

"ویکسینیشن کرائیں اور کرونا ایس او بیز اپنائیں۔"



INVITATION TO BID THROUGH EPADS

Pakistan Railways is a Federal Government Department which endeavors to provide a competitive, safe, reliable, market oriented, efficient and environment friendly mode of transport and plays a pivotal role in socio-economic development of the country. In order to meet the organization's operational and maintenance requirements, Project Director/PMU invites tenders/sealed bids from the authorize distributors/suppliers/consultancy firm/contractors registered with Income Tax & Sales Tax Departments and who are on Active Taxpayers List of the Federal Board of Revenue having registered office for the supply against following tenders in accordance with Single Stage-Two Envelops Procedure of Public Procurement Rules-2004.

S. No	Tender/Bid Number	Brief description	Tender Opening date and Time	Terms of Delivery	Bid Security Required
01	178/C&B-HS/PMU/2022-23	ENTERPRISE CLOUD MANAGED SERVICES ON USANCE BASIS	31/05/2024 at 1200 Hrs	-	As per Tender documents

- Only bids through E-Pak Acquisition and Disposal system (EPADS) will be entertained. (www.eprocure.gov.pk) No bid other than EPADS will be accepted. Bid security will be, submitted before closing of tender physically in tender box in the office of Project Director/PMU, along with Pay order/Cash deposit receipt (non-refundable) of Rs. 5,000/- as tender fee. Bidder will also upload the complete scanned copy of their bid in EPADS. Note: **EPADS Tender No. F- 240583716**
- Bidding documents, containing detailed terms and conditions, can be downloaded from [https:// e-procure .gov. pk](https://e-procure.gov.pk) against the cash of Rs. 5000/-
- The bids prepared in accordance with the instructions in the bidding documents, must be submitted on EPADS as per the schedule mentioned in the table above.

(Project Director/PMU)
Pakistan Railways, Headquarters Office, Lahore
Phone No.042-99201983, 99204460



**PAKISTAN RAILWAYS
REQUEST FOR PROPOSAL
FOR
PROCUREMENT OF
ENTERPRISE CLOUD MANAGED SERVICES
ON USANCE BASIS**

**PROJECT DIRECTOR
PROJECT MANAGEMENT UNIT IN MINISTRY OF RAILWAYS
2ND FLOOR, WALTON BLOCK, PAKISTAN RAILWAYS HEADQUARTERS,
LAHORE**

Phone No.: (042)-99204460

Website: www.pakrail.gov.pk

Email: aopmu@pakrail.gov.pk

Important Note:

Bidders must ensure that they submit all the required documents indicated in the bidding documents without fail and within the time limit as specified in the bidding document. Bids received without, undertakings, valid documentary evidence, supporting documents and the manner for the various requirements mentioned in the bidding documents or test certificates are liable to be rejected right at the initial stage itself. The data sheets and valid documentary evidence for the critical components as detailed hereinafter should be submitted by the Bidder for scrutiny. Every page of the bid document must be properly signed and stamp submitted by the bidder.

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1. INVITATION TO BID:

1.1 MODE OF ADVERTISEMENT(s):

Tender is placed on E-PADs and advertised on PPRA's website, & Pakistan Railways website as well as advertised in print media (national newspapers). The bidding document carrying all details can be downloaded from Pakistan Railways Website www.pakrail.gov.pk and from PPRA's website www.ppra.gov.pk. Bids shall be accepted only on E-PADs. All prospective bidders are required to deposit an amount of Rs. 5,000/- (Only Five Thousand Rupees) in favor of FA&CAO-PR with PMU Office, P.R. HQs Office, Lahore and collect the payment slip. The deposit slip must be attached with technical bid otherwise proposal will not be accepted.

1.2 FRAMEWORK CONTRACT:

The office of Pakistan Railways is implementing SAP S4HANA ERP, being an SAP HANA database solution along-with existing non-SAP solutions, for digitizing its business processes. In this regard, e-Bids on E-PADs Cloud are invited from Income Tax and Sales Tax registered firms on the basis of the Single-Stage-Two-Envelope procedure for the provision of Enterprise Cloud Hosting Services (Infrastructure-as-a-Service) on usance basis. e-Bids may be submitted on E-PADs Cloud on date and time as announced in the advertisement.

1.3 DURATION PERIOD OF THE CONTRACT:

Initially the bids will be called for a period of Two (2) Years (from contract date), which is further extendable with the mutual consent and subject to the performance of the service provider/related to the availability of budgetary provisions.

1.4 TYPE OF OPEN COMPETITIVE BIDDING:

- i. The bid shall be a single package consisting of one stage two envelopes, containing separately the financial and the technical proposals.
- ii. The envelopes shall be marked as "Technical Proposal" and "Financial Proposal".
- iii. In the first instance, the "Technical Proposal" shall be opened, and the envelope marked as "Financial Proposal" shall be retained unopened in the custody of the Procurement Officer.
- iv. The procuring agency shall evaluate the technical proposal in the manner prescribed in advance, without reference to the price and shall reject any proposal which does not conform to the specified requirements.
- v. During the technical evaluation, no amendments in the technical proposal shall be permitted.
- vi. However, additional information may be obtained and accepted if procuring Agency desires.
- vii. After the evaluation and approval of the technical proposals, the procuring agency shall open the financial proposals of the technically accepted responsive bids,

publicly at a time, date and venue announced and communicated to the bidders in advance, within the bid validity period.

- viii. The financial bids found technically nonresponsive shall be returned un-opened to the respective bidders. The lowest evaluated bidder shall be awarded the contract.

1.5 CONTACT MANAGEMENT:

The Primary Contact & Secondary Contact for all correspondence in relation to this bid is as follows:

<u>Primary Contact</u>	<u>Secondary Contact</u>
Mr. Muhammad Farooq Iqbal Malik PD/PMU Email: Farooq_malik@yahoo.com Phone: 042-99201983 PD/PMU Office of P.R HQS, Lahore.	Mr. Faisal Naeem AO/PMU Email: aopmu@pakrail.gov.pk Phone: 042-99204460 PMU Office of P.R HQS, Lahore.

Bidders should note that during the period from the receipt of the bid and until further notice from the primary contact, all queries should be communicated in writing via the primary contact. In case of an urgent situation where the primary contact cannot be contacted, the bidder may alternatively direct his queries through the secondary contact.

Bidders are also required to state, in their proposals, the name, title, contact details (landline, mobile, FAX number and e-mail address) of the bidder's authorized representative through whom all communications shall be directed until the process has been completed or terminated.

1.6 GENERAL CONDITIONS:

- i. The Pakistan Railways/ procuring agency will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.
- ii. The bidder shall submit bids which comply with the bidding document. Alternative bids shall not be considered. The attention of bidders is drawn to the provisions of this tender document Clause regarding "Determination of Responsiveness of Bid" and "Rejection / Acceptance of the Tender" for making their bids substantially responsive to the requirements of the bidding document.
- iii. The Bidder must be qualifying all the Items in the Enterprise Cloud Managed Services. If bidder does not fulfill any Items, terms & conditions and specifications, it will be deemed as disqualified/Non-Responsive for Enterprise Cloud Managed Services.
- iv. It will be the responsibility of the Bidder that all factors have been investigated

and considered while submitting the Bid and no claim whatsoever including those of financial adjustments to the contract awarded under this Bid Process will be entertained by the Pakistan Railways. Neither any time schedule, nor financial adjustments arising thereof shall be permitted on account of failure by the Bidder.

- v. It must be clearly understood that the Terms and Conditions and Specifications are intended to be strictly enforced. No escalation of cost by the Bidder except arising from increase in quantity/scope on the demand and approval of the Pakistan Railways will be permitted throughout the period of completion of the contract.
- vi. The Bidder should be fully and completely responsible for all the service deliveries and deliverables to the Pakistan Railways.
- vii. The bidder must mandatorily accomplish the Checklist for Bidder before submission of their Technical & Financial Bids proposals to the office of PR HQS Lahore.
- viii. The Contractor must be public cloud solutions provider, i.e., offering public cloud services to other businesses / companies and not just for its own or its parent company's operation.
- ix. Cloud solution (including disaster recovery (DR) site) must be located/ Co-located/ Managed/ operated in datacenters within territorial boundaries of Pakistan.
- x. Cloud platform must offer IaaS/PaaS with multiple OS support.
- xi. Contractor should have a cloud operation management tool for management purpose and to oversee/ supervise cloud infrastructure.
- xii. The bidder/Service Provider must quote for Enterprise Cloud Managed Services for all items.
- xiii. 100% compliance of services is required; no partial services will be accepted.
- xiv. Pakistan Railways may increase/decrease cloud and compute resources (RAM/Storage/Cores etc.) at any time according to requirements.
- xv. Provision of all the required licenses will be the responsibility of the bidder.

