

NOTICE INVITING TENDER (NIT)
FOR

“Fixation & Implementation of Proving Ground Management System Software at NATRAX”

NIT No. NATRAX/PROC/T&D/25/82

नेशनल ऑटोमोटिव टेस्ट ट्रैक्स (NATRAX), नेशनल ऑटोमोटिव बोर्ड (NAB) के तहत एक ऑटोमोटिव टेस्टिंग एंड सर्टिफिकेशन सेंटर है, जो भारी उद्योग मंत्रालय, भारत सरकार द्वारा गठित एक स्वायत्त निकाय है। NATRAX को लगभग 3000 एकड़ भूमि पर पीथमपुर, जिला धार, (मध्य प्रदेश, (सभी प्रकार के ऑटोमोबाइल के व्यापक परीक्षण और मूल्यांकन के लिए स्थापित किया गया है।	National Automotive Test Tracks (NATRAX) is an Automotive Testing & Certification Centre under National Automotive Board (NAB) which is an autonomous body under Ministry of Heavy Industries, Government of India. NATRAX has been set up on approx. 3000 acres of land for comprehensive testing and evaluation of all types of automobiles ranging from 2 wheelers to heavy commercial vehicles.
कृपया ध्यान दें, NATRAX, आदेश संख्या P-45021/2/2017-पीपी (बीई-II) दिनांक 4 जून 2020, के अनुसार उद्योग और आंतरिक व्यापार, भारत सरकार के संवर्धन विभाग द्वारा जारी "सार्वजनिक खरीद (मेक इन इंडिया को प्राथमिकता), आदेश 2017- संशोधन" पर आदेश और इस संबंध में अन्य दिशानिर्देशों का पालन करेगा	<i>Please note that, NATRAX shall follow the order on “Public Procurement (Preference to Make in India), Order 2017- Revision” issued by Department for Promotion of Industry and Internal Trade, Government of India, as per their Order Number P-45021/2/2017-PP (BE-II) dated 4th June 2020 and other guidelines in this regard.</i>

The details of the tender are as mentioned below;

Particular	<u>In Hindi</u>	<u>In English</u>
Name of work	<u>NATRAX में प्रोविंग ग्राउंड मैनेजमेंट सिस्टम सॉफ्टवेयर का निर्धारण और कार्यान्वयन</u>	<u>Fixation & Implementation of Proving Ground Management System Software at NATRAX</u>
अनुमानित लागत /Estimate Cost	<u>रुपये 40 लाख</u>	<u>Rs. 40 Lakh</u>
न्यूनतम पात्रता मानदंड/ Minimum Eligibility	जिन बोलीदाताओं की बोलियाँ निम्नलिखित मानदंडों को पूरा करती हैं, उन्हें ही उत्तरदायी माना जाएगा और NATRAX द्वारा उनका मूल्यांकन किया जाएगा।	The Bidders who's Bid meet the following criteria would only be considered as responsive and evaluated by NATRAX.

