

BDS Clause Number 9

Price schedule will be provided according to the format defined and acquired.
see section price schedule.

BDS Clause Number 10

Specifications:

see section of specifications.

C. Preparation of Bids

BDS Clause Number 11

The price shall be **Fixed**.

BDS Clause Number 12

Currency of the Bids shall be : **PKR**

BDS Clause Number 13

The Bids/Bid Validity period shall be: **90 Days**

BDS Clause Number 14

The amount of Bid Security shall be as defined in Bid Security Section for items and lots given in **BDS 6**
The Bid Security shall be in the form of: **Pay Order**

BDS Clause Number 15

The Bids security shall be valid for twenty-eight (28) days beyond the expiry of the Bids validity period specified in the bidding documents, for example the bid validity is 90 days so the bid security shall be valid for 90+28 = 118 days.

BDS Clause Number 16

Alternative Bids to the requirements of the bidding documents will not be permitted.

D. Submission of Bids

BDS Clause Number 17

Bid shall be submitted online on EPADS v2.0 whereas hard copy of the bid security should be submitted to the following;

Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory

Bids that are not submitted on EPADS v2.0 shall be disqualified.

The deadline for Bids submission is: **Tuesday, July 28, 2026 11:00 AM**

E. Opening and Evaluation of Bids

BDS Clause Number 18

The Bids opening shall take place on **EPADS v2.0**.

Day *: **Tuesday***

Date: ***Tuesday, July 28, 2026***

Time *: **11:30 AM***

BDS Clause Number 19

Selection technique adopted will be: **Quality and Cost Based Selection (QCBS)**
see Evaluation Criteria

F. Award of Contract

BDS Clause Number 20

The Performance guarantee shall: **10.00%**.

The Performance Guarantee shall be acceptable in the form of: **Bank Guarantee**

21.

51.1

Arbitrator shall be appointed by mutual consent of the both parties.

G. Review of Procurement Decisions

BDS Clause Number 22

Grievence against this procurement shall be submitted online on EPADS v2.0.

Eligibility Criteria

Bidder's Type	Required Registration
Sole Proprietorship	FBR (NTN)
Partnership Firm	FBR (GSTN)
Company (Private Limited)	SECP
Company (Public Limited)	
Company (Holding Company)	
Company (Limited by Guarantee)	
State Owned Enterprise (Private Limited)	
State Owned Enterprise (Public Limited)	

Eligibility Criteria	Document
1) Evidence of the bidding firm/company’s registration/incorporation	Yes
2) Should be active taxpayer.Status report	Yes
3) An affidavit on a minimum PKR 100/- stamp paper, duly declaring that the company was not blacklisted at the time of bid submission by any telecom operator, FMCG company, autonomous body, government, semi-government organization, or any other entity.	Yes

Evaluation Criteria

Quality and Cost Based Selection (QCBS)

Technical Marks	**100**
Passing Marks	**70**
Technical Evaluation Criteria	

Solution Design End-to-end CCU solution aligned to scope showing data integration, stream processing, analytical store, and dashboard and alert architecture implemented securely and reliably (Qualitative)(Doc Required) marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(30)** marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(25)** marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(20)** marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(15)** marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(10)** marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology **(5)**	30
Technical Evaluation Criteria	

Operations and User Experience Vendor must demonstrate how CCU operators will monitor interventions and respond to events: dashboards, alert workflow, and operating model including roles and 24/7 shift coverage (Qualitative)(Doc Required) marks based on operator workflow and role-based usage **(10)** marks based on operator workflow and role-based usage **(9)** marks based on operator workflow and role-based usage **(8)** marks based on operator workflow and role-based usage **(7)** marks based on operator workflow and role-based usage **(6)** marks based on operator workflow and role-based usage **(5)** marks based on operator workflow and role-based usage **(4)** marks based on operator workflow and role-based usage **(3)** marks based on operator workflow and role-based usage **(2)** marks based on operator workflow and role-based usage **(1)**	10
Technical Evaluation Criteria	

Security, Backup, and Disaster Recovery Description of security controls for data in transit and at rest, access control approach, audit logging, and high-level backup and DR approach (Qualitative)(Doc Required) marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(10)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(9)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(8)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(7)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(6)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(5)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(4)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(3)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(2)** marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and completeness of DR plan **(1)**	10

Technical Evalution Criteria	
Vendor Presentation and Solution Walkthrough Vendor shall present the proposed solution and walk through CCU implementation and operations including integration approach, dashboard and alert workflow, and security and DR posture (Qualitative)(Doc Required) marks based on clarity and confidence that vendor understands scope and risks **(10)** marks based on clarity and confidence that vendor understands scope and risks **(9)** marks based on clarity and confidence that vendor understands scope and risks **(8)** marks based on clarity and confidence that vendor understands scope and risks **(7)** marks based on clarity and confidence that vendor understands scope and risks **(6)** marks based on clarity and confidence that vendor understands scope and risks **(5)** marks based on clarity and confidence that vendor understands scope and risks **(4)** marks based on clarity and confidence that vendor understands scope and risks **(3)** marks based on clarity and confidence that vendor understands scope and risks **(2)** marks based on clarity and confidence that vendor understands scope and risks **(1)**	10
Experience in Deploying Similar Solutions	

Demonstrated experience in delivering CCUs, Realtime Analytics, Command Centers, NOC/IOC, or similar centralized monitoring and coordination solutions over the past five years. Minimum three referenced projects of similar nature with contract value of USD 500,000 or above (or PKR equivalent), each live for a minimum of twelve months (Qualitative)(Doc Required) 5 project **(10)** 4 project **(8)** 3 project **(6)** 2 project **(4)** 1 project **(2)**	10
Experience in Integration of Digital Systems	
Demonstrated experience in integrating with diverse field systems and standardizing data from multiple sources into centralized databases. Each referenced project must have been live for at least six months (Qualitative)(Doc Required) 5 project **(5)** 4 Project **(4)** 3 Project **(3)** 2 Project **(2)** 1 Project **(1)**	5
Experience with Centralized Dashboards and Alert Engines	

Prior deployments where centralized dashboards and alert engines were used to visualize operational data, detect anomalies, and support real-time monitoring or enforcement actions. Each referenced project must have been live for at least six months (Qualitative)(Doc Required) 5 project **(5)** 4 project **(4)** 3 project **(3)** 2 project **(2)** 1 project **(1)**	5
Company Profile	

Local Presence Vendor must demonstrate strong and sustained local presence in Pakistan with on-ground offices and technical staff across infrastructure, system integration, software development, analytics, and operations sufficient to support implementation and 24/7 CCU operations (Qualitative)(Doc Required) marks based on adequacy, relevance, and maturity of local presence **(10)** marks based on adequacy, relevance, and maturity of local presence **(9)** marks based on adequacy, relevance, and maturity of local presence **(8)** marks based on adequacy, relevance, and maturity of local presence **(7)** marks based on adequacy, relevance, and maturity of local presence **(6)** marks based on adequacy, relevance, and maturity of local presence **(5)** marks based on adequacy, relevance, and maturity of local presence **(4)** marks based on adequacy, relevance, and maturity of local presence **(3)** marks based on adequacy, relevance, and maturity of local presence **(2)** marks based on adequacy, relevance, and maturity of local presence **(1)**	10
Annual Financial Turnover	

Average annual turnover over the last five years in PKR (Qualitative)(Doc Required) Above PKR 3.0 Billion: **(10)** At or above PKR 2.0 Billion **(7)** At or above PKR 1.5 Billion **(5)** At or above PKR 1.0 Billion **(2)**	10

Required Services

Positions Without Lots :

Position	Delivery Schedule	Quantity	Bid Security
Procurement of Central Control Unit (CCU) Solution for Digital Interventions	**Address:** PRAL Head Office, 2nd Floor, STP Building, Service Road North, Sector I-9/3., Islamabad Capital Territory **Schedule:** 20 weeks **Quantity:** 1/Qty	1/Qty	0 PKR

Related Services :

No

Services Specifications

Positions Without Lots :

Position: Procurement of Central Control Unit (CCU) Solution for Digital Interventions

Specifications / Requirements:

Overview section PRAL issues this RFP to procure, implement, and operationalize a fully on-premise, end-to-end real-time analytical Command and Control Unit (CCU) to support enforcement, compliance monitoring, and operational decision-making. The CCU shall function as a real-time operational nerve center providing continuous situational awareness, threshold-based alerting, and data-driven visibility across all deployed and future digital interventions. The CCU shall not function as an enterprise data repository or authoritative system of record for any FBR transactional system. This section constitutes the comprehensive technical and commercial specifications for the Software, System Implementation, Operations, and Ongoing Support Services required for the CCU ecosystem. The Vendor is responsible for the complete lifecycle of the solution, ensuring that all support items and operational services are delivered in full alignment with the in-scope requirements.

Scope of Work

PRAL issues this RFP to procure, implement, and operationalize a fully on-premise, end-to-end real-time analytical Command and Control Unit (CCU) to support enforcement, compliance monitoring, and operational decision-making. The CCU shall function as a real-time operational nerve center providing continuous situational awareness, threshold-based alerting, and data-driven visibility across all deployed and future digital interventions. The CCU shall not function as an enterprise data repository or authoritative system of record for any FBR transactional system. This section constitutes the comprehensive technical and commercial specifications for the Software, System Implementation, Operations, and Ongoing Support Services required for the CCU ecosystem. The Vendor is responsible for the complete lifecycle of the solution, ensuring that all support items and operational services are delivered in full alignment with the in-scope requirements

In Scope

a. Supply of all software components across the full five-layer CCU architecture: Data Ingestion, Message Broker, Stream Processing Engine, Analytical Store, and Visualization.

b. Supply of all enterprise software licenses + licenses for the underlying operating systems with the solutions for production operation across all components for the full contract duration. No component shall be left unlicensed or subject to separate procurement.

c. End-to-end implementation across all five layers on PRAL-provisioned virtual machines, covering installation, configuration, integration, data modeling, pipeline and stream processing development, dashboard development, and performance tuning.

d. Integration with existing and future digital interventions, including production tracking cameras, scanners, digital invoicing systems, POS networks, and Digital Enforcement Stations.

e. Development of operational dashboards, KPI panels, drill-down analytical views, and threshold-based alerting aligned to operational requirements.

f. Knowledge transfer, training, and technical documentation upon solution acceptance.

g. Software support, patch management, and operational co-management for the full three-year contract duration.

h. The Vendor shall also be responsible for **fully staffing and operating** the Central Control Unit (CCU), including deployment of a dedicated operational team to monitor system uptime, oversee incoming data feeds from digital interventions, manage alerts, and support operational coordination.

g. All support services and adherence to Service Level Agreements (SLAs) fall within the vendor's scope of work

Out of Scope

a. Physical server, storage, and networking hardware.

b. PRAL shall provision the VM Hypervisor per the vendor's formal sizing specification that is mutually agreed upon. But vendor is responsible to provide BOQ for the operating system licenses on which their proposed solutions will run. This is because it is possible that a certain component requires for example Red Hat OS, Windows Server, Ubuntu, Suse Linux etc.

c. CCU facility infrastructure including video walls, operator monitors, and workstations.

Price Schedule

For Individual Positions

#	Position Title	Quantity	Unit Price (PKR)	Total Price (PKR)	Delivery Location	Delivery Period / Year	Country of Origin
1							
2							

For Lots

#	Lot Title	Total Lot Price (PKR)	Country of Origin
1	[Lot 1 Title]		

General Conditions of Contract

A. General

1. **Definitions**

1.1. Unless the context otherwise requires, the following terms whenever used in this Contract shall have the same meaning and shall be interpreted as indicated

1.1.1. “Applicable Law” means the laws and any other instruments having the force of law in the Government’s Country, or in such other country as may be specified in the Special Conditions of the Contract (SC), as they may be issued and in force from time to time;

1.1.2. “The Contract” means an agreement enforceable by law;

1.1.3. “The Contract Price” means the price payable to the Contractor under the Contract for the full and proper performance of its contractual obligations;

1.1.4. “The Services” means the work to be performed by the Contractor pursuant to this Contract and as prescribed in the Specifications and Schedule of Activities included in the Contractor’s Bid;

1.1.5. “Ancillary Services” means those services ancillary to the provision of Services, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Contractor covered under the Contract;

1.1.6. “GCC” means the General Conditions of Contract contained in this section;

1.1.7. “SCC” means the Special Conditions of Contract by which the GCC may be amended or supplemented;

1.1.8. **“**Day” means calendar day unless indicated otherwise;

1.1.9. “Effective Date” means the date on which this Contract comes into force and effect;

1.1.10. “The Contractor” means the individual or corporate body whose Bids to provide the Services has been accepted by the Procuring Agency;

1.1.11. “The Project Site,” where applicable, means the place or places named in Bid Data Sheet and technical Specifications;

1.1.12. “Government” means the Government of Pakistan;

1.1.13. “Local Currency” means the currency of Pakistan;

1.1.14. “In Writing” means communicated in written form with proof of receipt;

1.1.15. “Completion Date” means the date of completion of the Services by the Contractor as certified by the Procuring Agency;

1.1.16. “Foreign Currency” means any currency other than the currency of the country of the Procuring Agency;

1.1.17. “Party” means the Procuring Agency or the Contractor, as the case may be, and “Parties” means both of them;

1.1.18. "Service" means any object of procurement other than goods or works;

1.1.19. “Subcontractor” means any entity to which the Bidder subcontracts any part of the Services.