2. TENDER ELIGIBILITY/QUALIFICATION CRITERIA:

Eligible Bidder is a Bidder who:

- 2.1** Have a registered company/ firm in Pakistan.
- 2.2** Having at least relevant business (***Enterprise Cloud Managed Services***) experience of last three (3) years, for the Provision of Enterprise Cloud Managed Services.
- 2.3** Must be registered with Tax Authorities and have name in active taxpayer list at any time, as per prevailing latest tax rules (Only those companies which are validly registered with sales tax, income tax departments and having sound financial strengths can participate).
- 2.4** Has valid/ active Registration of General Sales Tax (GST) and National Tax Number (NTN)
- 2.5** Has submitted bid for complete Items and relevant bid security against ***Enterprise***

Cloud Managed Services.

- 2.6 Bidder has submitted complete bid. In case of non-Compliance, the same shall cause rejection of the bid.
- 2.7 Have the required relevant qualified personnel and enough strength to fulfill the requirement of assignment. (Attach Staff CV)
- 2.8 Has not been blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body or Private Sector Organization anywhere in Pakistan. (Submission of undertaking on legal e-stamp paper is mandatory).
- 2.9 Conforms to the clause of “**Responsiveness of Bid**” given herein this tender document.
- 2.10 Verifiable documentary proof for all above requirements is a mandatory requirement, noncompliance will lead to disqualification and considered to be non-Responsive.
- 2.11 Joint Venture/ Consortium of firms is allowed to participate in the bidding process.
- 2.12 Co-location of datacenter is allowed subject to validity of the co-location agreement. The Co-location site must be tier3 compliant/ certified data center.
- 2.13 Bidder must prepare all Technical and Financial bids as per enclosed Annexure (A to E).

3. TENDER COST:

The requisite Tender document against the **Enterprise Cloud Managed Services** can be downloaded from Pakistan Railways E-PADs or Website www.pakrail.gov.pk and from PPRA’s website www.ppra.gov.pk. The tender document cost may be deposited during office hours from **08.30 am to 04.30 pm** on the submission of a written request on the letter head of the Company/Firm Supplier business name against the payment of **Rs. 5,000/- (Pak Rs. Five Thousand Only) (Non-Refundable) in the favor of FA&CAO-PR** before the submission of bid.

3.1 EXAMINATION OF THE TENDER DOCUMENT:

The Bidder is expected to examine the Tender Document including all instructions and terms & conditions carefully before submission of his Technical & Financial bids against the requirement of this tender document.

4. CLARIFICATION OF THE TENDER DOCUMENT:

The Bidder may require in writing further information or clarification of the Tender Document, within 05 (five) working calendar days of issuance of tender in writing. The clarification and the replies will be shared with all prospective bidders.

Bidders should note that during the period from the receipt of the bid and until further notice from the Primary Contact given herein this document, all queries

should be communicated via the Primary Contact and in writing only. In the case of an urgent situation where the Primary Contact cannot be contacted, the bidder may alternatively direct his enquiries through the Secondary Contact.

5. AMENDMENT OF THE TENDER DOCUMENT:

The Pakistan Railways may, at any time prior to the deadline for submission of the Tender, at his own initiative or in response to a clarification requested by the Bidder(s), amend the Tender Document, on any account, for any reason. All amendment(s) shall be part of the Tender Document and binding on the Bidder(s).

6. REJECTION/DISQUALIFICATION:

The following are the requisites clauses which will be considered as rejection or disqualified.

- i. Partial/Incomplete Bids will be rejected/disqualified.
- ii. The bidder who doesn't apply with complete Enterprise Cloud Managed Services will be disqualified/non-Responsive/rejected.
- iii. If the bidder does not comply the Technical and Financial Bids as per enclosed Annexures (A to E).
- iv. If the bidder who doesn't meet the yardstick of Tender Evaluation Criteria, (Technical & Financial) will be considered to be rejected/disqualified or
- v. If the bidder does not comply with Schedule of Technical Specification & TOR's with any mandatory requirements or subjected to interlineations / cuttings / corrections / erasures / overwriting; or
The bidder refuses to accept the corrected Total Tender Price; or
Non-Responsive bids under the Evaluation of Bids or
Bids which do not comply with the tender document or
- vi. Non-submission of verifiable proofs in light of Technical Bid Evaluation Criteria, Checklist for Bidder, Technical Specifications and TOR's against the mandatory requirements.
- vii. If the service provider/contractor does not provide the General & Relevant Experience on Cloud Managed Services related to public sector organizations/departments in light of (Category-III Experience Criteria).
- viii. If the Service provider/bidder does not enclose the Relevant Technical Expert (Data Center professionals and Cloud Environment Professionals) CV-Resumes with the technical bid.

7. DETERMINATION OF RESPONSIVENESS OF THE BID (TENDER):

Pakistan Railways shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Tender is one which:

- i. Meets the eligibility criteria for the bidder.

- ii. Must be compiled with all of tender document.
- iii. Meets the Technical Specifications for the Services.
- iv. Meets the TORs for the services.
- v. Meets the delivery period / point for the Services.
- vi. Offers fixed price quotations for the Services.
- vii. Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.
- viii. A material deviation or reservation is one which affects the scope, quality, or performance of the Services or limits the Pakistan Railways' rights or the bidder's obligations under the Contract.
- ix. The Tender determined as not substantially responsive shall not subsequently be made responsive by the bidder by correction or withdrawal of the material deviation or reservation. However, Pakistan Railways, may waive off any minor non-conformity or inconsistency or informality or irregularity in the Tender.

8. CONTRACT AWARD CRITERIA:

At first stage bids, will be evaluated in a manner prescribed:

- i. (Technical Bid Evaluation Criteria) of this document, without reference to the price.
- ii. Any proposal which does not conform to the specified requirements as listed in said RFP.
- iii. In first stage bidder must comply with legal category while those who Non-Compiled [NC] during the evaluation considered as Non-Responsive [NR] and their bids will not be further evaluated.
- iv. In second stage, bidder must comply with Technical Specifications Category while those who Non-Compiled [NC] during the evaluation considered as Non-Responsive [NR] and their respective bids are not evaluated for further categories.
- v. In third stage bidder must comply with Experience Category those who are not compiled with this considered to be Non-Compiled [NC] and their bids considered to be Non-Responsive [NR]; the reason of this their respective bids not further evaluated.
- vi. The bidder qualifying score is 70% marks in Technical Bid Evaluation Criteria.

9. TENDER SCOPE:

Office of the Pakistan Railways HQS (hereinafter referred to as "the Pakistan Railways") invites / requests Proposals (hereinafter referred to as "the Bidder/ Tender") RFP for the Enterprise Cloud Managed Services (hereinafter referred to as "the Services").

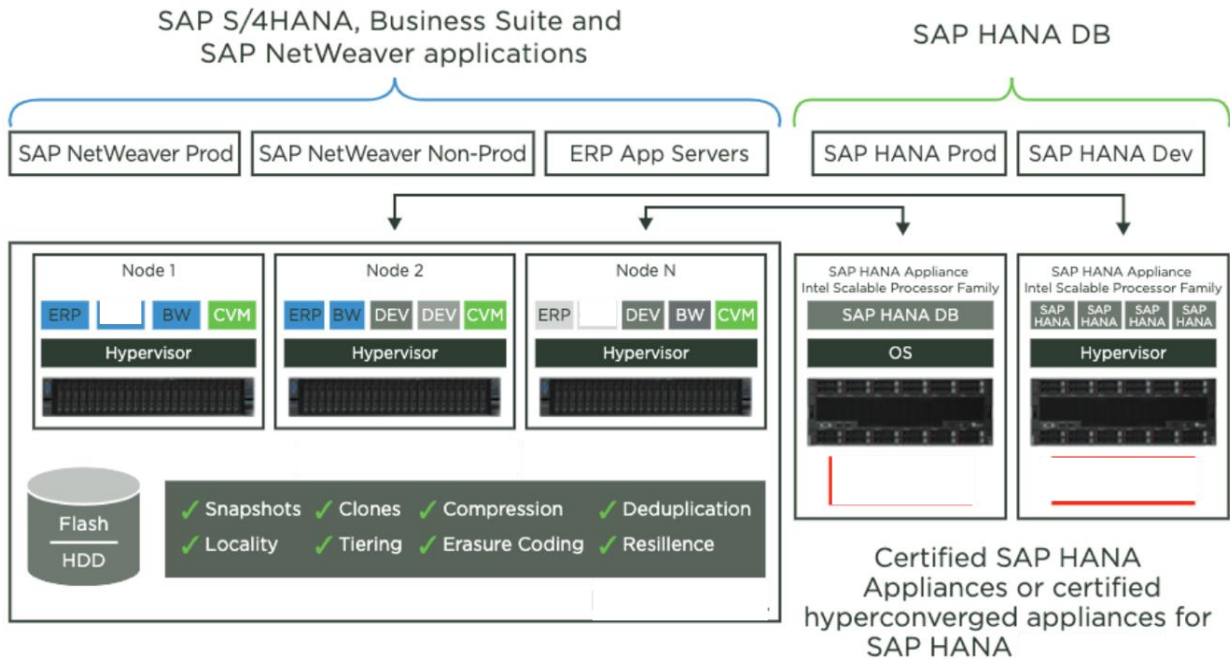
9.1 PROJECT SCOPE:

- i. The office of the Pakistan Railways HQS seeks to modernize and reduce the cost of its operations through the implementation of Enterprise Resource Planning (ERP) based customized Pakistan Railways HQS SAP S4HANA and

upgrading its existing technical, operational, inventory & financial systems into more synthesis & synchronized advance user-friendly result-oriented processes.