Criteria (MEC)	i. MEC 1: - कानूनी रूप से वैध इकाई: बोलीदाता को स्वामित्व/निजी भागीदारी/पब्लिक लिमिटेड कंपनी/निजी/सरकारी/सार्वजनिक/स्वायत्त कंपनी के रूप में एक कानूनी रूप से वैध इकाई होना आवश्यक है, दस्तावेज़ी साक्ष्य प्रस्तुत किए जाने चाहिए। संयुक्त उद्यम/संघ के रूप में अनुमति नहीं है। उपरोक्त के साथ स्वीकार्य दस्तावेज़ों की निम्नलिखित सूची भी प्रस्तुत की जानी चाहिए- क) फर्म का निगमन/वाणिज्यिक प्रतिष्ठान का प्रमाण पत्र/फर्म का लाइसेंस प्रमाण पत्र, आदि। ख) पैन कार्ड/जीएसटी पंजीकरण, पीएफ पंजीकरण, ईएसआई पंजीकरण, श्रम लाइसेंस और कोई अन्य लागू वैधानिक आवश्यकताएँ, आदि। ii. एमईसी - 2: वित्तीय क्षमताएँ: बोलीदाता के पास पिछले वित्तीय वर्ष (2022-23, 2023-24 और 2024-25) के 31 मार्च को समाप्त होने वाले पिछले तीन वर्षों के दौरान न्यूनतम औसत वार्षिक वित्तीय कारोबार 1 CR. रुपये के साथ न्यूनतम 3 वर्ष का अनुभव होना चाहिए। प्रासंगिक अवधियों की प्रमाणित ऑडिटेड बैलेंस शीट के रूप में दस्तावेज़ी साक्ष्य या चार्टर्ड अकाउंटेंट/कॉस्ट अकाउंटेंट से एक प्रमाण पत्र (यूडीआईएन नंबर के साथ) जिसमें प्रासंगिक अवधि के लिए टर्नओवर का विवरण हो, बोली और चालू वित्तीय वर्ष के गैर-ऑडिटेड वित्तीय आंकड़ों के साथ प्रस्तुत किया जाना चाहिए। यदि बोलीदाता के गठन/निगमन की तिथि 3 वर्ष से कम पुरानी है, तो गठन की तिथि के बाद पूरे हुए वित्तीय वर्षों के संबंध में औसत टर्नओवर को इस मानदंड के लिए ध्यान में रखा जाएगा।	i. MEC 1: - Legal Valid Entity: The Bidder shall necessary be a legal valid entity either in the form of Proprietary/Private Partnership/ Public Limited Company/ Private/ Govt./ Public/ Autonomous, documentary evidence should be submitted. In form of JV/Consortium not permitted. Following List of acceptable documents should also be submitted along with under above- a) Certificate of Incorporation/ Commercial establishment of firm/ License certificate of the firm, etc. b) PAN Card/GST registration, PF registration, ESI Registration, Labor License and any other applicable statutory requirements, etc., ii. MEC - 2: Financial Capabilities: The Bidder should have minimum 3 years' experience with Minimum Average Annual Financial turnover during the last three years, ending on 31st March of the previous financial year (2022-23, 2023-24 & 2024-25), should be as Rs 1 CRORE. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods OR a Certificate (with UDIN NO.) from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be submitted with the Bid and un-audited financial data of current Financial Year . In case the date of constitution /
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	स्टार्टअप पंजीकृत फर्मों के लिए, किसी टर्नओवर की आवश्यकता नहीं है और इसे स्टार्ट-अप नीति के अनुसार निपटाया जाएगा। बोली के साथ निम्नलिखित में से कोई भी स्वीकार्य दस्तावेज़ प्रस्तुत किया जाना चाहिए: क) ऊपर उल्लिखित प्रासंगिक अवधि के लिए प्रमाणित बैलेंस शीट, जिसमें यूडीआईएन होना आवश्यक है। ख) चार्टर्ड अकाउंटेंट/कॉस्ट अकाउंटेंट से प्रमाण पत्र जिसमें ऊपर उल्लिखित प्रासंगिक अवधि के लिए टर्नओवर विवरण दर्शाया गया हो, जिसमें यूडीआईएन होना आवश्यक है। iii. एमईसी-3 - समान कार्य: बोलीदाता के पास समान कार्य में कम से कम 5 वर्षों का अनुभव होना चाहिए और पिछले 5 वर्षों में निम्नलिखित मानदंडों को पूरा करते हुए समान कार्य* घटक को सफलतापूर्वक पूरा किया हो: - क. तीन समान पूर्ण कार्य जिनकी लागत 16.00 लाख रुपये से कम न हो; या ख. दो समान पूर्ण कार्य जिनकी लागत 20.00 लाख रुपये से कम न हो; या ग. एक समान पूर्ण कार्य जिसकी लागत 32.00 लाख रुपये से कम न हो; समान कार्य*: किसी भी सरकारी विभाग, प्रतिष्ठित फर्म, निजी संस्थान/शैक्षणिक संस्थान/आदि के लिए वाहनों/वस्तुओं/आवेदन स्वचालित लॉग आरएफआईडी/बार	incorporation of the Bidder are less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criterion. <u>For startups registered firms, no turnover is required and same shall be dealt as per the Start-up policy.</u> Any of the following acceptable documents to be submitted with Bid: a) Certified balance sheets for relevant period mentioned above, must necessarily have UDIN. b) Certificate from chartered accountant / cost accountant indicating turnover details for relevant period mentioned above, must necessarily have UDIN. iii. MEC-3 -Similar works: The Bidder should have at least 5 year of experience in the similar work and have successfully completed similar works* component in the last 5 years meeting the following criteria: - a. Three similar completed works costing not less than the amount Rs. 16.00 Lakh; or b. Two similar completed works costing not less than the amount Rs. 20.00 Lakh; or c. One similar completed work costing not less than the amount Rs. 32.00 Lakh; Similar Works*: successfully completed work pertaining to "Integrated Solution (Hardware+Software or anyone) for vehicles/objects/assert automated logs, customized