2. **Applicable Law**

2.1. The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in SCC.

3. **Language**

3.1. The Contract as well as all correspondence and documents relating to the Contract exchanged between the Contractorand the Procuring Agency, shall be written in the **English language** unless otherwise stated in the **SCC** . Supporting documents and printed literature that are part of the Contract may be in another language provided these are accompanied by an accurate translation of the relevant passages in English, in which case, for purposes of interpretation of the Contract, this translation shall govern.

4. **Notices**

4.1. Any notice, request, or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the **SCC**.

5. **Location**

5.1. The Services shall be performed at such locations as the Procuring Agency may approve and as specified in **SCC.**

6. **Authorized Representatives / Authority of Member in charge**

6.1. Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Procuring Agency or the Contractor may be taken or executed by the officials specified in the **SCC**.

B. Commencement, Completion, Modification, and Termination of Contract

7. **Effectiveness of Contract**

7.1. This Contract shall come into effect on the date the Contract is signed by both parties and such other later date as may be stated in the **SCC.**

8. **Commencement of Services**

8.1. The Contractor shall confirm availability of Key Experts and begin carrying out the Services not later than the number of days after the Effective Date specified in the **SCC.**

9. **Program schedule**

9.1. Before commencement of the Services, the Contractor shall submit to the Procuring Agency for approval a Program showing the general methods, arrangements, order and timing for all activities. The Services shall be carried out in accordance with the approved Program as updated.

10. **Starting Date/Expiration Date**

10.1. The Contractor shall start carrying out the Services Five (05) days after the date the Contract becomes effective, or at such other date as may be specified in the **SCC.**

10.2. Unless terminated earlier pursuant to Clause **GCC 14** hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the **SCC.**

11. **Entire Agreement**

11.1. This Contract contains all covenants, stipulations and provisions agreed by the Parties. No agent or representative of either Party has authority to make, and the Parties shall not be bound by or be liable for, any statement, representation, promise or agreement not set forth herein.

12. **Modification**

12.1. Any modification or variation of the terms and conditions of this Contract, including any modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any modification(s) or variation(s) made by the other Party.

12.2. In cases of any modification(s) or variation(s), the prior written consent of the Procuring Agency is required.

13. **Force Majeure**

13.1. **Definition**
For the purposes of this Contract, “Force Majeure” means an event which is beyond the reasonable control of a Contractor and which makes a Contractor’s performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

13.2. **No Breach of Contract**
The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract in so far as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

13.3. **Extension of Time**
Any period within which a Contractor shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

13.4. **Payments**
During the period of their inability to perform the Services as a result of an event of Force Majeure, the Contractor shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

14. **Termination**

14.1. **By the Procuring Agency**
The Procuring Agency may terminate this Contract in case of the occurrence of any of the events specified in paragraphs (a) through (e) of this Clause. In such an occurrence the Procuring Agency shall give at least thirty (30) calendar days' written notice of termination to the Contractor in case of the events referred to in (a) through (d); at least sixty (60) calendar days' written notice in case of the event referred to in (e);

14.1.1. If the Contractor fails to remedy a failure in the performance of its obligations hereunder, as specified in a notice of suspension;

14.1.2. If the Contractor becomes (or, if the Contractor consists of more than one entity, if any of its members becomes) insolvent or bankrupt or enter into any agreements with their creditors for relief of debt or take advantage of any law for the benefit of debtors or go into liquidation or receivership whether compulsory or voluntary;

14.1.3. If the Contractor fails to comply with any final decision reached as a result of arbitration proceedings;

14.1.4. If, as the result of Force Majeure, the Contractor is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;

14.1.5. If the Procuring Agency, in its sole discretion and for any reason whatsoever, decides to terminate this Contract;

14.2. **By the Contractor**
The Contractor may terminate this Contract, by not less than thirty (30) calendar days' written notice to the Procuring Agency, in case of the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause.

14.2.1. If the Procuring Agency fails to pay any money due to the Contractor pursuant to this Contract and not subject to dispute within forty-five (45) calendar days after receiving written notice from the Contractor that such payment is overdue;

14.2.2. If, as the result of Force Majeure, the Contractor is unable to perform a material portion of the Services for a period of not less than sixty (60) calendar days;

14.2.3. If the Procuring Agency fails to comply with any final decision reached as a result of arbitration;

14.2.4. If the Procuring Agency is in material breach of its obligations pursuant to this Contract and has not remedied the same within forty-five (45) days (or such longer period as the Bidder may have subsequently approved in writing) following the receipt by the Procuring Agency of the Contractor's notice specifying such breach.

C. Obligations of the Contractor

15. **General**

15.1. **Standard of Performance**

15.1.1. The Contractor shall perform the Services and carry out the Services with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Contractor shall always act, in respect of any matter relating to this Contract or to the Services, as a faithful adviser to the Procuring Agency, and shall at all times support and safeguard the Procuring Agency's legitimate interests in any dealings with the third parties;

15.1.2. The Contractor shall employ and provide such qualified and experienced Experts and Sub-Contractors as are required to carry out the Services.

15.2. **Law Applicable to Services**
The Contractor shall perform the Services in accordance with the Contract and in accordance with the Law of Pakistan and shall take all practicable steps to ensure that any of its Experts and Sub-Bidders, comply with the Applicable Law.

16. **Conflict of Interests**

16.1. **Contractor Not to Benefit from Commissions and Discounts**
The remuneration of the Contractor shall constitute the Contractor's sole remuneration in connection with this Contract or the Services, and the Contractor shall not accept for their own benefit any trade commission, discount, or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Contractor shall use their best efforts to ensure that the Personnel, any Subcontractors, and agents of either of them similarly shall not receive any such additional remuneration.

16.2. **Contractor and Affiliates Not to be Otherwise Interested in Project**
The Contractor agree that, during the term of this Contract and after its termination, the Contractor and its affiliates, as well as any Subcontractor and any of its affiliates, shall be disqualified from providing Services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

16.3. **Prohibition of Conflicting Activities**
Neither the Bidder nor its Subcontractors nor the Personnel shall engage, either directly or indirectly, in any of the following activities:

16.3.1. during the term of this Contract, any business or professional activities in the Government's country which would conflict with the activities assigned to them under this Contract;

16.3.2. during the term of this Contract, neither the Contractor nor their Subcontractors shall hire public employees in active duty or on any type of leave, to perform any activity under this Contract;

16.3.3. after the termination of this Contract, such other activities as may be specified in the **SCC.**

17. **Insurance to be Taken Out by the Contractor**

17.1. The Contractor(a) shall take out and maintain, and shall cause any Subcontractors to take out and maintain, at its (or the Sub-contractors', as the case may be) own cost but on terms and conditions approved by the Procuring Agency, insurance against the risks, and for the coverage, as shall be specified in the **SCC**; and (b) at the Procuring Agency's request, shall provide evidence to the Procuring Agency showing that such insurance has been taken out and maintained and that the current premiums have been paid.

18. **Contractor's Actions Requiring Procuring Agency's Prior Approval**

18.1. The Contractor shall obtain the Procuring Agency's prior approval in writing before taking any of the following actions:

18.1.1. appointing such members of the Personnel not provided by the Contractor;

18.1.2. changing the Program of activities; and

18.1.3. any other action that may be specified in the **SCC.**

19. **Reporting Obligations**

19.1. The Contractor shall submit to the Procuring Agency the reports and documents in the numbers, and within the periods as prescribed by the Procuring Agency.

20. **Liquidated Damages**

20.1. **Payments of Liquidated Damages**
The Contractor shall pay liquidated damages to the Procuring Agency at the rate per day stated in the **SCC** for each day that the Completion Date is later than the Intended Completion Date. The total amount of liquidated damages shall not exceed the amount defined in the **SCC**. The Procuring Agency may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

20.2. **Correction for Over-payment**
If the Intended Completion Date is extended after liquidated damages have been paid, the Procuring Agency shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in **SCC.**

20.3. **Lack of performance penalty**

If the Contractor has not corrected a Defect within the time specified in the Procuring Agency's notice, a penalty for Lack of performance will be paid by the Contractor. The amount to be paid will be calculated as a percentage of the cost of having the Defect corrected, assessed as specified in the Contractor

21. **Performance Guarantee**

21.1. Within the time stipulated in the acceptance letter from the Procuring Agency, the successful Bidder shall furnish the Performance Guarantee in shape and amount **specified in SCC.**

21.2. The proceeds of the Performance Guarantee shall be payable to the Procuring agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

21.3. The Performance Guarantee shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring agency and shall be in the acceptable form as specified in **SCC**.

21.4. The Performance Guarantee will be discharged by the Procuring agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise **specified in SCC.**

22. **Sustainable Procurement**

22.1. The Contractor shall conform to the sustainable procurement contractual provisions, if and as specified in the **SCC.**

D. Contractor's Personnel

23. **Description of Personnel**

23.1. The titles, agreed job descriptions, minimum qualifications, and estimated periods of engagement in the carrying out of the Services of the Contractor's Key Personnel. The Key Personnel listed by title as well as by name are hereby approved by the Procuring Agency.

24. **Removal and / or Replacement of Personnel**

24.1. Except as the Procuring Agency may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Contractor, it becomes necessary to replace any of the Key Personnel, the Contractor shall provide as a replacement a person of equivalent or better qualifications.

24.2. If the Procuring Agency finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Contractor shall, at the Procuring Agency's written request specifying the grounds thereof, provide as a replacement a person with qualifications and experience acceptable to the Procuring Agency.

24.3. The Contractor shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

E. Obligations of the Procuring Agency

25. **Change in the Applicable Law**

25.1. If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties which increases or decreases the cost of the Services rendered by the Contractor, then the remuneration and reimbursable expenses otherwise payable to the Contractor under this Contract shall be increased or decreased accordingly by agreement between the Parties, and corresponding adjustments shall be made to the amounts referred in the **SCC.**

26. **Services and Facilities**

26.1. The Procuring Agency shall make available to the Contractor and the Experts, for the purposes of the Services and free of any charge, the services, facilities and property described in the Terms of Reference, at the times and in the manner specified in the Terms of Reference.

26.2. In case that such services, facilities and property shall not be made available to the Contractor, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Contractor for the performance of the Services, (ii) the manner in which the Contractor shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Contractor as a result thereof.

F. Payments to the Contractor

27. **Contract Price**

27.1. The price payable shall be in Pakistani Rupees unless otherwise specified in the **SCC**.

28. **Terms and Conditions of Payment**

28.1. Payments will be made to the Contractor according to the payment schedule stated in the **SCC** and as per actual invoice submitted by the Contractor.

28.2. Unless otherwise stated in the **SCC**, the advance payment shall be made against the provision by the Contractor of a bank guarantee for the same amount, and shall be valid for the period stated in the **SCC.** Any other payment shall be made after the conditions listed in the **SCC** for such payment have been met, and the Contractor have submitted an invoice to the Procuring Agency specifying the amount due.

29. **Quality Control Identifying Defects**

29.1. The principle and modalities of Inspection of the Services by the Procuring Agency shall be as indicated in the **SCC.** The Procuring Agency shall check the Contractor's performance and notify him of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Procuring Agency may instruct the Contractor to search for a Defect and to uncover and test any service that the Procuring Agency considers may have a Defect. Defect Liability Period is as defined in the **SCC**.

30. **Correction of Defects, and Lack of Performance Penalty**

30.1. The Procuring Agency shall give notice to the contractor of any Defects before the end of the Contract. The Defects liability period shall be extended for as long as Defects remain to be corrected.

30.2. Every time notice a Defect is given; the contractor shall correct the notified Defect within the length of time specified by the Procuring Agency's notice.

30.3. If the contractor has not corrected a Defect within the time specified in the Procuring Agency's notice, the Procuring Agency will assess the cost of having the Defect corrected, the contractor will pay this amount, and a Penalty for Lack of Performance.

31. **Settlement of Disputes Amicable Settlement**

31.1. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

32. **Dispute Settlement**

32.1. **Arbitration**

If any dispute of any kind whatsoever shall arise between the procuring agency and the contractor in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity or termination, or the execution of the contract, the parties shall seek to resolve any such dispute or difference by mutual consultation. If the parties fail to resolve such a dispute or difference even after negotiations or mediation, then the dispute shall be referred within fourteen (14) days in writing by either party to the Arbitrator, with a copy to the other party.

Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with **GCC sub-clause 32.1**, shall be finally settled by arbitration. Arbitration may be commenced prior to or after completion of the Contract. Arbitration proceedings shall be conducted in accordance with Arbitration Act 1940. Notwithstanding any reference to arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless otherwise agreed. The Procuring Agency shall continue to pay the Contractor any undisputed amounts due under the Contract during the resolution of any dispute.

Special Conditions of Contract

SECTION VIII. SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

Number of GC Clause

Amendments of, and Supplements to, Clauses in the General Conditions of Contract

Definitions

The Procuring Agency is: Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory

The Supplier is:

The title of the subject procurement is:Tender No. P-34/2026 Procurement of Central Control Unit (CCU) Solution for Digital Interventions

Number of GC Clause 2

Applicable/Governing Law:

The Contract shall be interpreted in accordance with the laws of Islamic Republic of Pakistan

Number of GC Clause 3

Language:

The language of the Contract, all correspondence and communications to be given, and all other documentation to be prepared and supplied under the Contract shall be in **English.**

Number of GC Clause 4

Notices:

The addresses for the notices are:

Procuring Agency:

Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager
Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory
+92-334-531-4503
procurement@pral.com.pk

Contractor/ Bidder:

[Name, address and telephone number].

The Contractor/ Bidder's Representative(s)

[Name, address, telephone number and e-mail address]

Number of GC Clause 6.1

The Authorized Representatives are:

For the Procuring Agency:

Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager
Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory
+92-334-531-4503
procurement@pral.com.pk

For the Bidder:

Name: ………………………

Designation: ……………..

Address: ……………………………..

Number of GC Clause 7

Effectiveness of the contract

The Contractor/Bidder shall be effective within ….. days from the date of signature of the Contract by both parties

Number of GC Clause 8

Commencement of Contract:

The Contractor/ Bidder shall provide Non-Consultancy Services from the effective date of contract.

Number of GC Clause 10.2

Expiration of Contract:

The time period shall be ………………….

Number of GC Clause 14

Termination

In the event of termination of the contract due to any reason as already defined in the General Conditions of Contract, the Bidder shall be responsible for providing to the Authority the Services till the time of alternate arrangements.

Number of GC Clause 16

Conflict of Interest:

The Procuring Agency reserves the right to determine on a case-by-case basis whether the Bidder should be disqualified from providing services due to a conflict of a nature described in Clause GCC C2**.**

Number of GC Clause 20

Liquidated Damages

If the Bidder fails to provide services as required under the contract or in case of any data loss/data breach or any incident compromising the data security or other such failures related to any services, the Bidder shall pay to the Procuring Agency as Liquidated Damages at a rate of **0.01%** to **2.00%** of the Contract value, in accordance with the extent of performance failure & the cost of investigating such incidents as judged by the Authority.

Number of GC Clause 21

Performance Guarantee:

The amount of performance guarantee shall be 10.00% of the contract price in acceptable form of Bank Guarantee

Number of GC Clause 27

Currency of Payment:

All the payment to be released to the contractor/Bidder shall be in Pakistani Rupees.

Number of GC Clause F

Payment terms:

Payment will be made to the Bidder against the procured Goods and services according to the actual invoice or running bills submitted by the Bidder against the services provided within the time given in the conditions of the contract.

Number of GC Clause F

Identifying Defects:

The Authority reserves the right at any time to inspect the premises of the provider to inspect the goods and monitor the goods being provided.

Number of GC Clause F 5 & 6

Following is the guidance for Dispute Resolution

i. If any dispute of any kind whatsoever shall arise between the Authority and the Bidder in connection with or arising out of the Contract, including without prejudice to the generality of foregoing, any question regarding its existence, validity, termination and the execution of the Contract – whether during developing phase or after their completion and whether before or after the termination, abandonment or breach of the Contract – the parties shall seek to resolve any such dispute or difference by mutual diligent negotiations in good faith within 14 (fourteen) days following a notice sent by one Party to the other Party in this regard**.**

ii. At future of negotiation the dispute shall be resolved through mediation and mediator shall be appointed with the mutual consent of the both parties**.**

iii. At the event of failure of mediation to resolve the dispute relating to this contract such dispute shall finally be resolved through binding Arbitration by sole arbitrator in accordance with Arbitration Act 1940. The arbitrator shall be appointed by mutual consent of the both parties**.** The Arbitration shall take place in Islamabad, Pakistan and proceedings will be conducted in English language.

iv. The cost of the mediation and arbitration shall be shared by the parties in equal proportion however the both parties shall bear their own costs and lawyer's fees regarding their own participation in the mediation and arbitration. However, the Arbitrator may make an award of costs upon the conclusion of the arbitration making any party to the dispute liable to pay the costs of another party to the dispute**.**

v. Arbitration proceedings as mentioned in the above clause regarding resolution of disputes may be commenced prior to, during or after completion of the contract.

Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree that the Authority shall pay the Bidder any monies due to the Bidder.

Arbitrator's fee:

The fee shall be specified in Pak Rupees, as determined by the Arbitrator, which shall be shared equally by both parties**.**

Appointing Authority for Arbitrator:

By the Mutual Consent or in accordance with the provisions of Arbitration Act, 1940, in case the parties fail to reach a consensus on the name of sole arbitrator, any party may submit an application to the Chief Justice Islamabad High Court for appointment of sole arbitrator. The Chief Justice IHC may appoint a former judge of any High Court or Supreme Court as the sole arbitrator to resolve the dispute between the parties.

Rules of procedure for arbitration proceedings:

Any dispute between the Authority and a Bidder who is a national of the Islamic Republic of Pakistan arising in connection with the present Contract shall be referred to adjudication or arbitration in accordance with the laws of the Islamic Republic of Pakistan including Arbitration Act 1940, however above provision shall prevail in referring the case to the Arbitrator.

Place of Arbitration and Award:

The arbitration shall be conducted in English language and place of arbitration shall be at Islamabad. The award of the arbitrator shall be final and shall be binding on the parties.

Bid Securing Declaration

Form 9: Bid Securing Declaration

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

Bid No.:***P59201***

To: **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory**

We, the undersigned, declare that:

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

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

1. have withdrawn or modified our Bid during the period of Bid Validity specified in the Form of Bid;

2. Disagreement to arithmetical correction made to the Bid price; or

3. having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid Validity, (i) failure to sign the contract if required by Procuring Agency to do so or (ii) fail or refuse to furnish the Performance Security or to comply with any other condition precedent to signing the contract specified in the Bidding Documents.

We understand this Bid Securing Declaration shall expire if we are not the successful

Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight (28) days after the expiration of our Bid.

Contract Form

SECTION IX: CONTRACT FORMS

THIS AGREEMENT made the _____ day of __________ 20_____ between **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory**

(hereinafter called "the Procuring Agency") of the one part and *[name of Bidder]* of *[city and country of Bidder]* (hereinafter called "the Bidder") of the other part:

WHEREAS the Procuring Agency invited Bids for provision of goods, viz., **Tender No. P-34/2026 Procurement of Central Control Unit (CCU) Solution for Digital Interventions (*P59201*)** and has accepted a Bids by the Bidder for the provision of Goods in the sum of *[contract price in words and figures]* (hereinafter called "the Contract Price").

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below:-

1. This form of Contract;
2. the Form of Bids and the Price Schedule submitted by the Bidder;
3. the Schedule of Requirements;
4. the Technical Specifications;
5. the Special Conditions of Contract;
6. the General Conditions of the Contract;
7. the Procuring Agency's Letter of Acceptance; and
8. [*add here: any other documents*]

3. In consideration of the payments to be made by the Procuring Agency to the Bidder as hereinafter mentioned, the Bidder hereby covenants with the Procuring Agency to provide the Goods related services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Agency hereby covenants to pay the Bidder in consideration of the provision of Goods and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by __________________the ________________ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

………………………………………………

Signed, sealed, delivered by __________________the ________________ (for the Procuring Agency)

Witness to the signatures of the Bidder: ………………………………………………

Integrity Pact

Integrity Pact

DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BYTHE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE

Contract Number: Contract Value: Contract Title:

Dated:

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

Performance Guarantee Form

Performance Guarantee Form

To: **Pakistan Revenue Automation Pvt Limited (Pakistan Revenue Automation Pvt Limited), Manager Galaxy Business Center, 2nd Floor, Plot # 266-B, Street # 9, Sector I-9/3, Islamabad, Islamabad Capital Territory**

WHEREAS *[name of Bidder]* (hereinafter called "the Bidder") has undertaken, in pursuance of Contract No. *[reference number of the contract]* dated *[insert date]* for provision of Goods*(*hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Bidder shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Bidder's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Bidders guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Bidder, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Bidder to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

Signature and seal of the Guarantors

____

[name of bank or financial institution]

[address]

[date}

Annexure

Technical Proposal

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Technical Proposal** (page number: 77)

Financial Proposal

Financial Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Financial Proposal** (page number: 130)

Beneficial Ownership Form

Technical Submission (Vendor)

Document Required

See Form Under Additional Forms and Documents: **Beneficial Ownership Form** (page number: 131)

Payment Terms

Information (Read-Only)

See Form Under Additional Forms and Documents: **Payment Terms** (page number: 133)

Procurement Forms

Past Experience and Completed Contracts

See Form Under Additional Forms and Documents: **Past Experience and Completed Contracts** (page number: 134)

Current Contracts and Their Progress

See Form Under Additional Forms and Documents: **Current Contracts and Their Progress** (page number: 135)

Financial Capacity and Net Worth Evaluation Form

See Form Under Additional Forms and Documents: **Financial Capacity and Net Worth Evaluation Form** (page number: 136)

Average Annual Turnover

See Form Under Additional Forms and Documents: **Average Annual Turnover** (page number: 138)

Additional Forms and Documents

Overview

PRAL issues this RFP to procure, implement, and operationalize a fully on-premise, end-to-end real-time analytical Command and Control Unit (CCU) to support enforcement, compliance monitoring, and operational decision-making. The CCU shall function as a real-time operational nerve center providing continuous situational awareness, threshold-based alerting, and data-driven visibility across all deployed and future digital interventions. The CCU shall not function as an enterprise data repository or authoritative system of record for any FBR transactional system. This section constitutes the comprehensive technical and commercial specifications for the Software, System Implementation, Operations, and Ongoing Support Services required for the CCU ecosystem. The Vendor is responsible for the complete lifecycle of the solution, ensuring that all support items and operational services are delivered in full alignment with the in-scope requirements

In Scope

a. Supply of all software components across the full five-layer CCU architecture: Data Ingestion, Message Broker, Stream Processing Engine, Analytical Store, and Visualization.

b. Supply of all enterprise software licenses + licenses for the underlying operating systems with the solutions for production operation across all components for the full contract duration. No component shall be left unlicensed or subject to separate procurement.

c. End-to-end implementation across all five layers on PRAL-provisioned virtual machines, covering installation, configuration, integration, data modeling, pipeline and stream processing development, dashboard development, and performance tuning.

d. Integration with existing and future digital interventions, including production tracking cameras, scanners, digital invoicing systems, POS networks, and Digital Enforcement Stations.

e. Development of operational dashboards, KPI panels, drill-down analytical views, and threshold-based alerting aligned to operational requirements.

f. Knowledge transfer, training, and technical documentation upon solution acceptance.

g. Software support, patch management, and operational co-management for the full three-year contract duration.

h. The Vendor shall also be responsible for **fully staffing and operating** the Central Control Unit (CCU), including deployment of a dedicated operational team to monitor system uptime, oversee incoming data feeds from digital interventions, manage alerts, and support operational coordination.

g. All support services and adherence to Service Level Agreements (SLAs) fall within the vendor's scope of work

Out of Scope

a. Physical server, storage, and networking hardware.

b. PRAL shall provision the VM Hypervisor per the vendor's formal sizing specification that is mutually agreed upon. But vendor is responsible to provide BOQ for the operating system licenses on which their proposed solutions will run. This is because it is possible that a certain component requires for example Red Hat OS, Windows Server, Ubuntu, Suse Linux etc.

c. CCU facility infrastructure including video walls, operator monitors, and workstations.

General Obligations

The awarded vendor shall assume full responsibility for the functional completeness, performance, integration correctness, and operational readiness of the software solution from ingestion through visualization. Partial or component-only delivery shall not be accepted, and performance shortfalls shall not be attributed to the hardware or VM environment unless the provisioned infrastructure demonstrably fails to meet the vendor's formally submitted and PRAL-accepted sizing specification. The contract shall have an initial term of three (3) years from the date of Operational Acceptance, during which all operating system licenses, software licenses, support obligations, and operational responsibilities shall remain fully in effect without interruption. All components, pipelines, models, dashboards, and processes delivered under this tender shall operate exclusively within FBR's designated on-premise, and no data shall be transmitted, stored, processed, or cached outside the FBR or PRAL internal network perimeter at any point.