- ii. **Pakistan Railways HQS SAP ENTERPRISE RESOURCE PLANNING** is a systematic approach to making an organization's workflow more effective, more efficient, and more capable of adapting to an ever-changing environment. A well designed and implemented organization performance management information system is to reduce human error and miscommunication and focus key stakeholders on the requirements of their roles. The primary strategic role is to improve and an enhanced existing system through proper fine tuning and streamline the processes in order to accomplish desired focused goals of the organization.
- iii. SAP S4HANA ERP in (Pakistan Railways HQS SAP ERP) will effectively and efficiently use all the digitized data of the office of Pakistan Railways HQS along with regional offices and get best possible outcomes by processing all available application data. A good performance management information system works towards the improvement of the overall organizational performance by managing the performances of teams and individuals for ensuring the achievement of the overall organizational ambitions and goals. An effective performance management system can play a very crucial role in improved organizational performance, employee retention and loyalty, improved productivity, overcoming the barriers to communication, clear accountabilities, and cost advantages. Fully managed cloud services across Pakistan is also scope of this document.
- iv. The proposed solution must incorporate a secure, encrypted VPN / data circuits / SD/ WAN connection to permit remote data entry by our railway staff. To accommodate varying access needs, this VPN connection should have tiered access levels - one for data entry personnel and another for the contractor's technical staff. The Multi-Factor Authentication process upon connection should distinguish between these user categories. This process may involve a two-step verification such as a password plus an SMS code, or a password followed by approval through a dedicated mobile application. Alternatively, maybe a three-step verification with two passwords and an app-based approval can also be an option. Access to our system for data entry or modifications should be strictly restricted to those logged into this VPN solution. This applies universally, regardless of user category, whether for the contractor, the client, or any other party.

9.2 SAP HARDWARE ARCHITECTURE



- i. The proposed solution should not only be robust but also flexible, designed to route traffic exclusively meant for the SAP system through the VPN while allowing other user traffic to use their respective gateways. This demands an intelligent traffic management system in place to correctly segregate SAP related traffic from the rest. Further, the solution should exhibit versatility in handling changing requirements. The access levels and corresponding policies must be adjustable and able to accommodate modifications based on evolving needs. This may include changes in the level of access for different user categories or alterations in policy framework. Such a dynamic VPN solution will enable efficient, secure, and smooth operation for all intended users.
- ii. To protect PR data from ransomware and other malicious software, the proposed solution should include robust cloud security measures. These should include, but are not limited to, advanced threat detection and response systems, regular security assessments, and a comprehensive disaster recovery plan.
- iii. The chosen bidder will be responsible for the implementation and ongoing management of these security measures. We expect proactive monitoring, regular updates, and timely support from the responsive bidder/ firm.
- iv. It is of utmost importance that the proposed solution complies with all relevant local and international data security regulations. Please provide evidence of compliance in your proposal. Proposals will be evaluated based on the comprehensiveness of the proposed security measures, the bidder's proven track record in managing secure network access, compliance with regulatory requirements, and cost-effectiveness.

10. TECHNICAL POLICIES

The prospective bidder shall follow all the technical policies issued from time to time by the Pakistan Railways for the effective and efficient management of cloud services including the following

10.1 CYBER SECURITY POLICY

- i. Following is the List of Security conditions for the cloud management:
 1. The Cloud solution being proposed must support the following.
 2. SSL offloading, SSL Wild Card, SSL VPN
 3. Layer 7 load-balancing protocols and Multi-Factor Authentication (MFA)
 4. Token based 2FA.
 5. Sandbox as a service
 6. DDoS mitigation (Layer 7 via WAF).
 7. Anti-virus services
 8. Intrusion Prevention System (IPS) with additional features related to IIS.
 9. Web Application Firewall (WAF): Guards against web-based attacks like SQL injection and XSS.
 10. Behavioral Analysis: Monitors IIS behavior for unusual activities.
 11. Protocol Validation: Ensures legitimate protocols are used.
 12. Malicious File Detection: Blocks harmful file uploads/downloads.
 13. Real-time Traffic Inspection: Identifies attack patterns promptly.
 14. Antivirus equipped with Advanced Threat Protection (ATP) to safeguard against ransomware attacks.
 15. Above elements should be part and parcel of the proposed Cloud solution
- ii. Following shall be the MSSP services conditions for provision of cloud managed services as Next Generation Firewall Service:
 1. 1000 Mbps of Firewall inspection throughput.
 2. High availability (Active Passive).
 3. IPS included.
 4. Forward Proxy
 5. IPSEC VPN connectivity
 6. Connectivity with cloud
 7. Web/URL filtering/Geo-blocking included.
 8. Malware inspection included.
 9. Dedicated administrative domain.
 10. SSL/TLS Hardware processing.
 11. 8/5 Managed Services included.
 12. 24/7 Technical support included.
 13. Administrator control will be extended to Tenant.
- iii. Deployment of Web Application Firewall:
 1. OWASP Top 10 mitigation
 2. Load-balancing within Web Servers:
 - a. Round Robin
 - b. Weighted round robin
 - c. Least connection

- d. URL hash
 - e. Full URL hash
 - f. Host hash
 - g. Host domain hash
 - h. Source IP hash
3. Geo-Blocking
 4. Header enrichment- XFF
 5. HTTPS/ SSL Offloading
 6. Compliance support- NIST, PCI DSS, ISO
 7. Administrator control will not be extended to the Tenant.
- iv. Following Manage Services shall be outsourced and PR shall only monitor the performance of the outsourced services:
1. vApp deployment
 2. VM deployment
 3. IP Pool management
 4. Network configuration
 5. Live IP configurations
 6. NAT configurations
 7. Firewall rules implementation on ESG
 8. IP-Sec VPN configurations
 9. Catalog Management
 10. On boarding Service
 11. Network Setup
 12. Infrastructure Provisioning
 13. Infrastructure Monitoring

10.2 BACKUP POLICY OF PAKISTAN RAILWAYS FOR S4HANA DATA

This backup policy document compliments the Pakistan Railway's guide titled "How to Create a Backup Plan" for SAP S4HANA database. This policy document focuses on codifying PR's backup strategy. SAP HANA offers comprehensive functionality to safeguard database and ensure that it can be recovered speedily and with maximum business continuity.

The unprecedented growth in data volumes has necessitated an efficient approach to data backup and recovery. This document is intended to provide details on the stipulations of data backup and retrieval operations for Pakistan Railway.

Pakistan Railway intended to host hardware in the Local Cloud Service Provider's Enterprise Data Center for SAP S4HANA's smooth operations within the boundaries of Pakistan.

Information Technology recognizes that the backup and maintenance of data for servers are critical to the viability and operations of the respective departments. It is essential that certain basic standard practices be followed to ensure that data files are backed up on a regular basis.

Emergency recovery: Infra / Basis Team will make every attempt to recover the data within one business day. However, in the event of a catastrophic event, such as

fire damage, services, data may be unavailable for an extended period of time.

Non-Emergency recovery: These restorations will be performed on a time available basis, and will occur within the next seven business days.

Required Information: The detail of the request should include information about the file creation date, the name of the file, the last time it was changed, and the date and time it was deleted or destroyed.

A quarterly test (January, April, July, and November) on random system backups to determine if the files and data can be restored.

Backup Strategy

In the scope of Pakistan Railway and backup data, PR would follow the 3-2-1

Rule as follows:

Keep at least three (3) copies of data.

- i) Backup Media 1 on a different media
- ii) Backup Media 2 on a different media same site
- iii) Backup Media 3 on a remote site/off site

Backup Media (1): Storage address to be mentioned

- DB Backup on different Storage media

Backup Media (2): Storage address to be mentioned

- Veeam Backup on Different Storage media

Backup Media (3) Storage address to be mentioned

- Different location from Primary Site

The Systems Support team ensures that all backups are completed successfully and reviews the backup process on all servers daily. Logs are maintained to verify the amount of data backed up and the unsuccessful backup occurrences

SERVICE LEVEL POLICY FOR CLOUD MANAGED SERVICES

This is a Service Level Agreement (SLA) between Pakistan Railway and [Service Provider]. This document identifies the services required and the expected level of services between MM/DD/YYYY to MM/DD/YYYY.