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	कोड/समान तकनीक के माध्यम से स्कैन करके अनुकूलित रिपोर्ट/रिकॉर्ड के लिए एकीकृत समाधान (हार्डवेयर+सॉफ्टवेयर या कोई भी) से संबंधित सफलतापूर्वक पूरा किया गया कार्य। MEC-4: बोलीदाता के पास डॉटनेट प्रोग्रामिंग में कम से कम 5 वर्ष का अनुभव रखने वाले कम से कम 2 सॉफ्टवेयर डेवलपर होने चाहिए तथा उन्हें अपने मुख्य सॉफ्टवेयर विकास टीम के सदस्यों की सूची प्रस्तुत करनी होगी, जो प्रस्तावित कार्य के निष्पादन के लिए सीधे तौर पर जिम्मेदार होंगे। इन प्रमुख पेशेवरों का विस्तृत बायोडाटा (सीवी) - जिसमें उनकी भूमिका, तकनीकी विशेषज्ञता और पूर्व परियोजना अनुभव स्पष्ट रूप से दर्शाया गया हो - मूल्यांकन और योग्यता के उद्देश्यों के लिए बोली के साथ संलग्न किया जाएगा। इसके साथ मैनपावर डिप्लॉयमेंट योजना भी शामिल होनी चाहिए। MEC-5 -: बोलीदाता को कम से कम तीन (3) ऐसे ग्राहक संदर्भ प्रस्तुत करने होंगे जहाँ समान सेवाएँ प्रदान की गई हों। इन संदर्भों का उपयोग बोलीदाता की सेवा गुणवत्ता और ग्राहक संतुष्टि के स्तर का आकलन करने के लिए किया जाएगा। प्रत्येक संदर्भ के लिए, बोलीदाता को निम्नलिखित जानकारी प्रदान करनी होगी: • ग्राहक/संगठन का नाम • संपर्क व्यक्ति का नाम • मोबाइल नंबर • ईमेल आईडी NATRAX प्रतिक्रिया और मूल्यांकन के लिए इन संदर्भों से संपर्क करने का अधिकार सुरक्षित	report/records while scan through RFID/BAR CODE/Similar technology ", for any Govt. Dept./Reputed firm Private Institution/Academic Institutions/etc. MEC-4 : The bidder should have at least 2 nos. of software developers having min. 5 years experince in dotnet programing and submit the list of their core software development team members who will be directly responsible for executing the proposed work. Each team member should possess relevant experience in similar software development, customization, and implementation projects of comparable scale and complexity. The detailed resume (CVs) of these key professionals – clearly indicating their roles, technical expertise, and prior project experience – shall be attached with the bid for evaluation and qualification purposes. The Manpower deployment plan should also be included with it. MEC-5 – : The bidder shall submit a minimum of three (3) client references where similar services have been provided. These references will be used for assessing the bidder's service quality and customer satisfaction levels. For each reference, the bidder must provide: • Client/Organization Name • Contact Person Name • Mobile Number • Email ID NATRAX reserves the right to contact these references for feedback and evaluation. Submission of valid references
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	रखता है। बोली पर विचार और योग्यता के लिए वैध संदर्भ प्रस्तुत करना अनिवार्य है। उपरोक्त एमईसी (iii) के प्रमाण के रूप में स्वीकृत दस्तावेजों की सूची: क) कार्य का मूल्य आदि के साथ पीओ/कार्य आदेश के साथ पूर्णता प्रमाण पत्र/पूर्णता की स्व-घोषणा। ख) यदि पूर्णता प्रमाण पत्र/क्रय आदेश (पीओ) में निष्पादित कार्य की लागत का स्पष्ट उल्लेख नहीं है, तो बोलीदाता को टीडीएस, सीए प्रमाण पत्र, उत्पाद शुल्क, जीएसटी रिटर्न आदि के रूप में नया सारांश और प्रमाण प्रस्तुत करना होगा। ग) यदि पीओ/कार्य आदेश/पूर्णता प्रमाण पत्र किसी निजी नियोक्ता द्वारा जारी किया गया है, तो उसकी प्रामाणिकता के समर्थन में फॉर्म 26AS प्रस्तुत किया जाना चाहिए। नोट: न्यूनतम पात्रता मानदंडों के समर्थन में दस्तावेज तकनीकी बोली में अनिवार्य रूप से प्रस्तुत किए जाने हैं।	is mandatory for bid consideration and qualification. List of accepted documents as proof of MEC (iii) above: a) Completion certificate/self-declaration of completion along with PO/ work order, with value of works, etc., b) Incase completion certificate/Purchase order (PO) does not clearly mention the value of work executed, then the Bidder shall submit the fresh summary & proof as TDS, CA certificate, Excise, GST returns etc., c) Incase PO/Work order/completion certificate issued by any private employer, then form 26AS should be submitted to support the genuineness of the same. Note: Documents in support of the minimum eligibility criteria are compulsorily to be provided in the technical bid.
Contract Period	अनुबंध सेवाओं की शुरुआत की तारीख से एक वर्ष की अवधि के लिए वैध होगा। यदि आपूर्तिकर्ता की सेवाएँ उसके अनुबंध की शर्तों के दौरान संतोषजनक पाई जाती हैं, तो अनुबंध की शर्तों में कोई बदलाव किए बिना अनुबंध को समान नियमों और शर्तों के साथ एक और वार्षिक अवधि के लिए बढ़ाया जा सकता है। इस संबंध में NATRAX प्राधिकरण का निर्णय अंतिम और बाध्यकारी होगा।	Contract shall be valid for a period of one year from the date of start of the services. However detailed timeline shall be as per TOR of this document. If the services of the Vendor are found to be satisfactory during his terms of agreement, the contract can be extended for another yearly term with same terms and conditions without any change in the conditions of the contract. The decision of NATRAX authority shall be final and binding in this regard.
Conditions for rejection of bids	बोलियाँ अस्वीकार की जा सकती हैं, यदि: I. निर्धारित समय और प्रस्तुत करने की तिथि के बाद प्राप्त होने वाले को नहीं खोला जाएगा।	Bids may be rejected, if; I. Bids that is received after the scheduled time & date of submission shall not be opened.