Integration Target Inventory

This section defines the mandatory inventory of digital interventions that the vendor shall integrate into the CCU data pipeline. The vendor shall design all ingestion pipelines, schema mappings, and data models to accommodate every listed source from day one of go-live. Please note that the list is non-exhaustive.

Intervention name	**Description**	**Sample data analysis and visualizations**
Production Tracking & Track and Trace	Counting of goods produced at various manufacturing sites across key industries via processing of video streams	Count of produced items (bags, bales etc.), no. of taxpayer sites with solution deployed, Alerts (e.g., for hardware, production drops), Production count (filterable by line, period, SKU), scanner status, deviations, potential manipulations, display of video streams from live production cameras, video playback from stored files

Point of Sales	Integration of FBR system with POS solution of provinces (restaurants, services)	Number of transactions (filterable by geography, tax-office, period), deviations, national heatmap, revenue collection
Digital Invoicing	E-invoicing across FMCG, public sector, and other priority sectors	Integrations status by Licensed integrator, Invoices generated (filterable by taxpayer, period, invoice type), integration status, API uptime, tax return comparison
Cargo Tracking System	Tracking movement of priority goods via e-way billing for suppliers, transporters, buyers	EWBs generated, route heatmap, integration status, vehicle risk status, value triangulation to DI
Digital Enforcement Station	Checkposts across major chokepoints in Indus and Balochistan to counter smuggling	Inspections and impounded vehicles at key checkpoints, enforcement coverage

Faceless Assessment	Automated and anonymous clearance of goods	Number of GD's filed, number of documents called (vs. exempted), average clearance time, revenue collection
CRM and Litigation dashboards	Tracking of litigations across of onboarded lawfirms across all courts e.g., ATIR, SC, HC	CRM cases status, litigation process updates, deadlines (filterable by court, tax-office)
Data Integrations	Tracking of return filing and enforcement status for priority high value non-filing individuals	Notices status, notice deadlines, taxpayer filing status, null filing instances (filterable by tax-office, tax-officer)
Social Media Scraping	Access to major news channels / social media platforms and collection and analysis of data from various social	Social media trends and sentiments, digital campaign performance, traditional media coverage, trending keywords related to tax, enforcement, or public complaints. Volume of posts or mentions related to tax, Sentiment analysis of public commentary (positive, neutral, negative), Geo-tagged content showing location-specific buzz,

	media platforms	Screenshots or flagged posts routed as alerts to enforcement teams

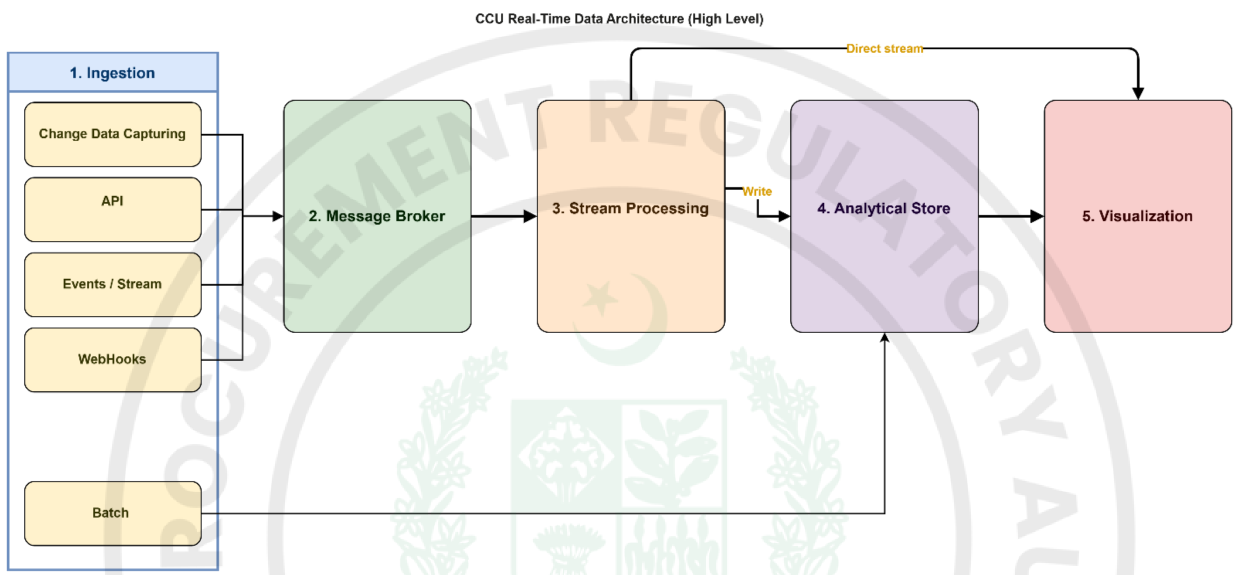
Future Integration Obligation

The ingestion layer shall be designed with sufficient configurability and capacity to onboard new FBR digital interventions during the contract period without architectural changes or additional negotiations. The vendor shall be responsible for all integration engineering, pipeline development, schema mapping, dashboard development and testing.

Reference Architecture

The CCU shall be built on a stream-first, event-driven real-time data architecture. Data shall flow unidirectionally from left to right across five tightly integrated layers: Ingestion, Message Broker, Stream Processing, Analytical Store, and Visualization. The architecture shall support sub-second data movement between layers and shall be deployed entirely on-premise with no dependency on external networks or cloud services. Vendors may propose minor variations to this architecture based on their enterprise technology stack, provided the logical separation of layers and the end-to-end latency requirements are preserved. Reference Architecture is provided below.

The Vendor must submit a detailed architectural framework that aligns with the CCU Real-Time Data Architecture, explicitly detailing the end-to-end data flow from Ingestion (including CDC, API, Stream, and Batch) through the Message Broker and Stream Processing layers. Documentation must demonstrate the interconnectedness of these systems, specifically detailing the Write path to the Analytical Store and the Stream path to Visualization. Furthermore, the Vendor must define the core functionality of each component and provide performance benchmarks specifically tailored to integration capacity, end-to-end response time, and visualization clarity.



Layer 1: Ingestion The ingestion layer shall serve as the unified entry point for all data originating from FBR's digital systems and field interventions. It shall support multiple ingestion modalities concurrently, including Change Data Capture (CDC) from transactional databases, REST and streaming APIs, real-time event and stream feeds from production tracking cameras and scanners, webhook-based push notifications from external FBR systems, and scheduled or trigger-based batch transfers. All ingestion connectors shall be capable of operating without an active internet connection, relying solely on the on-premise network fabric.

Layer 2: Message Broker The message broker shall act as the central nervous system of the architecture, decoupling data producers from consumers and ensuring reliable, ordered, and durable delivery of all events. It shall provide persistent, distributed log-based messaging with configurable retention, topic partitioning, consumer group management, and guaranteed at-least-once or exactly-once delivery semantics. The broker shall be capable of sustaining high-throughput ingestion from all upstream sources simultaneously without data loss or backpressure failures.

Layer 3: Stream Processing The stream processing engine shall consume event streams from the message broker in real time and apply stateful and stateless transformations, enrichments, aggregations, filtering, and business rule evaluations. It shall support windowed computations, joins across multiple streams, and anomaly or threshold-based alert generation. Processed and enriched output shall be written directly to the Analytical Store, and where applicable, critical alerts shall be routed back through the broker or delivered directly to the visualization and notification layer.

Layer 4: Analytical Store The analytical store shall serve as the high-performance, columnar or hybrid storage layer purpose-built for real-time and historical analytical queries. It shall ingest high-frequency writes from the stream processing engine without degradation in query performance, and shall support concurrent low-latency reads by the visualization layer. The store shall maintain both real-time working datasets and historical time-series data, enabling operational dashboards and retrospective analysis from a single unified store.

Layer 5: Visualization The visualization layer shall provide interactive, role-based dashboards and operational views consumed directly from the analytical store. It shall support real-time data refresh, drill-down capabilities, KPI monitoring, threshold-based visual alerts, and configurable reporting. Access shall be governed through role-based access control, and all dashboard data shall remain within the on-premise boundary with no outbound data transmission.

Data Flow Summary

Raw events and records originate at the Ingestion layer through CDC, APIs, webhooks, event streams, and batch feeds. These are forwarded to the Message Broker, which buffers, partitions, and durably stores all events for consumption. The Stream Processing engine subscribes to broker topics, applies real-time transformations and business logic, and writes enriched results to the Analytical Store. The Visualization layer queries the Analytical Store directly to render live dashboards, KPI panels, and alerts for FBR operational teams. A direct stream path from the Message Broker to the Analytical Store is also supported for high-volume raw data that does not require stream-side transformation before storage.

Architecture & Deployment Requirements

#	Requirement	Specification
1	Deployment Model	The entire solution shall be deployed strictly on-premise at the FBR-designated CCU site. No component, service, or data pipeline shall have a dependency on cloud infrastructure.
2	Internet Connectivity	The solution shall be fully operational with no active internet connection. All components shall function entirely within the FBR and PRAL internal network perimeter.
3	Data Security	The solution shall enforce encryption at rest and in transit across all layers. Role-based access control, audit logging, and data masking capabilities shall be mandatory.
4	Software Ecosystem	All software components shall be enterprise-grade with active commercial vendor support
5	End-to-End Latency	The solution shall guarantee end-to-end data processing and visualization refresh within 5 seconds from event origination at the ingestion layer under normal operational load.

6	License Inclusion	All operating systems and software licenses required to operate the complete solution shall be included in the vendor's commercial proposal. No component shall be left unlicensed or subject to separate procurement by FBR.
8	Full Solution Delivery	The vendor shall be responsible for the complete delivery, configuration, integration, and deployment of the solution on FBR-provisioned virtual machines. No partial or component-only delivery shall be accepted.
9	FBR Systems Integration	The vendor shall be required to integrate the CCU with existing and future FBR digital systems, including but not limited to production tracking cameras, scanners, digital invoicing systems, and other designated FBR data sources, as part of the implementation scope.
10	Implementation	Vendor is responsible to provide end to end implementation services including building Data Integration Pipelines, Streaming setup, Stream Processing engine development, Analytical Store Setup and Data modeling, Data Visualization through dashboard.

Data Integration / Ingestion

The Data Ingestion Layer shall serve as the primary interface between FBR's operational source systems and the CCU real-time data pipeline. This layer is responsible for the continuous, reliable, and low-latency capture of data changes and events from heterogeneous source systems, including relational databases, transactional applications, REST APIs, webhook publishers, event emitters, and batch data exports originating from existing and future FBR digital interventions.

The ingestion layer shall be built on an enterprise-grade Change Data Capture and data integration platform. This platform shall operate by intercepting database transaction logs at the source level, enabling non-intrusive, real-time extraction of insert, update, and delete operations without imposing query load on source systems. This log-based CDC mechanism shall eliminate the need for polling-based or trigger-based extraction patterns, ensuring minimal impact on source system performance while guaranteeing row-level change fidelity and ordering.

The platform shall support heterogeneous source connectivity, covering major relational database engines, mainframe systems, and file-based sources through a unified, configuration-driven integration framework. All captured change events shall be serialized into a structured, schema-aware format and forwarded to the Message Broker layer for downstream consumption by the stream processing engine. The ingestion platform shall provide a centralized management interface for pipeline monitoring, throughput visibility, lag tracking, and error handling, enabling FBR operations teams to maintain full observability over all active ingestion pipelines.

The vendor shall be responsible for the full implementation of this layer, including source system connectivity, schema mapping, initial load execution, ongoing incremental CDC, and integration hardening across all designated FBR data sources.

Implementation

The vendor shall install and configure the enterprise data integration platform on PRAL-provisioned virtual machines. Implementation shall include the following activities that cover all source systems that are part of this project:

- Source system profiling and connectivity validation for all designated FBR systems
- Configuration of log-based CDC pipelines for all relational and transactional sources
- Schema mapping, data type normalization, and transformation rule definition
- Execution and validation of full initial loads prior to incremental CDC activation
- Configuration of API-based, webhook-based, and event stream ingestion connectors
- Integration with the Message Broker layer for downstream event delivery
- End-to-end pipelines testing, latency benchmarking, and throughput validation
- Handover documentation and knowledge transfer to FBR and PRAL technical teams

This would be a full implementation with concrete results displayed in the form of Dashboards at CCU.