Signatories:

Pakistan Railway:

Service Provider:

Purpose

This section defines the goals of this agreement, such as: The purpose of this SLA is to specify the Requirements for IaaS service that will be provisioned to [Customer]

- Agreed service targets
- Criteria for target fulfilment evaluation
- Roles and responsibilities of [Service Provider]
- Duration, Scope and Renewal of this SLA contract

- Supporting processes, limitations, exclusions and deviations.

Contractual Parameters

This section specifies the contractual parameters of this agreement:

- Contract renewal must be requested by [Customer] at least 30 days prior to expiration date of this agreement.
- Modifications, amendments, extension and early termination of this SLA must be agreed by both signatory parties.
- [Customer] requires a minimum of 60 days' notice for early termination of this SLA.

Service Agreement

This section can include a variety of components and subsections. into the following components:

- KPIs and metrics
- Service levels, rankings, and priority
- Exceptions and limitations
- Responses and responsibilities
- Service Management

KPIs and Metrics

Key performance indicators (KPIs) and other related metrics can and should support the SLA, but the achievement of these alone does not necessarily result in the desired outcome for the customer.

Metric	Commitment
Availability	
Reliability	
Issue Recurrence	

Service Levels, Rankings, and Priority

Metric	Description	Target Response
Critical	The Incident may only be assigned Critical priority if the Production Environment unenviable for carried out business processes. It could be a production shutdown or the stoppage of	Within 0-30 minutes

	a core business process in the system.	
High	The Incident may only be assigned priority High if an important business process of is seriously affected. That means, necessary key activities cannot be carried out. It could be an urgently required function that is not available from time to time or that does not work as it should.	Within 4 Hours
Medium	The Incident may only be assigned priority medium if an important business process of is partially affected.	Within 8 Hours minutes
Low	If a business process of End User is not affected, the Incident must be assigned priority Low. For example, request of new service or function.	Within 12 hours
Informational	Inquiry for information	Within 96 Hours

Exceptions and Limitations

Include any exceptions to the SLA conditions, scope, and application, such as: This SLA is subject to the following exceptions and special conditions:

- [Service Provider] must ensure Cloud Service A availability of 99.8% during any public holiday seasons.
- [Service Provider] may not be liable to credit reimbursement for service impact to data centers in Region A and Region B due to natural disasters.
- Response to requests of Severity Level 4 or below by [Customer] can be delayed up to 24 hours during the aforementioned holiday season.
- Support incidents regarding a third-party software other than in scope third party services, release, version and/or functionalities of Software developed specifically for Licensee.
- The root cause behind the support incident is not a malfunction, but a missing functionality or the support incident is ascribed to a request.

Responses and Responsibilities

Here, you'll define the responsibilities of both the service provider and the customer.

[Customer] responsibilities:

- [Customer] should provide all necessary information and assistance related to service performance that allows the [Service Provider] to meet the performance standards as outlined in this document.
- [Customer] shall inform [Service Provider] regarding changing business requirements that may necessitate a review, modification, or amendment of the SLA.

[Service Provider] responsibilities

- [Service Provider] will act as primary support provider of the services herein identified except when third-party vendors are employed who shall assume appropriate service support responsibilities accordingly.
- [Service Provider] will inform [Customer] regarding scheduled and unscheduled service outages due to maintenance, troubleshooting, disruptions or as otherwise necessary.

3.6. Service Management

Include service management and support details applicable to the service provider in this section

Backup (Managed)

Vendor should provide enterprise backup solution as per table below.

Backup Advance Plan		
Environment	VM	DB
PRD*	26	20
DEV	12	8
QAS	12	8

3.6.1. Service Availability

Service coverage by the [Service Provider] as outlined in this agreement follows the schedule specified below:

- On-site support: 08:30 A.M. to 06:00 P.M, Monday to Friday during the contract period.
- Phone Support: 24-Hours
- Email Support: 24-Hours

11.TENDER DOCUMENT FOR THE PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES

Pakistan Railways, Headquarters, Office, Lahore

Firm/Supplier Name:

Date of Issue of Request:

Pakistan Railways HQS graciously invites sealed bids for the provision of following ***Enterprise Cloud Managed Services*** from NTN/GST/PST registered firms/companies. Tenders of the same will be opened on **31/05/ 2024** at **12:00 Hrs.** following the **Single Stage - Two Envelopes** bidding.

<i>Contract for Enterprise Cloud Managed Services</i>		
<i>Item No.</i>	<i>Service Name</i>	<i>Description</i>
1	<i>Enterprise Cloud Managed Services</i>	Detailed prescribed in RFP

Tender document including ***Enterprise Cloud Managed Services*** details and comprehensive specifications are available on Pakistan Railways E-PADs & website (www.pakrail.gov.pk) and PPRA website (www.ppra.org.pk) and also from office of the Pakistan Railways HQS from the date of advertisement during office hours only **(08.30 am to 04.30 pm)**.

The management of Office of the Pakistan Railways HQS reserves the right to accept or reject all the Bids at any time before the acceptance of any Bid. The reasons of rejection shall be communicated to the bidders upon request.

12. EVALUATION OF BIDS:

12.1 BID OPENING EVALUATION:

All the technical & financial bids documents must need to be **responsive** under all the **Sections** and must comply with Checklist for Bidder before proceeding to Technical Evaluation & Financial Evaluation process. While if any bidder technical bids documents do not comply with all **Sections** and Checklist for bidder will be considered to be **non-responsive/disqualified** for further technical & financial evaluation process.

12.2 TECHNICAL BIDS EVALUATION:

- i. If an offer (Technical Bid) is not substantially responsive and contains material deviations or reservations to the terms & conditions, and specifications in this Request for Bid and it will not be considered further for Financial Evaluation. The Procuring Agency will evaluate and compare only the Technical Bids determined to be **substantially responsive**.
- ii. **Technical Bid Evaluation Criteria** are based on a 100-point scale. In the Evaluation Criteria, 70 percent or higher will be considered qualified for the **Financial Bid**.
- iii. Only those bidders' bids will be considered to Financial Evaluation stage whose bids are declared as responsive as per the **Technical Bid Evaluation Criteria**. While the non-responsive bids after the **Technical Bid Evaluation Criteria** will not proceed to Financial Bid Evaluation Stage and shall remained sealed and will be returned.
- iv. The Bidders who have duly complied with the Eligibility/Qualification and Evaluation Criteria against **Enterprise Cloud Managed Services** will be eligible for further processing.
- v. The Bids who do not conform to the Technical Specifications or Bid conditions or the Bids from the Bidders without adequate capabilities for supply and maintenance / warranty services will be rejected.

13. TECHNICAL BID EVALUATION CRITERIA

The following Mandatory Requirements must be fulfilled for further technical evaluation. In case of non-fulfillment of any of the Mandatory Requirement, the bidder will be technically disqualified for further processing of financial proposal.

13.1 MANDATORY REQUIREMENTS

- i. The bidder must be registered in Pakistan with SECP or Registrar of Firms.
- ii. Bidder must be Tier-3 Compliant (Primary and Disaster Recovery Site). In case of co-location, the location should also be Tier-3 complaint.
- iii. Must have experience of managing at least one Project of SAP S4HANA (Managed Cloud Services) having minimum service value of 10 million PKR.

- iv. The bidder must be listed as an active tax payer.
- v. Bidder must have one of the ISO certifications on cloud security such as ISO 27000/27001/27017 OR same series.
- vi. The bidder is never blacklisted by any provincial/ federal government department or autonomous body.
- vii. The firm must have a valid co-location agreement in case of co-location.
- viii. The bidder must have its active Disaster Recovery (DR) site in another city of Pakistan (at least 200 km away from Primary Site).

13.2 EVALUATION CRITERIA

S. No.	Parameters	MAX MARKS	
1	Projects for Cloud Services (The work order for successfully completed projects are required to be submitted) No. of Projects SAP S4HANA (Managed Cloud Services) with Minimum service value of 10 million PKR.	30	
	1-3 Projects		10 marks
	4-7 Projects		20 marks
	8 + Projects		30 marks
2	Average Annual Revenue of 3 years. (in PKR)	20	
	Average revenue less than 100 million		05 Marks
	Average revenue 100 - 500 million		15 Marks
	Average revenue 500 million above	20 Marks	
3	Network and Cyber Security Staff 02 Marks for each staff (Max 5 staff will be considered for marking) (Staff having Bachelor/ Master degree in Computer Science/IT/Electrical/ Electronics/ Telecom, with relevant international certification will be considered)	10	
4	SAP Basis Resource (max marks will not exceed 10)	10	
	Mid-Level (5 years' experience)		1 mark for each individual
	Senior Level (10 years' experience)		2 marks for each individual
5	Data Centre (Network and Security) 3 year Audit reports (issued by the auditor)	15	
	Year 2020 - 2021		05 Marks
	Year 2021 - 2022		05 Marks
	Year 2022 - 2023		05 Marks
	No marks will be given before 2020-21 audited reports.		
6	Tier-3 complaint (primary Site)	5	
	Marks		
	Tier-3 complaint (Disaster Site)	5	
	Marks		
	Tier-3 certified Site/Sites	10 Marks	
TOTAL MARKS		100	

- Service Value Proof
 - Official document substantiating provision of services of service value during minimum one year.
- Revenue 2020-21 onward shall be considered
- Network and Cyber Security Staff
 - Staff having Bachelor/ Master degree in Computer Science/IT/Electrical/

Electronics/ Telecom, with relevant **international certification** will be considered

- Basis Resource Qualification
 - SAP-Basis certification
- Audit Authority
 - Any international ISO certification firm engaged in the certification of IT systems
- Conditions of complaint datacenter (Self-managed or Co-location)
 - Three tier power Backup (1st -Utility, 2nd -Self Generation,3rd -Storage Bank) in place.
 - ATS Power Distribution Covers Ancillary Load
 - Multiple Server Rack Load
 - Uninterrupted internet bandwidth with AS number Datacenter
 - 99.8 % Uptime
 - Datacenter Monitoring System in Place
 - Physical Security System in Place
- Tier 3 Certification (Self-managed or Co-location)
 - Certification of Design documents from any international or local certification agency

Note: In above evaluation criteria minimum passing/qualifying marks (in technical bid) is **70%** (seventy) Percent

Documentary evidence / proof is mandatory to get the marks, no marks will be given without authentic documentary evidence issued by the concerned authority/office.