	II. निर्दिष्ट पात्रता/योग्यता मानदंडों को पूरा किए बिना प्रस्तुत किए गए कोटेशन पर विचार नहीं किया जाएगा। III. तकनीकी मूल्यांकन में भी बोलियाँ अस्वीकार की जा सकती हैं, यदि बोली में दिए गए किसी भी संदर्भ से प्राप्त फीडबैक संतोषजनक नहीं है।	II. Bids submitted without fulfilling the specified eligibility/qualifying criteria shall not be considered. III. The bids may also be rejected in technical evaluation, if the feedback received from any of the reference given in the bid is not satisfactory.
Manner of bid submission	बोलियाँ दो भागों में दो लिफाफों में प्रस्तुत की जानी चाहिए: i. तकनीकी बोली- जिसमें पात्रता मानदंड, तकनीकी मूल्यांकन, पूर्ण निविदा दस्तावेज की हस्ताक्षरित और स्वीकृत प्रति, बोलीदाता के अनुभव और क्षमता को दर्शाने वाले अन्य दस्तावेज से संबंधित सभी दस्तावेज शामिल होने चाहिए। ii. वित्तीय बोली- जिसमें इस निविदा के पृष्ठ पर संलग्न प्रारूप में दरें शामिल होनी चाहिए और इसे अलग से सीलबंद लिफाफे में प्रस्तुत किया जाना चाहिए।	The bids should be submitted in two parts in two envelopes: i. Technical Bid- consisting all the documents related to eligibility criteria, Technical Evaluation, signed and accepted copy of complete tender document, any other documents showing the experience and capability of bidder. ii. Financial Bid- Consisting the rates in the format attached on page 17/17 of this tender and same should be submitted separate sealed envelope.
Period of issue of tender documents.	From 15:00 Hrs on 24/10/2025 to 15:00 Hrs on 11/11/2025	
The Date of pre bid meeting : 31/10/2025 , 11:00AM (The queries of meeting shall be shared on below given email ID's before 29/10/2025) a.prabhakar@natrip.in; anuj.kumar@natrip.in	बोली-पूर्व बैठक की तिथि: 31/10/2025, प्रातः 11:00 बजे (बैठक से संबंधित प्रश्न 29/10/2025 से पहले नीचे दी गई ईमेल आईडी पर साझा किए जाएंगे) a.prabhakar@natrip.in; anuj.kumar@natrip.in, je.procurement@natrax.in,	
Last date/Time for submission of Bids	13/11/2025 को 15:00 बजे तक मुख्यालय कार्यालय NATRAX में / Up to 15.00 Hrs on 13/11/2025, at HQ office NATRAX	
Date/Time of opening of technical bids.	13/11/2025 को 15.30 बजे मुख्यालय कार्यालय NATRAX में / 15.30 Hrs on 13/11/2025 at HQ office NATRAX	
Date of Demonstration at NATRAX	तकनीकी बोलियों के खुलने/मूल्यांकन के बाद ईमेल आईडी के माध्यम से इसकी सूचना दी जाएगी। It shall be intimated through Email IDs after opening/evaluation of Technical Bids.	