#	Requirement	Specification
1	Log-Based Change Data Capture	The ingestion platform shall implement log-based CDC by reading directly from database transaction logs, redo logs, or equivalent native log mechanisms at the source. Trigger-based or

		polling-based extraction methods shall not be accepted as the primary CDC mechanism.
2	Heterogeneous Source Support	The platform shall natively support connectivity to a minimum of five enterprise relational database engines, including Oracle, Microsoft SQL Server, PostgreSQL, MySQL, and Teradata, without requiring custom or third-party middleware for each connection. The platform shall also support displaying video feeds from live production cameras as well as video playback from stored files.
3	Initial Load and Incremental Sync	The platform shall support full initial load of historical data from source systems followed by seamless, automated transition to real-time incremental CDC, with no manual intervention or pipeline restart required at the point of cutover.
4	Exactly-Once and At-Least-Once Delivery	The platform shall support configurable delivery semantics, providing exactly-once or at-least-once event delivery guarantees to the message broker, with built-in deduplication and offset management to prevent data loss or duplication under failure conditions.
5	Schema Evolution Handling	The platform shall automatically detect and alert on source schema changes, including column additions, data type modifications, and table renames
6	Multi-Source Concurrency	The platform shall support concurrent ingestion from a minimum of twenty active source pipelines simultaneously, with independent throughput,

		latency, and error management per pipeline, and without resource contention between pipelines.
7	Message Broker Native Integration	The platform shall natively publish captured change events to the enterprise message broker layer using the broker's native protocol, without requiring intermediate file drops, JDBC bridges, or custom-coded producers. Event delivery shall preserve source ordering guarantees.
8	Centralized Monitoring and Alerting	The platform shall provide a unified management and monitoring interface exposing per-pipeline metrics including throughput, replication lag, event counts, error rates, and last successful event timestamp. Threshold-based alerting shall be configurable for all key metrics.
9	Enterprise Licensing and Support	The platform shall be procured under a commercial enterprise license that includes 24/7 vendor technical support, access to software updates and patches, and a documented SLA for critical issue resolution. Open-source distributions without a formal support agreement shall not be accepted.
10	Security and Access Control	All data in transit from source systems to the message broker shall be encrypted using TLS 1.2 or higher. The platform shall enforce role-based access control for pipeline configuration and management operations, and shall maintain a tamper-evident audit log of all administrative actions.
11	API-Based Ingestion	The platform shall support ingestion of data from source systems and third-party FBR applications

		through REST and SOAP APIs. The platform shall handle authentication, pagination, rate limiting, and retry logic natively, and shall deliver API-sourced payloads to the message broker in a structured, schema-consistent format.
12	Webhook-Based Ingestion	The platform shall expose configurable webhook endpoints capable of receiving push-based event notifications from FBR source systems in real time. Received webhook payloads shall be parsed, validated, and forwarded to the message broker without buffering delays, ensuring alignment with the overall end-to-end latency requirement.
13	Batch Ingestion	The platform shall support scheduled and trigger-based batch ingestion from file-based sources, relational exports, and legacy FBR systems that do not support real-time integration patterns. Batch jobs shall be configurable in terms of frequency, partitioning, and error handling, and shall deliver data to the message broker or analytical store as structured, ordered event sets.
14	Event and Stream Ingestion	The platform shall natively consume real-time event streams from field devices, production tracking systems, scanners, and cameras deployed under FBR digital interventions. It shall support standard event streaming protocols.

Message Broker & Streams Processing

A message broker is a middleware component that acts as an intermediary between different applications or services, enabling them to communicate asynchronously without being directly connected to one another. At its core, a message broker receives messages from producers (the senders) and routes them to the appropriate consumers (the receivers), decoupling the two sides so they don't need to know about each other's existence. This decoupling allows systems to scale independently, tolerate failures gracefully, and evolve without tight dependencies. Brokers typically organize messages into topics or queues, where producers publish data and consumers subscribe to receive it a pattern commonly known as pub/sub (publish-subscribe). By acting as a buffer, the broker also handles situations where consumers are temporarily unavailable, storing messages durably until they can be processed.

Beyond simple message passing, a high-performance message broker serves as the backbone for event streaming and real-time data pipelines. It can handle millions of messages per second across distributed nodes, making it ideal for use cases like log aggregation, activity tracking, transaction processing, and microservices coordination. Advanced brokers offer features like message replay — allowing consumers to rewind and re-read historical messages — as well as configurable retention policies, partitioning for parallelism, and consumer group management to distribute workload across multiple instances. This makes them not just a communication tool, but a powerful platform for building fault-tolerant, event-driven architectures that can serve as the central nervous system of a modern distributed system.

Implementation

The vendor shall be responsible for the complete implementation of the Message Broker layer, covering the following activities:

1. Provisioning and deployment of broker nodes (on-premise) and installation and configuration of the cluster management layer. This will include network topology setup including listeners, advertised hosts, and inter-broker communication.

2. Security hardening — SSL/TLS encryption, SASL authentication, and ACL-based authorization.

3. Defining replication factors and partition strategies per topic to ensure fault tolerance and parallelism. Tuning broker-level settings such as log retention policies, segment sizes, and flush intervals
4. Configuring producer and consumer performance parameters (batch size, compression, acknowledgment levels). Setting up quotas and throttling to prevent any single client from overwhelming the cluster. Designing topic naming conventions and governance standards
5. Defining partition counts aligned with expected throughput and consumer parallelism. Building producer services that publish events from source systems (databases, applications, APIs). Developing consumer groups and processing logic to read, transform, and route messages to target systems
6. Implementing stream processing pipelines for real-time transformations, aggregations, and enrichments using a compatible stream processing framework
7. Setting up connectors for seamless integration with databases, data warehouses, and third-party tools via a connector framework
8. Deploying monitoring dashboards to track broker health, consumer lag, throughput, and latency.

#	Requirement	Specification
1	High Throughput	Must handle millions of messages per second to support high-volume, real-time data workloads without bottlenecking producers or consumers.
2	Fault Tolerance	The system must continue operating without data loss in the event of broker node failures through replication and automatic leader election

3	Scalability	Must support horizontal scaling of brokers, producers, and consumers dynamically to accommodate growing data volumes without downtime
4	Durability	Messages must be persisted to disk and replicated across multiple nodes to guarantee no data is lost even under failure conditions
5	Low Latency	End-to-end message delivery must operate in near real-time (milliseconds range) to support time-sensitive applications and event-driven architectures
6	Message Ordering	Must guarantee ordered delivery of messages within a partition or queue to preserve event sequencing for downstream consumers
7	Security	Must enforce encryption in transit (TLS), encryption at rest (AES-256), authentication (SASL/OAuth/mTLS), and authorization (RBAC/ACLs)
8	Replay & Retention	Must support configurable message retention policies and allow consumers to rewind and re-consume historical messages from any point in time
9	Observability	Must provide built-in or integrable monitoring for broker health, consumer lag, throughput, latency, and alerting for operational anomalies
10	Data Streams Processing	Must have the capability to do data transformation, filtration and aggregations to store results to various data sinks.

Analytical Store

The Analytical Store shall serve as the high-performance, columnar storage and query engine at the core of the CCU's real-time analytics capability. It shall receive enriched, processed event streams directly from the Stream Processing Engine and persist them in a format optimized for sub-second analytical query execution. The store shall function as the single source of truth for all operational dashboards, KPI panels, drill-down investigations, and alert-driven analytical views consumed by FBR teams in CCU. It shall be capable of sustaining continuous high-frequency writes from the stream processing layer while simultaneously serving concurrent low-latency read queries from the visualization layer, without performance degradation under combined workload conditions.

The Analytical Store shall maintain a rolling short-term historical dataset spanning a minimum of three to six months of operational data across all ingested FBR data domains. This retention window shall support both real-time monitoring and retrospective operational analysis from a single unified store, eliminating the need for separate hot and cold storage tiers within the CCU boundary. The store shall be deployed entirely on-premise on PRAL-provisioned virtual machines, with no external data egress at any point. The vendor shall be responsible for end-to-end data modeling, schema design, partitioning strategy, and query optimization as part of the implementation scope.

Implementation

The vendor shall be responsible for the complete implementation of the Analytical Store layer, covering the following activities:

1. Installation and configuration of the enterprise analytical database engine on PRAL-provisioned virtual machines, including cluster setup, storage allocation, and network binding within the on-premise environment.
2. End-to-end dimensional and analytical data modeling, including the design of fact tables, dimension tables, materialized aggregations, and time-series schemas aligned to each FBR operational data domain.
3. Definition and implementation of partitioning strategies based on time-based and domain-based keys to ensure query isolation, parallel execution, and efficient data pruning across the retention window.
4. Configuration of ingestion interfaces from the Stream Processing Engine, including native connectors, write protocols, schema

registration, and throughput tuning to sustain continuous high-frequency event writes.

5. Implementation of materialized views and pre-aggregated summary tables to support dashboard query patterns with guaranteed sub-second response times under concurrent user load.
6. Definition and enforcement of data retention policies governing the rolling three-to-six-month short-term historical window, including automated data expiry, partition pruning, and storage reclamation procedures.
7. Query performance benchmarking and tuning across all defined dashboard and drill-down query patterns, with documented baseline response times validated against the specified latency thresholds prior to go-live.
8. Role-based access control configuration, including schema-level and table-level permission assignment aligned to FBR operational roles and data sensitivity classifications.
9. Integration testing with the visualization layer to validate end-to-end query execution, dashboard refresh rates, and concurrent user load handling under simulated operational conditions.
10. Delivery of complete technical documentation covering the data model, schema registry, partitioning design, retention configuration, and query optimization guide, with formal knowledge transfer to FBR and PRAL technical teams.

#	Requirement	Specification
1	Columnar Storage Architecture	The analytical store shall implement a columnar storage format natively optimized for aggregation, filtering, and scan-heavy analytical query patterns.

2	Real-Time Write Ingestion	The store shall support continuous, high-throughput ingestion of event records from the stream processing engine with write latency not exceeding one second under normal operational load. Write operations shall not degrade concurrent read query performance beyond a measurable threshold.
3	Sub-Second Query Response	The store shall deliver analytical query responses within one second for standard dashboard queries and within five seconds for complex drill-down queries executed against the full three-to-six-month retention dataset, under a minimum of twenty concurrent user sessions.
4	Short-Term Historical Retention	The store shall maintain a configurable rolling retention window of a minimum of three months and a maximum of six months of operational data across all FBR data domains, with automated partition expiry and storage reclamation upon retention boundary breach.
5	Materialized Views and Pre-Aggregation	The store shall support the definition and automated refresh of materialized views and pre-aggregated summary tables to accelerate recurring dashboard query patterns. Refresh cycles shall be configurable and shall not block or delay incoming write streams.
6	Concurrent Read and Write Isolation	The store shall support fully concurrent read and write operations without locking, blocking, or serialization conflicts. Query execution shall not be queued or delayed due to simultaneous high-frequency write ingestion from the stream processing engine.

7	Partitioning and Data Pruning	The store shall support time-based and domain-based partitioning with automatic partition pruning during query execution, ensuring that query scans are limited to relevant data segments and do not perform full dataset scans for time-bounded analytical queries.
8	Visualization Layer Integration	The store shall expose a standard SQL-compatible query interface and shall provide native connectors or certified JDBC/ODBC drivers for integration with the enterprise visualization layer. All query traffic from the visualization layer shall be served directly from the on-premise store with no intermediate caching tier required.
9	Role-Based Access Control	The store shall enforce role-based access control at the schema, table, and column level, restricting data visibility based on FBR-defined operational roles. All access attempts, including failed authentications and unauthorized query attempts, shall be recorded in a tamper-evident audit log.
10	Enterprise Licensing and Support	The analytical store shall be procured under a commercial enterprise license inclusive of 24/7 vendor technical support, guaranteed software patch and update access, and a documented SLA for critical incident resolution.

Real-Time Dashboard & Visualization

The proposed solution shall establish a centralized, on-premise Real-Time Dashboard and Visualization Layer comprising Operational, Strategic, and Analytical dashboards to support comprehensive monitoring, compliance tracking, and executive decision-making across FBR domains. The visualization layer shall provide interactive, role-based dashboards directly powered by the Analytical and Real-Time Serving Layer, enabling real-time data refresh, KPI monitoring, drill-down investigation, and threshold-based alerting.

The platform shall support data consumption across multiple time horizons, ranging from real-time and real-time operational data to aggregated and historical datasets (including yearly views), depending on defined business use cases.

The solution shall enable a unified Command & Control Unit (CCU) capability, delivering live operational visibility, structured analytical alert management, and enforcement-driven insights. All visualization, reporting, and data access capabilities shall operate strictly within the on-premise environment.

The platform shall enable playback of live video streams from production tracking cameras as well as playback of stored video files pertaining to specific events.

The platform shall support multiple user personas, including executive leadership, operational teams, enforcement units, and analysts, through secure, governed, and scalable access mechanisms. The solution shall also provide robust support for configurable alerts and threshold-based monitoring.

The platform shall support secure mobile access, enabling authorized users to access dashboards, alerts, and KPIs via mobile devices with responsive design and role-based access controls.