14. FINANCIAL BIDS EVALUATION:

- i. Technically qualified/ responsive bidder(s) shall be called for opening of the Financial Proposal(s). The Financial Proposals/bids will be opened in the presence of the Bidders at the time and venue indicated by the Pakistan Railways accordingly. The technically responsive Bidder(s) or their authorized representatives against ***Enterprise Cloud Managed Services*** shall be allowed to take part in the Financial Proposal(s) opening against their relevant quoted financial proposals.
- ii. The sealed financial proposals/bids of Non-Responsive/Disqualified bidders against Provision of Enterprise Cloud Managed Services will be returned to the bidders or their representatives.
- iii. The lowest financial bid of Provision of Enterprise Cloud Managed Services will be selected among those responsive bids.
- iv. In evaluating the **financial bids**, the Pakistan Railways will adjust for any arithmetical errors as follows:
 - a) Where there is a discrepancy between amounts in figures and in words, the amount in words will govern.
 - b) Where there is a discrepancy between the unit rate and the line Items total resulting from multiplying the unit rate by the quantity, the unit rate as quoted will govern.
 - c) If a Bidder/Supplier refuses to accept the correction, his Financial Bid will be rejected.

15. DETERMINATION OF RESPONSIVENESS OF THE BID (TENDER)

- 14.1 The Pakistan Railways shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Tender is one which:
 - 14.2 Meets the eligibility criteria given herein this tender document Services.
 - 14.3 Meets the Technical Specifications and TOR's for the Services against each item in ***Enterprise Cloud Managed Services***.
 - 14.4 Meets the delivery period the Services against each item in ***Enterprise Cloud Managed Services***.
 - 14.5 Prices shall be quoted in Pak Rupees.
 - 14.6 Bidder offers fixed price financial bid for the Services against each Items in Enterprise ***Cloud Managed Services***, whereby no optional offer / bid or price is allowed.
 - 14.7 Is accompanied by the required Bid Security @ **Rs. 1 million** in the shape of CDR/Pay Order/DD in favor of "**FA&CAO/PR**" part of technical bid envelope against ***Enterprise Cloud Managed Services***.
 - 14.8 In compliance with the Preparation/Submission of Tender in a manner prescribed in this tender document Checklist for Bidder.

- 14.9 Conforms to all terms and conditions of the Tender Document, without material deviation or reservation.
- 14.10 The Tender determined as not substantially responsive shall not subsequently be made responsive by the bidder by correction or withdrawal of the material deviation or reservation.
- 14.11 Bidder must prepare all Technical and Financial bids as per enclosed Annexure (A to E).
- 14.12 Your **Bids (Technical & Financial)** must be typed or written in indelible ink and shall be signed stamped by you or your authorized representative. Without a signature & stamp in your Form of Bids (Technical & Financial), your Bids will not be considered further.
- 14.13 Your Bids (Technical & Financial) should be submitted as per the following instructions and in accordance with the attached **Form of Bids (Annex-A & B) and Annexures (C to E)**. The attached Terms and Conditions of **Provision of Enterprise Cloud Managed Services** are an integral part of the Contract, so each bidder must carefully read before preparing and submission of bids in the office of PR HQS Office, Lahore,

16. TERMS AND CONDITIONS FOR THE PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES.

- 15.1 The scope of work includes the provision of Enterprise Cloud Managed Services.
- 15.2 The Office of PD PMU - PR HQS reserves the right to accept or reject all the bids at any time before the acceptance of any Bid. The reasons of rejection shall be communicated to the bidder.
- 15.3 Bids must be completed in all requisite respects giving necessary details specifications and requirements of the bidding document.
- 15.4 If bidders technical bid does not comply with one or more Items as acquired in Provision of Enterprise Cloud Managed Services and Schedule of Technical Specification and TORs of Enterprise Cloud Managed Services then their technical bids will be considered as rejected & ineligible for financial evaluation.
- 15.5 The Office of the Pakistan Railways HQS reserves the right to increase or decrease the quantity of any Items mentioned in the Provision of Enterprise Cloud Managed Services in the tender document at any time.
- 15.6 Further, the Firm/Supplier will have to ensure that Mandatory Attributes:
- a) Bear National Sales Tax Number (STN) and National Tax Number (NTN).
 - b) Is an authorized business certificate from Principal/partner for at least last three (3) years for the **Provision of Enterprise Cloud Managed Services**.
 - c) Has a registered incorporated authorized company/firm in Pakistan with **Provision of Enterprise Cloud Managed Services** experience of last three (3) years.
 - d) Has the required relevant qualified personnel and enough strength to

fulfill the requirement of assignment.

- e) In addition to the quoted price, the evaluated price shall include sales tax or any other tax or duty as per applicable rules in Pakistan.
- f) The bidder will provide an undertaking for the **Provision of Enterprise Cloud Managed Services within 4 weeks** from the date of issuance of the contract.

17. VALIDITY OF THE OFFER:

Your Bids prices should be valid for a period of 120 Days from the deadline for receipt of bids if bidder withdraw their bids during the validity period and/or refuse to accept the award of a contract when and if awarded.

Further information can be obtained from:

Office of the PD PMU, PR, HQS, Office Lahore

Concerned person: Mr. Muhammad Farooq Iqbal Malik, PD/PMU

Email: Farooq_malik@yahoo.com

Phone: 042-99201983

18. GENERAL INSTRUCTIONS:

- 17.1 All applicable Taxes will be deducted as per government rules.
- 17.2 Quarterly bill (Cloud Services on usance basis) will be submitted by the bidder. No advance payment will be released.
 - i. The bidder must submit the bill on each quarter first week and then office of the Pakistan Railways HQS will process the bill after compliance on all codal financial formalities for payment within 30 days of receipt of bill.
- 17.3 The bid should also be accompanied with used services details complete in all respect.

19. CURRENCY OF BID:

The currency of bid is Pakistani Rupees (PKR); All prices offered/ quoted must be in Pakistani Rupees (PKR). Bid will be rejected if any price is quoted in any other currency.

20. APPLICABLE TAXES

All offered prices must be quoted with all applicable taxes and taxes should be quoted separately with price. If only price is mentioned it would be assumed that all applicable taxes are included in it.

21. AWARD OF CONTRACT:

The award will be made to the bidder offering the lowest evaluated price and that meets the required terms and conditions of technical specification and financial capabilities. Provision of **Enterprise Cloud Managed Services**.

22. ISSUANCE OF LOI (LETTER OF INTENT):

The bidder whose Bid is accepted will be notified of the award of contract through the LOI (Letter of Intent) in light of Framework Contract of Provision of Enterprise Cloud Managed Services against the quoted prices issued by the Pakistan Railways after the Award of Contract (Contract Agreement).

23. LETTER OF ACCEPTANCE:

The bidder (Firm/Supplier) must issue/submit the Letter of Acceptance on their letter head against the Purchase Order/Supply Order/LOI/Form of Contract which issued by the Office of Pakistan Railways within week's time.

24. MODE OF PAYMENT:

24.1 The bidder will be eligible for Payment as per mentioned Terms & Conditions in Form of Contract Agreement & LOI.

24.2 The Pakistan Railways HQS must receive an invoice (inclusive of all taxes) for payment from the bidder, after the completion of the work. Payment will be started after the invoice submitted by the bidder and confirmed by the Railways. The payment invoice must be supported by any invoices, receipts, or other documentation the client may request from time to time.

24.3 All payments will be released through cheques.

25. CONTRACT AMENDMENTS:

- i. The bidder shall not execute the change until and unless the Pakistan Railways has allowed the said change, by written order issued by the concerned authorities of Railways.
- ii. The change, mutually agreed upon, shall constitute part of the obligations under this Contract, and the provisions of the Contract shall apply to the said Change.
- iii. No variation in or modification in the Contract shall be made, except by written amendment signed by both the Pakistan Railways and the bidder.