- NATRAX बिना कोई कारण बताए निविदा को अस्वीकार/संशोधित/रद्द करने का अधिकार सुरक्षित रखता है। - दस्तावेज़ हिंदी और अंग्रेजी दोनों भाषाओं में तैयार किया गया है; हालाँकि किसी भी विसंगति के मामले में अंग्रेजी मान्य होगी। - सफल बोलीदाता को काम देने से पहले NATRAX के साथ एक अखंडता कोड समझौते पर हस्ताक्षर करना होगा। किसी भी बोलीदाता को किसी भी समय इस समझौते पर हस्ताक्षर करने से इनकार करने की अनुमति नहीं है; NATRAX के पास बोलीदाता की EMD (MSME फर्म के मामले में EMD राशि का दावा) जब्त करने का पूरा अधिकार होगा।	- NATRAX reserves the right to reject/modify/cancel the tender without assigning any reason thereof. - The document has been prepared in both the language Hindi & English; however, in case of any discrepancy the English shall prevail. - The successful bidder needs to sign an Integrity code agreement with NATRAX before awarding the work. No bidder is allowed to refuse to sign this agreement at any time if someone refusing; NATRAX shall have all the rights to forfeit the EMD of bidder (claim of EMD amount in case of MSME Firm).
बोली लगाने से पहले साइट पर प्रदर्शन और साइट का दौरा NATRAX प्रत्येक संभावित बोलीदाता को अपनी बोली जमा करने से पहले साइट का दौरा करने और सिस्टम आवश्यकताओं को अच्छी तरह से समझने की पुरजोर सलाह देता है। प्रदर्शन और एकीकरण में NATRAX के आंतरिक हार्डवेयर का उपयोग किया जाना चाहिए, जिसके विनिर्देश निम्नलिखित हैं: A. बूम बैरियर नियंत्रक: Honeywell 3000 प्रो B. रीडर: Zktecco C. बूम बैरियर: CAME D. सॉफ्टवेयर: Winpack (Honeywell) E. सर्वर: HP मेक रैक सर्वर यह प्रणाली 2020 में चालू की गई थी। बोलीदाता बुनियादी ढाँचे की वर्तमान स्थिति का विश्लेषण करने के लिए जिम्मेदार हैं। सिस्टम लक्ष्यों को पूरा करने के लिए आवश्यक कोई भी अतिरिक्त API विकास, हार्डवेयर आवश्यकताएँ, या बुनियादी ढाँचा बोलीदाता के दायरे में होगा।	On-Site Demonstration & Site Visit Before Bidding NATRAX strongly recommends every prospective bidder to conduct a site visit at ground zero and thoroughly understand the system requirements before submitting their bid. The demonstration and integration must use the NATRAX in-house established hardware, with specifications as follows: A. Boom Barrier Controller: Honeywell 3000 Pro B. Reader: Zktecco C. Boom Barrier: CAME D. Software: Winpack (Honeywell) E. Server: HP make rack server This system was commissioned in 2020. The bidders are responsible for analyzing the current condition of the infrastructure. Any additional API development, hardware requirements, or