The Vendor shall assess the existing platforms currently in use by PRAL and FBR, including Tableau v2026 and Oracle Analytics Server v2023, to determine their capability to meet the required real-time and analytics requirements. Where limitations are identified, the Vendor shall propose suitable alternative or complementary technologies, along with clear technical justification, integration approach, and impact assessment.

Implementation Requirements

1. The Vendor shall implement an on-premise visualization environment capable of consuming data directly from the analytical store or Real-Time

Serving Layer, with real-time refresh capabilities and optimized performance for concurrent users and command center displays.

2. The Vendor shall develop visualization as per requirements across real-time, analytical, aggregated, and detailed data layers based on defined business use cases.
3. Implementation should support high-frequency data refresh and efficient query performance to ensure a seamless user experience across operational dashboards, executive views, and command center displays.
4. The deployed dashboards and visualizations by vendor shall adhere to industry-standard UX/UI best practices, ensuring intuitive navigation and usability.
5. The dashboards should be designed that they are accessible via secure web and mobile interfaces and optimized for both operator workstations and large command center video wall displays.
6. The vendor shall implement rule-based, threshold-driven alerting across all data feeds and operational interventions and also provide full alert lifecycle management including creation, acknowledgment, assignment, escalation, and closure with audit trails.
7. The vendor shall implement multi-level drill-down capabilities from summary dashboards to detailed transactional data.
8. The developed dashboards shall support investigation workflows including filtering, slicing, drilling, and cross-domain
9. The implementation shall enforce role-based access control (RBAC) across dashboards, reports, and data views.
10. The implemented solution shall support scheduled and on-demand report generation.

11. The implemented platform shall enable export of dashboards and reports in standard formats including PDF and Excel, with email subscriptions.

Detailed Requirements Table

	Requirement	Specification
1	On-Premise Deployment	The solution shall be fully deployed on-premise
2	Multi-Layer Visualization	Multi-layer visualization capabilities, including real-time, aggregated, and detailed dashboards, based on defined business and analytical use cases as well as video streaming and playback capabilities
3	Query Performance	Low-latency query performance, with response times in seconds
4	High Availability	Minimum 99.99% uptime.
5	24/7 Availability	Continuous availability across all interfaces.
6	Cross-Platform Access	Support web and mobile access across modern platforms.
7	Mobile Support	Secure, responsive mobile dashboards.
8	UX/UI Standards	Industry-standard UX/UI with intuitive navigation.
9	Rendering Performance	Seamless dashboard rendering with minimal lag.
10	Role-Based Dashboards	Support multiple user roles and dashboard segmentation.
11	Command Center Optimization	Optimized for video walls and operator terminals.
12	Alerting	Rule-based, threshold-driven alerts.
13	Alert Lifecycle	Full lifecycle management with audit tracking.
14	Alert Prioritization	Severity levels and confidence scoring.
15	Notifications	Multi-channel alerts (dashboard, email).
16	Drill-Down	Multi-level drill-down to transaction level.
17	Investigation	Cross-domain analysis
18	Advanced Visuals	Advanced visualization capabilities, including but not limited to heatmaps, trend analysis, Sankey

		diagrams, geospatial maps, combo charts, and other interactive visual formats.
19	RBAC	Role-based access at dashboard and data level.
20	Audit Logs	Tamper-evident logging of all activities.
21	Data Security	Strict on-premise data control.
22	Distribution	Automated report distribution.
23	Scalability	High concurrency support.
24	Unified Dashboards	Support both real-time and aggregated dashboards.
25	Enterprise Support	enterprise-grade support with 24/7 availability, backed by defined SLAs for incident response and resolution. Support shall be provided by the OEM or an authorized partner, including access to patches, upgrades, and technical assistance.
26	Pixel-Perfect Rendering	The platform shall ensure pixel-perfect dashboard rendering with no blur, distortion, pixelation, or misalignment across all supported devices and display resolutions.
27	High Resolution	4K and higher, without pixelation, blur, or visual distortion.
28	Zoom & Scaling	The platform shall support smooth zoom-in and zoom-out functionality while preserving layout integrity, alignment, and readability of all dashboard elements.
29	Multi-Screen Support	The platform shall support seamless single and multi-screen (video wall) dashboard display without distortion or misalignment.
30	Adaptive Layout	The dashboards shall dynamically adapt to different screen sizes, resolutions, and aspect ratios, ensuring consistent usability, layout structure, and visual clarity across devices.
31	High Availability (HA)	High availability architecture to ensure continuous operation with a minimum uptime of 99.99%, including failover, redundancy, and no single point of failure.

Alerting and Notification

The Alerting and Notification Engine shall continuously evaluate processed event streams and analytical store data against predefined thresholds, business rules, and anomaly conditions, generating and routing structured alerts to designated FBR operational roles without manual intervention. All rules, thresholds, and notification workflows shall be configurable by authorized FBR and PRAL personnel without vendor involvement or code-level changes. The vendor shall implement the engine end-to-end, covering: alert rule design and threshold configuration across all integrated digital interventions; integration with the Stream Processing layer for real-time evaluation and with the Analytical Store for retrospective and scheduled checks; configuration of role-based notification routing across all delivery channels.

#	Requirement	Specification
1	Detection Latency	Alert conditions shall be evaluated against live event streams with detection-to-alert latency not exceeding 2 seconds under normal operational load.
2	Rule Logic	Alert rules shall support multi-condition logic using AND, OR, and NOT operators across streams and domains, plus scheduled and trigger-based evaluation against the Analytical Store for retrospective and trend-based conditions.
3	Severity and Escalation	A minimum of three severity tiers (Critical, Warning, Informational) shall be supported, each with independently configurable notification channels, escalation timelines, and automatic escalation across a minimum of three levels upon acknowledgment timeout.

4	Notification Channels	Notifications shall be delivered via on-screen dashboard, email, and SMS, configurable per rule and per severity tier, with suppression windows available for planned maintenance without permanently disabling any rule.
5	Self-Service Management	Authorized FBR and PRAL personnel shall create, modify, clone, suppress, and retire alert rules without vendor involvement, code changes, or system restarts.
6	CCU Action Track	The CCU shall track alert lifecycle status (acknowledged, assigned, closed) and operational outcomes recorded by FBR officers, enabling basic effectiveness reporting of CCU-driven actions.

Security And Access Control

All components across the five-layer CCU architecture shall conform to a unified security framework enforced at every layer boundary.

#	Requirement	Specification
1	Encryption	TLS 1.2 or higher in transit. AES-256 at rest across all layers.
2	Authentication	SASL, OAuth 2.0, or mTLS enforced on all components. Anonymous access shall not be permitted.
3	Access Control	RBAC enforced at platform, schema, table, and dashboard levels per FBR-defined roles. Least-privilege mandatory. No shared or default credentials in production.
4	Audit Logging	Centralized, tamper-evident audit log covering all access, pipeline, and administrative events across all

		layers, retained for the full Analytical Store retention window.
5	Data Masking	Sensitive fields including taxpayer identifiers and financial values shall be masked in dashboard and query outputs based on role entitlements.
6	Network Isolation	All components shall operate exclusively within the FBR or PRAL on-premise perimeter. No outbound connection to external networks or cloud services shall be permitted.

Human Resources and CCU Operations Team

The vendor shall provide fully staffed, 24/7 CCU operations across three rotational shifts for the entire contract duration, ensuring continuous availability of dashboards, alerts, communication tools, and operational monitoring capabilities.

CCU Operations Team

The vendor shall deploy and maintain the following minimum staffing at the CCU site:

Role	Headcount	Responsibilities
CCU Manager / Team Lead	1	Overall accountability for CCU operations, shift coordination, SOP compliance, incident escalation and closure, SLA adherence, and coordination with FBR, PRAL, and intervention owners
Systems / Infrastructure Engineer	1	CCU infrastructure availability, performance, security, patching, access

		controls, and backups of CCU operational data and configurations
DevOps / Platform Engineer	2	Deployment, configuration, automation, upgrades, and reliability of CCU application and integration services including CI/CD and environment management
Integration Engineer	2	Onboarding and maintaining integrations with digital interventions, managing APIs and connectors, monitoring data flows, and performing first-level diagnostics for integration issues
Application / CCU Software Engineer	2	CCU dashboards, alerting workflows, reporting views, and application enhancements per approved change management processes
Real-Time Monitoring Operators (Day Shift)	2 to 4	Continuous monitoring of dashboards and alerts, ticket handling, escalation per SOPs and SLAs, incident logging, and shift handovers
Real-Time Monitoring Operators (Night Shift)	1 to 2	Same as day shift with minimum coverage for continuous operations
Reporting / Operations Support Analyst	Shift-based	Operational reports, summaries, and support to FBR embedded teams

Coverage and Qualifications

- The Vendor shall ensure **24/7 CCU operations** through a shift-based staffing model.
- All key staff shall possess relevant qualifications and experience.
- CVs and role mappings for key personnel shall be submitted with the bid. FBR and PRAL shall be notified of any changes during the contract period.

The staffing numbers provided are minimum and indicative and shall be supported by adequate engineering and platform roles to ensure continuous integration, enhancement, and operational stability.

Service Specifications

1. Training & Support

- **CCU Solution Training (Functional & Operational):**
  The Vendor shall provide end-to-end training on the CCU solution, covering system workflows, operational concepts, alert lifecycle management, dashboard navigation, escalation mechanisms, and day-to-day coordination processes to ensure effective utilization of the CCU as an operational command environment.
- **User Training:**
  The Vendor shall deliver structured user training sessions, including user manuals/run books, SOPs, and system walkthroughs, to enable FBR and PRAL personnel to effectively operate the CCU for operational monitoring, alert handling, dashboard usage, and coordination activities.
- **Technical Training:**
  The Vendor shall provide technical training for designated IT and technical teams covering CCU system administration, configuration management, monitoring, troubleshooting, security controls, backup and restore procedures for CCU operational components, and application updates.
- **Management Training:**
  The Vendor shall provide high-level orientation for FBR and PRAL leadership and supervisory roles on CCU dashboards, alerts, reports,

and performance monitoring, including interpretation of indicators, escalation workflows, and operational decision-support capabilities.

2. Technical Support & Maintenance

- **User Helpdesk:**
  Provision of 24/7 user support via phone, email, or ticketing system for operational issues related to CCU dashboards, alerts, displays, and system access.
- **Technical Assistance:**
  The Vendor shall ensure the availability of qualified technical personnel to provide preventive and corrective maintenance, first-level diagnostics, and urgent technical resolution for CCU software, and integration components.
- **Post-Warranty Maintenance:**
  Provision of post-warranty support services for the duration specified in the contract, including software updates, security patches, performance tuning, and operational optimization of CCU components.
-

3. Data Conversion & Migration

- Where required, the Vendor shall support one-time or limited migration of CCU operational configuration data, including dashboard definitions, alert rules, thresholds, user roles, and historical alert/event records relevant to CCU operations.
- Data validation and quality checks shall be performed to ensure accuracy and continuity of CCU operational views prior to go-live.
- Support for existing data structures and formats shall be limited to ensuring continued access to historical operational dashboards, alerts, and evidentiary records required for CCU monitoring and audit purposes.

Documentation Requirements

1. End user documents:

i. **Types of End-User Documents:**

- User Manuals
- Quick Start Guides
- FAQs and Troubleshooting Guides
- Training Materials (e.g., slides, videos, interactive tutorials)

ii. **Language:**
- English

iii. **Content:**
- Detailed instructions on system usage, including login procedures, dashboard navigation, and report generation
- Step-by-step guides for common tasks and troubleshooting
- Visual aids such as screenshots, diagrams, and flowcharts
- Glossary of terms and definitions

iv. **Formats:**
- PDF documents for downloadable manuals and guides
- HTML for online help and knowledge base articles
- Video formats (MP4) for training tutorials

v. **Quality Control and Revision Management:**
- Regular reviews and updates to ensure accuracy and relevance
- Version control to track document revisions
- User feedback mechanisms to identify areas for improvement

vi. **Medium:**
- Digital formats available on the company's intranet
- Printed copies upon request

vii. **Reproduction and Distribution Methods:**
- Digital distribution via email, intranet, and company website
- Printed copies distributed through internal mail or upon request

2. Technical documents:

i. **Types of Technical Documents:**
   - System Architecture Diagrams
   - Integration Documentation
   - Run books
   - Installation and Configuration Guides
   - Maintenance and Troubleshooting Manuals
   - Technical Specifications and Data Sheets
   - Security and Compliance Documentation

ii. **Language:**
   - English

iii. **Content:**
   - Detailed descriptions of system architecture and components
   - API endpoints, request/response formats, and usage examples
   - Step-by-step installation and configuration procedures
   - Maintenance schedules, diagnostic procedures, and troubleshooting steps
   - Technical specifications for software requirements
   - Security protocols, data encryption methods, and compliance measures

iv. **Formats:**
   - PDF documents for comprehensive guides and manuals
   - HTML for online API documentation
   - Diagrams in vector formats (e.g., SVG) and image formats (e.g., PNG)
   - Spreadsheets (e.g., Excel) for technical specifications and data sheets

v. **Quality Control and Revision Management:**
   - Peer reviews and technical validation to ensure accuracy and completeness
   - Version control to manage document updates and revisions
   - Adherence to technical writing standards

- Regular updates to reflect system changes and enhancements

vi. **Medium:**

- Digital formats available on the company's intranet and developer portal
- Printed copies for critical documents (e.g., installation guides) upon request

vii. **Reproduction and Distribution Methods:**

- Digital distribution via email, intranet, and developer portal

Printed copies distributed through internal mail or upon request

Testing and Quality Assurance Requirements

Inspections

i. The Vendor shall be responsible for the safe and sound delivery of all software products as per the Purchase Order, at FBR's designated locations as per Schedule within the timescales stated in the Purchase Order.

ii. FBR or its authorized representatives shall have the right to inspect and test the Product being supplied and installed by the Vendors on or after delivery as per the Purchase Order.

iii. Should any inspected or tested Products fail to conform to the specifications as required by FBR or PRAL and as per the Purchase Order, FBR or PRAL may reject them and the Vendor shall either replace the rejected Products or make alterations necessary to meet specification requirements of FBR at no cost to FBR or PRAL.