26. ASSIGNMENT/SUB-CONTRACTING:

The bidder shall not assign or sub-contract its obligations under the Contract, in whole or in part, except with the Pakistan Railways' prior written consent.

27. PERFORMANCE GUARANTEE:

26.1 Performance Guarantee (PG) 10% of the awarded contract price (for 28 months) shall be calculated.

26.2 Performance Guarantee will be submitted by the bidder on prescribed form (approved by Procurer), deposited by the responsive bidder and retained by the Office of the PR HQS valid for a period of 28 months (from the contract signing date).

26.3 Performance Guarantee (PG) will be forfeited in case of failure to comply with any terms & conditions for the provision of *Enterprise Cloud Managed Services*.

26.4 A responsive bidder must submit their Performance Guarantee within 10 days (or extended period approved by competent authority PR) after the receiving of LOI/bid acceptance letter by Pakistan Railways.

26.5 Performance guarantee is an essential pre-requisite before signing of Contract Agreement.

28. ACCEPTANCE OF TERMS & CONDITIONS OF BIDDING DOCUMENT:

Responsive bidder (Firm/Company/Service provider) must read and accept all the sections & clauses of **Provision of Enterprise Cloud Managed Services** by signing at each and every page of bid document/ RFP otherwise it considers to be disqualified.

29. LIQUIDATED DAMAGES:

If the Contractor/Service Provider fails/delays in performance of any of the obligations, under the Contract/violates any of the provisions of the Contract/commits breach of any of the terms and conditions of the Contract the Pakistan Railways may, without prejudice to any other right of action / remedy it may have, deduct from the Contract Price, as liquidated damages, a sum of money @ 0.1% of the Contract Price which is attributable to such part of the Services / the Works as cannot, in consequence of the failure/delay, be put to the intended use, for every day between the scheduled delivery date(s), with any extension of time thereof granted by the Pakistan Railways, and the actual delivery date(s).

30. TERMINATION OF CONTRACT:

- i. If the bidder fails/delays in performance of any of the obligations, under the Contract/violates any of the provisions of the Contract/commits breach of any of the terms and conditions of the Contract the Pakistan Railways may, at any time, without prejudice to any other right of action/remedy it may have, by written notice served on the Contractor/Service Provider, indicate the nature of the default(s) and terminate the Contract, in whole or in part, without any compensation to the Contractor/Service Provider.
- ii. (120) days termination notice will be served from either side. Bidder will be bound to properly migrate complete data of Pakistan Railways to the new location along with operating system, certificates, licenses or any other allied service/resource which is required to run said project smoothly.
- iii. The Pakistan Railways may, at any time, by written notice served to bidder terminate the Contract, in whole or in part, for its convenience, without any compensation to the Contractor/Service Provider.

31. GRIEVANCE REDRESSAL COMMITTEE:

In case of any dispute, the bidder must be submitted his written grievance in the Grievance Redressal Committee (GRC) as notified by the procuring agency. The procuring agency shall constitute a committee comprising of odd number of

persons, with proper powers and authorizations, to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.

**ANNEXURE-A (FORM OF TECHNICAL BID)
 FRAMEWORK CONTRACT OF ENTERPRISE CLOUD MANAGED SERVICES
 (To be filled by Company/Firm using his/her covering letter head)**

To

PD PMU,
 Pakistan Railways HQS, Lahore.

We offer to execute the **Enterprise Cloud Managed Services** in accordance with the Conditions of Contract accompanying this tender document. We propose to complete the delivery of Services **Enterprise Cloud Managed Services** described in the Contract within the following Delivery Time from the Date of Signing of the Contract. Technical Specifications of Enterprise Cloud Managed Services Items as per of the bidding document:

Item No	Description of Services	Year 1	Year 2
1			
2			
3			

Enterprise Cloud Managed Services

Cloud Services Leaflets/Brochures

}

Technical Manuals

} Specify, if applicable.

Maintenance Requirements

}

We hereby confirm that this Technical Bid complies with the Validity of the Offer and services conditions under the Request for Bid document and agree with each section & clause of Tender Bidding Document of **Provision of Enterprise Cloud Managed Services**, respectively along with Term of Reference (TOR's) of Enterprise Cloud Managed Services. We read and agreed with the bidding document for the Enterprise Cloud Managed Services.

We have not been associated with the firm that prepared the design and specifications of the contract that is subject of this request for tender document.

Authorized Signature: _____ Name and Title of Signatory _____

Name of Supplier: _____ Address : _____

Phone Number: _____ Fax Number, if any _____

Email: _____

Mandatory Note:

Each Page of Technical Bid Form must be signed and stamped by the Company/Firm/Supplier.

ANNEXURE-B (FORM OF FINANCIAL BID)
FRAMEWORK CONTRACT OF ENTERPRISE CLOUD MANAGED SERVICES
(To be filled by Company/Firm using his/her covering letter head)

To

PD PMU,
Pakistan Railways HQS,
Lahore.

We offer to execute the **Enterprise Cloud Managed Services** in accordance with the Conditions of Contract accompanying this tender document for the Contract Price/Cost of as mentioned below. We propose to complete the delivery of Services under of **Enterprise Cloud Managed Services** described in the Contract within the following Delivery Time from the Date of Signing of the Contract.

Financial Bid of Enterprise Cloud Managed Services in Pak Rupees:

Item No.	Description of Services	Qty	Unit Price	Annual Recurring Cost (A)	All applicable Taxes (B)	2 Years Gross Total Recurring Cost with all taxes (A+B)
1	Processor Cores	750 Cores				In Numbers: In Words:
2	Random Access Memory GBs	9216 GBs				In Numbers: In Words:
3	Hard Drive SSD/SATA GBs	53248 GBs				In Numbers: In Words:

Grand Total of Amount in Figures	
Grand Total of Amount in Words	

Note: All allied services must include in the above-mentioned prices for smooth operation of **Enterprise Cloud Managed Services**, no other cost will be beard by the Pakistan Railways.

Total Price of Financial Bid Enterprise Cloud Managed Services year-wise with GST in Pak Rupees:

<i>Item No.</i>	<i>Year (1) Annual Contract Recurring Cost with ST</i>	<i>Year (2) Annual Contract Recurring Cost with ST</i>	<i>Grand Total Recurring Cost for Two Years with ST</i>
1			
2			
3			
Total			

We hereby confirm that this Financial Bid complies with required terms & conditions and each section & clause of Tender Document of **Enterprise Cloud Managed Services**. We agreed that the above cited Quoted Prices will be fixed for two years, and it will never be changed within 2 years in any dollar or price variation in any circumstances.

Authorized Signature: _____

Name and Title of Signatory _____

Name of Supplier: _____

Address: _____

Phone Number: _____

Fax Number, if any _____

Email: _____

Mandatory Notes:

- a) All allied services must include in the above-mentioned prices for smooth operation of **Enterprise Cloud Managed Services**, no other cost will be beard by the Pakistan Railways.
- b) Each Page of Financial Bid Form must be signed and stamped by the Company/Firm/Supplier.
- c) All applicable Government Taxes will be deducted by the Office of Pakistan Railways HQS during payments.
- d) The Quoted Prices will be fixed for two years, and it will never be changed within 2 years in any dollar or price variation in any circumstances.

**ANNEXURE-C (LETTER OF 24/7 SERVICE DELIVERY)
PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES
(To be filled by Company/Firm using his/her covering letter head)**

To

PD PMU,
Pakistan Railways HQS,
Lahore.

SUBJECT: LETTER OF 24/7 SERVICE DELIVERY AGAINST THE TENDER NO.

_____ has read and accepted to provide the
24/7 service delivery against this RFP Document.

Authorized Signature: _____

Name and Title of Signatory _____

Name of Supplier: _____

Address: _____

Phone Number: _____

Fax Number, if any _____

Email: _____

Mandatory Notes:

- a) Each Page must be signed and stamped by the Company/Firm/Supplier.
- b) Performance evaluation letter issued by the Pakistan Railways will be attached with each quarterly/monthly bill (Cloud Services) submitted by the bidder.

ANNEXURE-D (LETTER OF ACCEPTANCE)
PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES
(To be filled by Company/Firm using his/her covering letter head)

To

PD PMU,
Pakistan Railways HQS,
Lahore.

SUBJECT: LETTER OF ACCEPTANCE AGAINST THE TENDER NO. _____ FOR ALL
SECTION OF ENTERPRISE CLOUD MANAGED SERVICES

_____ has read & accepted all the terms and conditions for
the Provision of Enterprise Cloud Managed Services vide Tender Document No.