तकनीकी बोली मूल्यांकन के न्यूनतम पात्रता मानदंड (MEC) अनुभाग में सफलतापूर्वक उत्तीर्ण होने के बाद, बोलीदाता को मौजूदा बुनियादी ढाँचे का उपयोग करके NATRAX में प्रस्तावित प्रणाली का ऑन-साइट प्रदर्शन आयोजित करना होगा। प्रदर्शन की सफलता सुनिश्चित करना बोलीदाता की ज़िम्मेदारी है, और इस गतिविधि के लिए NATRAX पर कोई शुल्क नहीं लगाया जाएगा।

मौजूदा प्रणाली की अनुकूलता प्रस्तावित प्रणाली के अनुरूप होनी चाहिए। बोलीदाता को यह सुनिश्चित करना होगा कि प्रस्तावित समाधान निविदा में वर्णित सभी मौजूदा NATRAX हार्डवेयर और सॉफ्टवेयर घटकों के साथ सहजता से एकीकृत हो, और इसके लिए मौजूदा व्यवस्था में कोई बड़ा बदलाव करने की आवश्यकता न हो। अनुकूलता और कुशल संचालन के लिए आवश्यक सभी अनुकूलन, इंटरफ़ेस या मिडलवेयर पूरी तरह से बोलीदाता की आपूर्ति और ज़िम्मेदारी के दायरे में आएंगे।

NATRAX प्रदर्शन और सिस्टम प्रदर्शन के आधार पर बोलियों को स्वीकार या अस्वीकार करने का अधिकार सुरक्षित रखता है। केवल वे बोलीदाता ही वित्तीय बोली चरण में आगे बढ़ेंगे जो अपने समाधान का सफलतापूर्वक प्रदर्शन करेंगे।

यह संरचना तकनीकी स्पष्टता और अनुपालन सुनिश्चित करती है, बोलीदाता की ज़िम्मेदारी के लिए अपेक्षाएँ निर्धारित करती है, और वित्तीय बोली पर विचार करने से पहले वास्तविक दुनिया के प्रदर्शन के आधार पर समाधानों का मूल्यांकन करने के NATRAX के अधिकार को सुदृढ़ करती है।

infrastructure needed to meet the system goals will be within the scope of the bidder.

After successful qualification in the Minimum Eligibility Criteria (MEC) section of the technical bid evaluation, the bidder must organize an onsite demonstration of the proposed system at NATRAX using the existing infrastructure. It is the bidder's responsibility to ensure the demonstration's success, and no charges will be levied upon NATRAX for this activity.