Pre-commissioning Tests

Prior to proceeding to full system acceptance, the Vendor shall conduct **Pre-Commissioning Tests** to validate the readiness of the Central Control Unit (CCU) for operational use. These tests shall confirm the correct installation, configuration, connectivity, and basic functional operation of the CCU as an **operational monitoring and coordination facility**.

All Pre-Commissioning Tests must be successfully completed and formally accepted by FBR and PRAL before commencement of the User Acceptance Testing (UAT) phase.

Scope of Pre-Commissioning Tests:

1. System Installation & Configuration Verification
   - Verify that all CCU software, and supporting items have been installed and configured in accordance with the approved design and specifications.
   - Confirm that CCU components (integration services, dashboards, alerting mechanisms, observability tools, and video wall interfaces) are operational and accessible.
   - Validate that data and indicators received from designated digital interventions and upstream systems are **structured, complete, and compatible** with CCU ingestion and monitoring requirements.
2. Connectivity & Data Flow Validation
   - Confirm end-to-end connectivity (Integration) between designated intervention environments, FBR/PRAL systems, and the CCU.
   - Validate that data and indicator flows from source systems to the CCU are functioning correctly through approved interfaces.
   - Verify that real-time and near-real-time feeds, as well as any configured periodic/batch transmissions, are received and processed correctly for monitoring purposes.
3. Initial Dashboard & API Functionality Check
   - Verify that CCU dashboards render correctly and display expected operational indicators and monitoring views.
   - Validate that alert generation, notification mechanisms, and alert lifecycle workflows (creation, acknowledgement, escalation, closure) are functional.

    - Confirm that APIs and integration endpoints used for CCU ingestion and data exchange are operational and responding as expected.
4. Security & Access Control Testing
    - Validate implementation of role-based access control (RBAC) for CCU users, including operators, administrators, and supervisory roles.
    - Verify secure authentication mechanisms, encryption of data in transit and at rest (where applicable), and audit logging of user access and system activities.
    - Confirm that access to CCU systems and displays complies with FBR security and governance requirements.
    -

Criteria for Completion: Successful completion of Pre-Commissioning Tests shall be confirmed through formal certification by FBR, verifying that:

- CCU software components are correctly installed and configured;
- Connectivity and data/indicator transmission to the CCU are reliable and stable;
- Dashboards, alerts, and monitoring functions operate as intended; and
- Security and access controls are correctly enforced.

Upon certification, the CCU shall be deemed ready to proceed to the User Acceptance Testing (UAT) phase.

Operational Acceptance Tests

After successful completion of Pre-Commissioning Tests, the system shall undergo User Acceptance Testing (UAT), where senior FBR officers, analysts, and relevant stakeholders will validate the system's performance in real-world operational conditions.

Scope of UAT

1. Functional Testing of Key Features

   - Verify real-time production monitoring across integrated industries
   - Confirm that anomaly detection alerts are correctly triggered based on defined thresholds.
   - Test compliance scoring and enforcement dashboards.
2. Performance & Load Testing
   - Validate system performance under normal and peak data loads.
   - Ensure the backend and frontend can handle simultaneous user access.
3. Compliance & Enforcement Mechanism Testing
   - Test reporting of flagged factories for non-compliance.
   - Verify real-time alerts and historical audit logs for inspection teams.
4. End-User Feedback & Issue Resolution
   - Conduct training sessions for FBR and PRAL teams to interact with the system.
   - Identify and resolve user-reported issues before final acceptance.
5. Penetration and vulnerability testing of the system
   - Ensure data is encrypted during transmission and protected against tempering and manipulation

Criteria for Completion: FBR and PRAL approval after all tests are successfully passed, ensuring full operational readiness.

Project Plan

The Project Plan submitted by the Supplier shall comprehensively (but not limited to) address the following subjects:

1. **Project Organization and Management Plan**
   - Define roles, responsibilities, and the governance structure for effective project execution.
   - Include escalation pathways and points of contact for smooth communication and issue resolution.
   - Establish a project management office (PMO) to oversee project execution.
   - Detail the project management methodologies and tools to be used.

2. **Training Plan**
    - Provide comprehensive training modules for FBR and PRAL's staff covering system development/enhancement, integrations, operation, data analysis, and troubleshooting.
    - Include follow-up refresher sessions, if applicable.
    - Offer hands-on training sessions and user manuals.
    - Develop a feedback mechanism to continuously improve training content.

3. **Pre-commissioning and Operational Acceptance Testing Plan**
    - Provide testing protocols to validate system functionality, integration, and compliance with performance benchmarks prior to commissioning.
    - Include criteria for Operational Acceptance.
    - Establish a testing schedule and resource allocation.
    - Document test results and corrective actions taken.

4. **Disaster Recovery Plan**
    - Define roles and responsibilities of the Disaster Recovery Team (i.e., Primary contact, Response team, post-mortem analysis, Operations restoration).
    - Provide disaster recovery procedures (i.e., Disaster Recovery calling tree, Activation criteria for activating the plan).
    - Provide step-by-step procedures for restoring operations.
    - Detail regular backups verification and steps for restoring data from backup.
    - Include a business continuity plan to ensure minimal disruption.
    - Details of requirements of Disaster Recovery Plan are also given in Business Function and Performance Requirement of this RFP.

5. **Warranty Service Plan**
    - Provide details of warranty coverage, including response times, replacement policies, and periodic maintenance schedules.
    - Ensure alignment with the warranty requirements
    - Include provisions for software updates and patches.
    - Outline customer support channels and escalation procedures.

6. **Task, Time, and Resource Schedules**
   - Provide a Gantt chart or similar representation of key tasks, milestones, and associated timelines.
   - Provide resource allocation details (e.g., personnel, equipment).
   - Identify critical path activities and potential bottlenecks.
   - Include contingency plans for resource reallocation.

7. **Post-Warranty Service Plan (if applicable)**
   - Outline post-warranty service provisions, including options for extending support agreements.
   - Provide details on service-level agreements (SLAs) and support tiers.
   - Offer service contracts and regular health checks.
   - Include options for system upgrades and enhancements.

8. **Technical Support Plan**
   - Provide details of 24/7 support, escalation matrix, and service-level agreements (SLAs).
   - Ensure availability of spare parts and maintenance procedures.
   - Develop a knowledge base and self-service portal for common issues.
   - Include remote support capabilities and on-site visit schedules.

9. **CCU System Development**
   - Provide a detailed customization plan for the CCU system to meet the specific needs of FBR and PRAL.
   - Include integration with existing systems, data security protocols, and scalability provisions.
   - Outline the development process, including requirements gathering, design, implementation, and testing phases.

10. **Compliance and Certification Plan**
   - Ensure adherence to relevant regulatory and security standards (e.g., PTA-approved equipment, evaluation certifications).
   - Provide documentation and timelines for obtaining all necessary certifications.

- Conduct regular audits and compliance checks.
- Include a plan for ongoing compliance monitoring and reporting.

11. Reporting and Monitoring Plan

- Provide a mechanism for regular progress updates to FBR and PRAL.
- Include provisions for dashboards or analytics reports to monitor system performance.
- Establish key performance indicators (KPIs) and metrics for success.
- Develop a reporting schedule and stakeholder communication plan.

12. Risk Management Plan

- Identify potential risks and mitigation strategies.
- Develop a risk register to monitor and manage risks.
- Assign risk ownership and establish a risk review process.
- Include contingency plans for high-impact risks.

13. Change Management Plan

- Outline the process for managing changes to the project scope, schedule, and resources.
- Develop a change request and approval procedure.
- Communicate changes to all stakeholders and update project documentation.
- Include training and support for users to adapt to changes.

14. Quality Assurance Plan

- Define quality standards and acceptance criteria for project deliverables.
- Implement regular quality checks and audits.
- Develop a process for continuous improvement and feedback.
- Document quality assurance activities and results.

Implementation Timelines and Milestones

Vendor would be required to complete the phases within the specified timeframes from the contract signing date (or any other reasonable plan agreed upon between PRAL and Vendor):

Phase 1: Architecture and Software Setup (4 weeks)

- Design Phase (4 Weeks): Design the full architecture along with Data Model.
- Software Setup (4 Weeks): Software Setup including configurations, integration testing and smoke tests.

The above two items should run in parallel.

Phase 2: Pre-Commissioning & Testing (12 weeks)

- Build phase (8 weeks): System calibration, End to End Development including data ingestion, processing, and Dashboard development. Verification, and preliminary functionality testing.
- User Acceptance Testing (UAT) (4 weeks): All stakeholders participate and sign off.

Phase 3: Full Operationalization & Go-Live (4 weeks)

- Go-live (4 weeks): Full-scale CCU operations, enforcement dashboards active, and real-time data analytics enabled.

Disaster Recovery And Backup

The Vendor shall submit and maintain a comprehensive Disaster Recovery and Business Continuity Plan (DR/BCP) for the CCU ecosystem. This plan must encompass all architectural layers including Ingestion, Message Broker, Stream Processing, Analytical Store, and Visualization as well as supporting functions such as alerting, observability, and operational logs.

Requirements include:

- Automated Backups & Restoration: Implementation of regular, automated backup cycles with documented restoration procedures and mandatory periodic DR drills.

- Recovery Point Objective (RPO): The Vendor must guarantee an RPO of 15 minutes, ensuring minimal data loss across the stream processing and analytical store layers.
- Recovery Time Objective (RTO): The Vendor must guarantee an RTO of 4 Hours for the restoration of core visualization and real-time alerting capabilities.
- Component-Specific Recovery: The plan must specifically detail the failover mechanisms for each component in the Ecosystem

Availability, Reliability, and Fault Tolerance

The vendor shall ensure the CCU operates as a continuously available, fault-tolerant system meeting the following requirements:

#	Requirement	Specification
1	System Uptime	The solution shall maintain continuous 24/7 availability with 99.9 % uptime in accordance with agreed SLAs.
2	Fault Tolerance	The system shall continue operating without data loss in the event of component failures through replication, redundancy, and automatic failover mechanisms.
3	No Single Point of Failure	The proposed architecture shall have no single point of failure across any layer including the message broker, stream processing engine, analytical store, and visualization layer.
4	High Availability	All critical components shall be deployed in a highly available configuration with active-active or active-passive redundancy as appropriate.

5	Data Durability	All data in transit and at rest shall be replicated across multiple nodes ensuring no data loss under failure conditions.
6	Recovery Objectives	The vendor shall define and comply with documented RTOs and RPOs aligned to FBR and PRAL's operational continuity requirements.
7	Performance Under Load	The system shall sustain full operational performance under normal and peak load conditions without degradation in latency, throughput, or dashboard refresh rates.
8	Monitoring and Observability	A Unified Observability Dashboard shall serve as a single-pane-of-glass interface, simultaneously surfacing infrastructure metrics, pipeline SLAs, and data-quality indicators. The system will perform Infrastructure Metrics Collection for CPU, memory, disk I/O and network data and other related platform metrics. To ensure operational uptime, the Alerting & Escalation framework will support multi-channel routing (SMTP, webhook, API) with built-in suppression and de-duplication rules.

BOQs Guideline for Vendors

The Vendor shall submit a detailed Bill of Quantities (BOQ) outlining the costed elements required for the successful setup, development and operation of the Central Control Unit (CCU), to be established at FBR Headquarters, Islamabad.

- The BOQ must clearly separate and provide a full break-down of one-time setup costs and recurring costs and be submitted in the structured format.
- All unit prices must be quoted inclusive of all components.

- Vendors must justify any bundled items or package pricing in a short technical note or appendix.