Authorized Signature: _____

Name and Title of Signatory _____

Name of Supplier: _____

Address: _____

Phone Number: _____

Fax Number, if any _____

Email: _____

Mandatory Notes:

- a) Each Page must be signed and stamped by the Company/Firm

ANNEXURE-E (UNDERTAKING ON LEGAL E-AFFIDAVIT)
PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES
(Submission of undertaking (e-Affidavit) on legal valid and attested e-stamp
paper
(Rs. 1200 or above etc.)

To

PD PMU,
Pakistan Railways HQS,
Lahore.

It is certified that _____:

- i) That the bidder is never blacklisted on any grounds whatsoever.
- ii) That the bidder takes all mandatory steps to comply the Tender Document No.
- iii) That the bidder has Tier 3 compliance Data Center with, ISO 27000/ISO 27001/ISO 27017/ same series certifications for Cloud Infrastructure and managing public cloud services.
- iv) Bidder read and accepted all the Sections of Tender Document No. _____ for the **Provision of Enterprise Cloud Managed Services.**
- v) That the bidder will provide the 24/7 Service delivery as per the Tender Document No. against the Enterprise Cloud Managed Services for the office of Pakistan Railways HQS.

Authorized Signature: _____

Name and Title of Signatory _____

Name of Supplier: _____

Address: _____

Phone Number: _____

Fax Number, if any _____

Email: _____

* Mandatory Notes: * Each Page must be signed and stamped by the Company/Firm.

32. OTHER TERMS AND CONDITIONS FOR THE PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES

- 32.1 Fixed Price: The price must be quoted by the Bidder/Service Provider in PAK Rupees which shall remain firm and fixed and not subject to any adjustment during framework contract performance period. Office of the Pakistan Railways HQS does not oblige responsive bidder/Service Provider against the dollar variation during the framework contract period in light of all Section of Enterprise Cloud Managed Services & Connectivity. Despite of that, the responsive bidder/Service Provider each year signed new Form of contract agreement with office of the Pakistan Railways HQS subject to the performance evaluation of Enterprise Cloud Managed Services which measured by the Office of the Pakistan Railways HQS. The recurring cost of Enterprise Cloud Managed Services remains same and fixed during the duration of framework as mentioned in Tender/RFP Document.
- 32.2 Delivery Schedule: The delivery of the service should be completed as per above schedule. The Contractor/ Service Provider shall ensure that the Services shall be delivered complete to enable the testing and training to proceed without interruption. If it shall appear to the Client that the services have been or are likely to be delayed by reason of incomplete delivery or for any other reasons, he may require the Contractor/ Service Provider at the expense of the Contractor/Service Provider to deliver the missing items of the services or provide suitable service solutions.
- 32.3 Cloud Services: The Cloud Managed Service shall remain at the risk and under the physical custody of the Contractor/Service Provider Data Centers where the core operations data maintained and saved.
- 32.4 Installation & Implementation: The Contractor/Service Provider shall ensure that the implementation design conforms to an open standard by which new services can be added without disruption to existing services.
- 32.5 The Contractor/Service Provider shall provide a document stating step-by-step procedures for installation and disaster recovery to the Pakistan Railways.
- 32.6 The Contractor/Service Provider shall configure the system for high availability and reliability, of all hardware and software against the Enterprise Cloud Managed Services for the office of Pakistan Railways HQS.
- 32.7 The Contractor/Service Provider shall submit detailed and complete installation, transition and cutover plan for the new system, installation procedures for the new components specifying installation constraints, operational cutover, maintenance prior to Client acceptance and if special security and/or access arrangements are required.
- 32.8 Applicable Law: The Contract shall be interpreted in accordance with the laws of the Islamic Republic of Pakistan.
- 32.9 Training: The Contractor/Service Provider shall arrange and undertake a comprehensive training program (basic and advance level) for the staff (Six persons) nominated by the Pakistan Railways / the Client to ensure that they shall

acquire a good working knowledge of the operation, and general maintenance of the Services to be supplied under the Contract.

- 32.10 Data Privacy & Security: The Contractor/Service Provider shall take effective & efficient mandatory measures for the Data Security & Privacy against the Enterprise Cloud Managed Services & Connectivity as per the bidding document No. _____ for the office of Pakistan Railways HQS in light of Data Encryption in their Certified Tier 3 Data Centers.
- 32.11 Provision of services: Upon completion of service, the bidder shall provide:
- a) Completion certificate issued by the concerned authority by the bidder.
 - b) Certificate issued by the Pakistan Railways about the completion of work as per bid/tender document and contract for the said services.
 - c) Stamped & Signed Copies of the bidder's invoice showing service detail description, quantity, and total amount.
 - d) NTN Certificate, GST Invoice.
 - e) Delivery of services along with their required as per framework contract.
 - f) All other perpetual documents which required by Procuring agency at the time of payment.
- 32.12 Payment: As per mentioned in the tender document. All defects will be corrected by the Service provider without any cost to the Pakistan Railways within mutually decided timeline.
- 32.12 Force Majeure: If a Force Majeure situation arises, the Contractor/Service Provider shall, by written notice served on the Pakistan Railways with a copy to the Client, indicate such condition and the cause thereof. Unless otherwise directed by the Pakistan Railways in writing, the Contractor/Service Provider shall continue to perform under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 32.13 In addition to Clause-17.2 and Clause 24.2, the bill submitted by the service provide will be on actual usage basis of resources used by Pakistan Railways and the invoice must contained verified detail bill list of resource used.

33. SETTLEMENT OF DISPUTES

33.1 Amicable Settlement

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

33.2 Dispute Settlement

Any dispute between the Parties as to matters arising pursuant to which cannot be settled amicably within thirty (30) days after receipt by one Party of the other Party's request for such amicable settlement may be submitted by either Party for settlement in accordance with the provisions of the Arbitration Act, 1940 (Act No.X of 1940) and of the Rules made thereunder and any statutory modifications thereto. Services under the Contract shall, if reasonably possible, continue during the arbitration proceedings and no payment due to or by the

Client shall be withheld on account of such proceedings.

33. PROVISION OF ENTERPRISE CLOUD MANAGED SERVICES & CONNECTIVITY ITEMS TECHNICAL SPECIFICATION:

S. No	Server Name	Role	Database	OS	OS Drive	SAP Binaries Drive	Drive Space Allocated for Database	Total HD	Processor	Memory
SAP Development and QA Environment										
1	ERPDEV	SAP S4HANA Dev	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	16 Cores	256 GB
2	ERPQAS	SAP S4HANA QA	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	16 Cores	256 GB
3	CARDEV	SAP CAR QA	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	12 Cores	196 GB
4	CARQAS	SAP CAR Dev	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	12 Cores	256 GB
5	Fiori Dev	SAP Fiori Dev	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
6	Solman Dev	SAP Solman Dev	Sybase	Linux SUSE	80 GB	200 GB	512 GB	792 GB	8 Cores	164 GB
7	PIPO Dev	SAP Process Orchestration Dev	Sybase	Linux SUSE	80 GB	100 GB	32 GB	212 GB	2 Cores	16 GB
8	PIPOQA	SAP Process Orchestration QA	Sybase	Linux SUSE	80 GB	100 GB	32 GB	212 GB	2 Cores	16 GB
9	OTDEV	SAP OpenText Dev	MSSQL	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
10	OTQA	SAP OpenText QA	MSSQL	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
11	BWDEV	SAP BW Dev	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	16 Cores	256 GB
12	BWQA	SAP BW QA	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	16 Cores	256 GB

13	BPCDEV	SAP BPC Dev	HANA	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
14	BPCQA	SAP BPC QA	HANA	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
15	BODEV	SAP Business Objects Dev	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
16	BOQA	SAP Business Objects QA	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
17	Fiori QA	SAP Fiori QA	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
				Total				7620 GB	116 Cores	1832 GB

SAP PRODUCTION Environment in HA										
18	ERPPROD	SAP S4HANA Prod 1 (Active)	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	64 Cores	768 GB
19	ERPPROD	SAP S4HANA Prod 2 (Passive)	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	64 Cores	768 GB
20	CARPRD	SAP CAR PRD	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	48 Cores	384 GB
21	FioriPrd	SAP Fiori Production 1	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
22	FioriPrd	SAP Fiori Production 2	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
23	PIPOPRD	SAP Process Orchestration PRD 1	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
24	PIPOPRD	SAP Process Orchestration PRD 2	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
25	OTPRD	SAP OpenText Production 1	MSSQL	Linux SUSE	80 GB	200 GB	256 GB	536 GB	8 Cores	128 GB
26	OTPRD	SAP OpenText Production 2	MSSQL	Linux SUSE	80 GB	200 GB	256 GB	536 GB	8 Cores	128 GB
27	BWPRD	SAP BW Production 1	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	48 Cores	768 GB
28	BWPRD	SAP BW Production 2	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	48 Cores	768 GB
29	BPCPRD	SAP BPC Production 1	HANA	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB

30	BPCPRD	SAP BPC Production 2	HANA	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
31	BOPRD	SAP Business Objects Production 1	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
32	BOPRD	SAP Business Objects Production 2	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
33	SolmanPrd	SAP Solman	Sybase	Linux SUSE	80 GB	200 GB	400 GB	680 GB	16 Cores	256 GB
				Total				14792 GB	332 Cores	4416 GB

DMZ										
34	Web Dispatcher	SAP Web Dispatcher	Sybase	Linux SUSE	80 GB	100 GB	100 GB	280 GB	2 Cores	16 GB
				Total				280 GB	2 Cores	16 GB

Disaster Recovery										
35	ERPPROD	SAP S4HANA Prd DR	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	64 Cores	768 GB
36	CARPRD	SAP CAR PRD DR	HANA	Linux SUSE	80 GB	200 GB	512 GB	792 GB	48 Cores	384 GB
37	FioriPrd	SAP Fiori Production	Sybase	Linux SUSE	80 GB	100 GB	64 GB	244 GB	2 Cores	32 GB
38	PIPOPRD	SAP Process Orchestration PRD	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB

39	OTPRD	SAP OpenText Production	MSSQL	Linux SUSE	80 GB	200 GB	256 GB	536 GB	8 Cores	128 GB
40	BWPRD	SAP BW Production	HANA	Linux SUSE	80 GB	200 GB	2.0 TB	2328 GB	48 Cores	768 GB
41	BPCPRD	SAP BPC Production	HANA	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
42	BOPRD	SAP Business Objects Production	Sybase	Linux SUSE	80 GB	200 GB	128 GB	408 GB	4 Cores	64 GB
43	SolmanPrd	SAP Solman	Sybase	Linux SUSE	80 GB	200 GB	400 GB	680 GB	16 Cores	256 GB
				Total				8132 GB	198 Cores	2528 GB

***SUSE & Backup Storage to be arranged at 1/3 times the total storage. Backup, high availability on both primary and DR are required.**

32.1 NON - SAP RESOURCES REQUIRED

Non-SAP Managed Cloud Hardware Sizing				
S.No	Servers	Cores	RAM (GB)	HDD (GB)
1	Pakrail LRMS App Server	16 Cores	32 GB	2048 GB
2	Pakrail LRMS DB Server	16 Cores	32 GB	6246 GB
3	Pakrail Pension App Server	32 Cores	64 GB	300 GB
4	Pakrail Pension DB Server	32 Cores	64 GB	300 GB
5	Pakrail Pension BKP Server	8 Cores	4 GB	300 GB
Total		104 Cores	196 GB	9194 GB

32.2 Cloud Services Cyber Security Requirements

- a) Strong access controls are required to restrict unauthorized access to cloud resources. This includes strong authentication mechanisms, multi-factor authentication (MFA), and role-based access control (RBAC) to limit privileges based on job roles.
- b) The bidder must keep all software and systems up to date with the latest security patches to address known vulnerabilities. This applies not only to the cloud provider's infrastructure but also to any applications and virtual machines running in the cloud.
- c) Implement network security controls like firewalls, intrusion detection and prevention systems (IDPS), application control, *scans incoming and outgoing traffic for viruses, malware, and other malicious content, preventing them from infecting network* and virtual private networks (VPNs) to monitor and protect network traffic. Use network segmentation to isolate different components of the cloud infrastructure.
- d) Bidder must follow best practices for secure configuration management to eliminate common misconfigurations that can lead to security breaches. This includes securely configuring servers, databases, applications, and other components of the cloud infrastructure.
- e) Enable logging and monitoring capabilities to detect and respond to security incidents promptly. Implement a centralized logging solution and establish real-time monitoring of logs, events, and metrics to identify suspicious activities or unauthorized access attempts.
- f) The Bidder must develop a comprehensive incident response plan that outlines the steps to be taken in the event of a security incident. This includes processes for containment, eradication, and recovery, as well as communication protocols and coordination with the cloud provider's incident response team.
- g) Bidder must conduct regular security assessments, penetration testing, and vulnerability scanning to identify and remediate potential weaknesses in the cloud infrastructure. This helps to proactively address security vulnerabilities before they can be exploited.
- h) Bidder must implement backup and disaster recovery mechanisms to ensure the availability and integrity of data and services in case of an incident. Regularly test and validate the effectiveness of these mechanisms.
- i) vCPU and OS will be clubbed in price.

33. CHECKLIST FOR BIDDERS

The provision of the following an essential prerequisite along with submission of Tenders (Technical / Financial) Bids, respectively:

Sr. #	DETAIL	YES/ NO.
1.	Duly Signed and Stamped Tender Document Copy enclosed with Technical Bid	
2.	Duly Signed and Stamped Form of Bid (Technical) in light of (Annexure-A)	
3.	Duly Signed and Stamped TORs in Light of tender document on the Letter Head enclosed with Annexure-A.	
4.	Duly Signed and Stamped Form of Bid (Financial) (Annexure-B)	
5.	Duly Signed and Stamped Letter of Service Quality 24/7 (Annexure-C)	
6.	Duly Signed and Stamped Letter of Acceptance of the Tender Document No. (Annexure-D)	
7.	Duly Signed and Stamped undertaking (e-Affidavit) on legal valid and attested e-stamp paper (Rs. 1200 or above etc.). (Annexure-E)	
8.	Tier 3 Data Center self-managed or co-located with managed Public Cloud Service	
9.	ISO 27000 /ISO 27001/ ISO 27017 or same series certifications for Cloud Infrastructure / security	
10.	Company/Firm/Supplier Profile and Business Portfolio enclosed with Technical Bid.	
11.	SAP S4HANA minimum three clients experience letters.	
12.	Registered FBR NTN (National Tax Number) and GST (General Sales Tax)/PST (Sales Tax) Certificates must be enclosed with Technical Bid.	
13.	Certificate of Registration Company/Firm/Service Provider enclosed with (Technical Bid).	
14.	Enclosed color pages of Brochure/Catalog/Literature/datasheets of products of Enterprise Cloud Managed Services must be enclosed with (Technical Bid)	
15.	Project of similar nature specifically in tender document for Signed stamped Documentary Evidence (Copies of Signed Contracts, SLA's, Purchase Orders, Work Orders which clearly represent the volume of services supplied in similar nature of projects in light of RFP document must enclosed with Technical Bid.	
16.	Compliance with complete RFP document with all terms and conditions.	
17.	Pay order/DD/CDR required @ Rs. 1 million in the shape of Pay Order/DD/CDR/ which must be attached with Technical Bid.	
18.	The responsive bidder/ company/ firm will start providing services in 4 weeks from the issuance of purchase/ service order. (Competent authority may give extension)	
19.	Complete bid/ each paper must be signed and stamped by the authorized representative of company	

20.	Qualified Bid will be decided on total price for the contract period	
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34. TERM OF REFERENCE (TOR'S) OF ENTERPRISE CLOUD MANAGED SERVICES

Enterprise Cloud Managed Services & Connectivity			
Sr #	Conditions and Standards	Remarks	Response
1	The bidder will arrange Proof of Concept according to the specifications in light of RFP document quoted in the bid, if and when required by Pakistan Railways HQS.	Mandatory	Yes No
2	The bidder must be a public cloud solutions provider, i.e., offering public cloud services to government entities/ public or private sector, not just for its own or its parent company's operations.	Mandatory	Yes No
3	The bidder must provide a Flexible Model of Cloud managed services which must be dynamic/changeable from the Cloud-based system specification mentioned above, as per ongoing requirements.	Mandatory	Yes No
4	Bidder will have the flexibility to Create and Modify or Destroy any instance according to Pakistan Railways need, within 4 hours.	Mandatory	Yes No
5	A list of General & Relevant (Public Sector/private) Projects by the bidder should be provided	Mandatory	Yes No
6	Cloud infrastructure should be ISO27000/ISO27001/ISO 27017 or same series certified.	Mandatory	Yes No
7	The bidder must have Tier 3 compliance data centers.	Mandatory	Yes No
8	The Bidder must have three year's experience in SAP S4HANA related hardware/ software to operate the SAP	Mandatory	Yes No
9	Cloud infrastructure should be strategically placed along with route optimization such that the latency from all cities in Pakistan is minimum.	Mandatory	Yes No
10	Cloud solution must be Managed in datacenters within boundaries of Pakistan	Mandatory	Yes No
11	Compute and Storage require to run the workload must be managed with the cloud orchestrator, high availability and backup services.	Mandatory	Yes No
12	Bidder should have a cloud operation management tool for management purpose and to oversee/ supervise cloud infrastructure.	Mandatory	Yes No
13	99.8 % services uptime will be ensured by bidder.	Mandatory	Yes No
14	24x7x365 technical support will be provided by bidder.	Mandatory	Yes No
15	Escalation matrix for complaint registration will be provided by bidder.	Mandatory	Yes No
16	The Bidder should have multiple Tier-1 uplink connectivity.	Mandatory	Yes

			No
18	Bidder will provide complete dashboard to Pakistan Railways for the monitoring and management of the Enterprise Cloud Managed Services	Mandatory	Yes No