The compatibility of the existing system shall be in line with the offered system. The bidder must ensure that the proposed solution integrates seamlessly with all current NATRAX hardware and software components detailed in the tender, without requiring significant changes to the existing setup. All necessary adaptations, interfaces, or middleware required to achieve compatibility and efficient operation will fall strictly under the bidder's scope of supply and responsibility.

NATRAX reserves the right to accept or reject bids based on the demonstration and system performance. Only bidders who successfully demonstrate their solution will proceed to the financial bid stage.

This structure ensures technical clarity and compliance, sets expectations for bidder responsibility, and reinforces NATRAX's right to evaluate solutions based on real-world performance before financial bid consideration.

A. Scope of Work (SOW) for PGMS Software Remediation and Enhancement at NATRAX

1. Introduction

The contractor shall be responsible for the comprehensive remediation, enhancement, and optimization of the existing **Proving Ground Management System (PGMS)** software deployed at NATRAX.

The objective is to transform the current platform into a **fully integrated, automated, and intelligent system** that streamlines all booking, management, and operational workflows across the following domains:

- Test Tracks
- Laboratories
- Workshops
- Add-On and Auxiliary Services

The upgraded system must ensure seamless interoperability among departments, improved user experience, enhanced reporting and analytics, robust financial and security integration, and adherence to institutional policies and government IT standards.

2. System Users and Account Management

- Implement a **multi-tier user management system** supporting registration, approval, and verification workflows for both internal (NATRAX staff) and external (customer/vendor) users.
- Introduce **role-based access control (RBAC)**, defining hierarchical structures such as Master Company, Department, Sub-Department, and Individual Users.
- Enable **secure authentication mechanisms** including password encryption, OTP/email verification, and optional **multi-factor authentication (MFA)**.
- Provide administrative capability for creating, editing, and mapping user roles, departments, and privileges with **full audit trails** and **version history**.
- Develop **self-service dashboards** for password reset, profile updates, and access requests while maintaining centralized administrative supervision.

3. Booking and Resource Scheduling Modules

- Enable **end-to-end digital booking workflows** for all operational entities – Tracks, Labs, Workshops, and Add-On Services.
- Design an **intuitive booking interface** allowing users to:
 - Create booking requests (RFQ → Quotation → Service Selection → PO Upload)
 - Check real-time availability of tracks, vehicles, equipment, and manpower
 - View alternate slots or facilities in case of conflicts
- Develop **automated approval workflows** with multi-level authorization (user → admin → finance → management).

- Enable **real-time notifications** via email, SMS, and in-portal alerts for each stage of booking and approval.
- Introduce **calendar-based scheduling**, with color-coded visualization of confirmed, pending, and blocked slots.
- Support **dynamic rescheduling**, cancellation, and live editing of bookings with proper audit trail and access restrictions.
- Include parameters for **exclusive vs. shared usage**, cut-off timings, and configurable operational rules per service type.

4. Quotation, Purchase Order (PO), and Approval Automation

- Develop **automated quotation generation** (unit rate, package, or event-based) integrated with booking workflows.
- Allow role-based approval and editing of quotations by admin or finance personnel.
- Enable automated **PO upload and validation**, tracking of consumption against approved PO values, and auto-locking once limits are reached.
- Automate **priority handling of bookings** based on PO validity, financial thresholds, and contractual hierarchies.
- Introduce auto-alerts for **PO expiry, limit consumption, or threshold breaches**, minimizing manual intervention.
- Support exemption workflows for long-term or annual contract customers.

5. Usage Logging, Live Consumption Tracking, and Asset Management

- Develop real-time modules to **log all usage data** (track runs, lab hours, workshop time, add-on services).
- Compare **booked vs. actual usage** and flag deviations for review or billing adjustment.
- Generate **daily usage logsheets** and **performance dashboards** for internal and customer review.
- Integrate with **RFID/GPS/barcode systems** for automatic asset tagging, issuance, and return tracking (vehicles, tools, walkie-talkies, etc.).
- Allow **offline/manual entry** in exceptional cases with justification notes and approval workflows.
- Maintain detailed **audit trails** for every edit or entry.