Vendors must provide unit-wise and cost-wise breakdowns for at least the following (non-exhaustive) items:

Sr. No.	Description	Quantity / Capacity
1.	Software's License	All Operating Systems & Software License along with relevant details like Perpetual, Yearly, User Based, Core Based, Capacity Based. Detail to be provided for each software component separately
2.	Implementation Services	Breakdown of Implementation Services at Man Day Rate Level

		and Resource Category Level
3.	CCU Operation Staffing	Monthly Staffing cost at Job Seniority Level
4.	Services and Support	Annual maintenance charges SLA-Based Technical Support

Evaluation Criteria

The evaluation shall follow the Single Stage Two Envelope procedure using Quality and Cost Based Selection (QCBS). Only bids securing a minimum of 70% of the total technical score shall be eligible for financial evaluation. The weightage for technical and financial evaluation components is as follows:

- Technical Evaluation: 70%
- Financial Evaluation: 30%

Technical Evaluation (Total: 100 Marks, 70% Required to Pass)

A. Technical Solution (60 Marks)

Criteria	Description	Marking	Documents Required

Solution Design	End-to-end CCU solution aligned to scope showing data integration, stream processing, analytical store, and dashboard and alert architecture implemented securely and reliably	0-30 marks based on completeness of design, clarity of end-to-end data flow, and robustness of proposed methodology	Annotated architecture diagram, sizing summary, high-level architecture, and proposed methodology
Operations and User Experience	Vendor must demonstrate how CCU operators will monitor interventions and respond to events: dashboards, alert workflow, and operating model including roles and 24/7 shift coverage	0-10 marks based on operator workflow and role-based usage	Staffing plan with roles, headcount, and shift coverage; sample dashboard or alert screens; short list of key KPIs and alerts to be monitored
Security, Backup, and Disaster Recovery	Description of security controls for data in transit and at rest, access control approach, audit logging, and high-level backup and DR approach	0-10 marks based on security protocols (RBAC, MFA, encryption), alignment with ISO 27001 or NIST, and	Cybersecurity note referencing encryption protocols and access control setup; detailed CCU DR plan

		completeness of DR plan	
Vendor Presentation and Solution Walkthrough	Vendor shall present the proposed solution and walk through CCU implementation and operations including integration approach, dashboard and alert workflow, and security and DR posture	0-10 marks based on clarity and confidence that vendor understands scope and risks	Presentation to be delivered in person before the evaluation committee

B. Historical Experience (20 Marks)

Criteria	Description	Max Marks	Marking	Documents Required
Experience in Deploying Similar Solutions	Demonstrated experience in delivering CCUs, Realtime Analytics, Command Centers, NOC/IOC, or similar centralized monitoring and coordination solutions over the past five years. Minimum three	10	2 marks per project	Valid contract or agreement, project completion certificate, or implementation report clearly referencing scope of real-time monitoring and system deployment

	referenced projects of similar nature with contract value of USD 500,000 or above (or PKR equivalent), each live for a minimum of twelve months			
Experience in Integration of Digital Systems	Demonstrated experience in integrating with diverse field systems and standardizing data from multiple sources into centralized databases. Each referenced project must have been live for at least six months	5	1 mark per project	System architecture diagrams, API integration documentation, project reports showing end-to-end data flow, or client attestations
Experience with Centralized Dashboards and Alert Engines	Prior deployments where centralized dashboards and alert engines were used to visualize operational data, detect anomalies, and support real-time monitoring or enforcement	5	1 mark per project	BOQ documents, deployment photos, integration documentation, or field reports

	actions. Each referenced project must have been live for at least six months			

C. Company Profile (20 Marks)

Criteria	Description	Max Marks	Marking	Documents Required
Local Presence	Vendor must demonstrate strong and sustained local presence in Pakistan with on-ground offices and technical staff across infrastructure, system integration, software development, analytics, and operations sufficient to support implementation and 24/7 CCU operations	10	0-10 marks based on adequacy, relevance, and maturity of local presence	HR certificate or affidavit from authorized company representative confirming current technical staff strength with department-wise distribution; lease agreement, utility bills, or incorporation certificate evidencing operating presence in Pakistan
Annual Financial Turnover	Average annual turnover over the last five years in PKR	10	Above PKR 3.0 Billion: 10 marks; At	Audited financial statements (Profit and Loss, Balance

			or above PKR 2.0 Billion: 7 marks; At or above PKR 1.5 Billion: 5 marks; At or above PKR 1.0 Billion: 2marks	Sheet, Statement of Cash Flows) for last three fiscal years certified by a chartered accountant

Mandatory Clauses for Solution Design

#	Requirement	Layer / Domain	Mandatory Specification
1	Full On-Premise Deployment No component, pipeline, or data may reside on or transit through any cloud or external network at any point.	All 5 layers	100% on-premise at FBR-designated CCU site. Zero internet dependency for operations. All OS and software licenses included in vendor proposal.

2	End-to-End Latency ≤ 5 Seconds From raw event origination at ingestion through stream processing to live dashboard refresh guaranteed under normal load.	Ingestion → Visualization	Sub-5s end-to-end. Analytical store query response ≤1s (standard) / ≤5s (complex drill-down). Alert detection-to-fire ≤5s.
3	Full-Stack Integration with All FBR Digital Interventions Vendor must integrate all systems (POS, DI, CTS, DES, etc.) from day one, plus support future onboarding without architectural rework.	Data Ingestion Layer	Log-based CDC mandatory (no polling) and Event ingestion and processing. Native support for Oracle, SQL Server, PostgreSQL, MySQL, Teradata.
4	24/7 CCU Staffing & Operations Vendor is directly responsible for	HR & Operations	Minimum roles: 1 CCU Manager, 1 Infra Engineer, 2 DevOps, 2 Integration Engineers, 2 App Engineers, 2–4 Day Operators, 1–2 Night Operators. 3

	deploying, managing, and maintaining a fully staffed operations team at the CCU site for the entire 3-year contract term.		rotational shifts, CVs submitted with bid.
5	Professional Grade deployment of Realtime first Data Ecosystem.	Vendor Experience	Vendor must demonstrate local experience in deployment of Real Time First Data Ecosystem. At least three Realtime first Data projects completed successfully to avoid disqualification. Vendor also has to submit successful completion certificates for implemented projects.

Financial Proposal Format

SR #	Description	Unit	Quantity	Unit Price in PKR (without applicable GST/PST)	GST/PST amount applicable per unit in PKR	Unit Price in PKR (inclusive of all applicable taxes)	Total Cost in PKR (inclusive of all applicable taxes)
01	**Total Project Cost** As per given scope	No.	01				
	Total Cost (inclusive of all applicable taxes)						
	Total Amount in Words						

Note: Bidders are required to provide a detailed cost breakdown of all quoted items, including services, software, and hardware, covering the total project cost.

(Beneficial Owners Information)

Declaration of Ultimate Beneficial Owners Information for Public Procurement Contracts.

1. Name
2. Father's Name/Spouse's Name
3. CNIC/NICOP/Passport No.
4. Nationality
5. Residential address
6. Email address
7. Date on which shareholding, control or interest acquired in the business.
8. In case of indirect shareholding, control or interest being exercised through intermediary companies, entries or other legal persons or legal arrangements in the chain of ownership or control, following additional particulars to be provided:

1	2	3	4	5	6	7	8	9	10
Name	Legal form (company/Limited Liability Partnership/Association of Persons/Single Member Company/partnership Firm/Trust/Any other individual body corporate (to be specified)	Date of incorporation/registration	Name of registering authority	Business Address	Country	Email address	Percentage of shareholding, control or interest of BO in the legal person or legal arrangement	Percentage of shareholding control or interest of legal person or legal arrangement in the Company	Identify of natural person who ultimately owns or controls the legal person or arrangement

9. Information about the Board of Directors (details shall be provided regarding number of shares in the capital of the company as set opposite respective names).

1	2	3	4	5	6	7	8

Name and surname (in Block Letters)	CNIC No. (in case of foreigner, Passport No.)	Father's/Husband's Name in full	Current Nationality	Any other Nationalit y (ies)	Occupation	Residential address in full or the registered/princip al office address for a subscriber other than natural person	Number of shares taken by cash subscriber (in figures and words
			Total numbers of shares taken (in figures and words)				

10. Any other information incidental to or relevant to Beneficial Owner(S).

Name and signature

(Person authorized to issue notice on behalf of the company)

Payment Terms

1. Responsibility to include all and correct taxes lies on the bidders.
2. Price should be in Pak Rupees only.
3. The quantity of items or services may be increased or decreased at PRAL's sole discretion based on operational requirements at the time of contract award.
4. Bidders must submit bid for all items and services listed in the scope of work / BOQ. Partial bidding is not permitted. The contract will be awarded on a turnkey basis to the bidder with the highest Combined Evaluation Score as per the following criteria:
    a. Technical Component (TC) = Total technical evaluation score
    b. Financial Component (FC) = (Lowest Bid / Respective Bid) * 100
    c. Combined Evaluation Score = (TC * 70%) + (FC * 30%)
5. CAPEX (estimated 50% of total contract value) covers all implementation, deployment, integration, testing, documentation, training, production rollout, and hypercare activities.
6. OPEX (estimated 50% of total contract value) covers managed operations and support services for the deployed platform for 36 months after production go-live.
7. Quarterly OPEX payments shall be invoiced at the end of each quarter and are subject to the vendor meeting the agreed service levels (SLAs/KPIs).

Payment will be done as per the following milestones:

CAPEX (Estimated 50% of the total contract value):

S.No.	Milestone	Deliverables	Payment %	Acceptance Criteria
1	Project Kick-off	Contract signing, project initiation, mobilization of resources, and commencement of project activities.	10%	Payable upon contract signing and project commencement.
2	Solution Delivery & UAT Completion	Completion of all agreed project deliverables, including platform setup, real-time data ingestion, stream processing, analytics platform, dashboards, documentation, knowledge transfer, production deployment, and successful completion of User Acceptance Testing (UAT).	30%	Written acceptance of all deliverables and successful completion of UAT.
3	Hypercare Completion	Provision of post-go-live hypercare support, issue resolution, performance tuning, and operational stabilization for a period of 6 months following production go-live.	10%	Successful completion of the six-month hypercare period and written final project acceptance.

OPEX (Estimated 50% of the total contract value):

S.No.	Milestone	Deliverables	Payment %	Acceptance Criteria
1	Quarterly Managed Services	Platform operations, monitoring, administration, maintenance, incident management, upgrades, patches, performance optimization, and operational support over a period of 3 years following production go-live.	4.167% each quarter over 3 years following production go-live.	Subject to the vendor meeting the agreed service levels (SLAs/KPIs)

Past Experience / Contracts

Contracts over *[insert amount]* during the last three years:				
Procuring Agency	Value	Year	Goods/Services Supplied	Country of Destination

Current Contract Commitments / Works in Progress

Bidders and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

Current Contract Commitments

No.	Name of Contract	**Employer's Contact Address, Tel, Fax**	**Value of Outstanding Work [Current Eq. PKR]**	**Estimated Completion Date**	**Average Monthly Invoicing Over Last Six Months [Eq. PKR/month)]**
1					
2					
3					
4					
5					

Financial Situation and Performance

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: *[insert full name]*
IFP No. and title: *[insert IFP number and title]*
Page *[insert page number]* of *[insert total number]* pages

1. Financial data

Type of Financial information in (currency)	**Historic information for previous _*[insert number]* years, *[insert in words]* (amount in currency, currency, exchange rate*, PKR equivalent)**				
	Year 1	Year 2	Year 3		
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

* Refer ITA 14 for the exchange rate

3. Financial documents

The Applicant and in case of JV, members of JV shall provide copies of financial statements for *[number]* years pursuant Section III, Qualifications Criteria and Requirements. The financial statements shall:

(a) reflect the financial situation of the Applicant or in case of JV member, and not an affiliated entity (such as parent company or group member).

(b) be independently audited or certified in accordance with local legislation.

(c) be complete, including all notes to the financial statements.

(d) correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements[1] for the *[number]* years required above; and complying with the requirements.

[1] If the most recent set of financial statements is for a period earlier than 12 months from the date of Application, the reason for this should be justified.

Average Annual Turnover (Annual Sales Value)

[The following table shall be filled in for the Applicant and for each member of a Joint Venture]

Applicant's Name: *[insert full name]*
Date: *[insert day, month, year]*
Joint Venture Member Name: *[insert full name]*
IFP No. and title: *[insert IFP number and title]*
Page *[insert page number]* of *[insert total number]* pages

Annual Turnover Data			
Year	**Amount Currency**	**Exchange rate* (If applicable)**	**PKR equivalent**
[indicate calendar year]	*[insert amount and indicate currency]*		
		Average Annual Turnover **	

* Refer ITA for date and source of exchange rate.

** Total PKR equivalent for all years divided by the total number of years. See Section III, Qualification Criteria and Requirements, ITA.