6. Financial Integration: Invoicing, Pre-Invoice, and Tally Interface

- Automate the **draft/pre-invoice and final invoice generation process**, incorporating all service components, add-ons, and applicable discounts.
- Provide review workflows for both admin and customer before final invoicing.
- Integrate with **Tally ERP** for synchronized posting of billing data and ledger updates.
- Enable **GST-compliant e-invoicing** with digital signature support and auto-generated invoice numbers.
- Provide combined or split invoicing options based on user, department, or PO.

- Implement **payment reconciliation dashboards** with alerts for pending or disputed invoices.

7. Workshop, Lab, and Add-On Service Workflow Automation

- Build distinct yet integrated modules for **Workshop, Lab, and Add-On Service** operations.
- Support per-unit, per-hour, per-sample, or per-project billing configurations.
- Enable **multi-day and recurring bookings**, accommodating long-duration testing.
- Allow resource mapping by department, vehicle, or test type with appropriate approval hierarchies.
- Track consumables, spare parts, and tool allocation within each booking cycle.
- Ensure **authorization checkpoints** at each workflow stage (initiation → execution → completion → billing).

8. Visitor Management System (VMS) Integration

- Incorporate a **complete visitor management workflow** from pre-registration to exit.
- Automate generation of digital or printed **badges/passes/permits**, linked to booked slots or events.
- Integrate with **security and access control systems (RFID, QR, or Face ID)** for automated check-in/out.
- Enable live visitor tracking and centralized dashboard for the security team.
- Maintain **audit-ready logs** for all visitor entries/exits and access privileges.

9. Canteen, Coupon, and Miscellaneous Service Integration

- Link canteen booking and coupon issuance directly to user bookings or events.
- Enable automatic logging of meal usage, access limits, and top-up/recharge functions.
- Provide admin control over meal entitlement per user, department, or visit category.
- Integrate other auxiliary services such as **EV Charging, Sandbag Use, Equipment Rental and Conference Facilities** into a unified billing and reporting platform.

10. Reporting, Compliance, and Audit

- Provide **automated, configurable reports** (daily, monthly, quarterly, annual) covering bookings, usage, revenue, and resource utilization.
- Maintain **immutable audit logs** of all user activities, including booking edits, approvals, cancellations, and asset transactions.
- Ensure compliance with **data integrity, traceability, and ISO/IT policy standards**.
- Include **dashboard-based analytics** for management decision-making and KPI tracking.

11. Usability, Training, and Documentation

- Deliver detailed **User Manuals, Quick Reference Guides, and Training Videos** for all modules.
- Conduct **batchwise training sessions** (onsite and online) for NATRAX personnel and key customers.
- Ensure ongoing **user feedback capture and improvement cycle** post-deployment.

12. Security, Workflow Controls, and Escalation Protocols

- Implement **multi-layer data security** with encryption of credentials, role-based view rights, and secure API interactions.
- Establish **error handling, system logs, and incident reporting** across all modules.
- Define clear **escalation matrices** for technical faults, workflow interruptions, or approval delays.

13. Transition, Testing, and Acceptance

- Conduct **parallel runs** to validate upgraded modules alongside existing workflows.
- Ensure smooth **data migration** from legacy systems without loss or corruption.
- Carry out **Functional Testing, Integration Testing, and User Acceptance Testing (UAT)** jointly with NATRAX representatives.
- Deliver final software only after **defect-free demonstration, documentation handover, and formal acceptance sign-off** by NATRAX.

Present System Limitations and Resolution Plan

During the implementation and operational phase of the current PGMS version, several **technical, functional, and data-flow limitations** were observed across modules.

The following consolidated section outlines the **key issues** and **expected resolutions** under this enhancement scope.

A. Track Booking & Usage Related Issues

Module / Area	Observed Limitations	Resolution / Enhancement Scope
Customer Registration	Customers face difficulty in creating accounts and bookings; lack of intuitive flow.	Redesign registration and onboarding flow to be self-explanatory; include embedded User Manuals, Tooltips, and Help Videos directly on Dashboard.
Company Registration	Multiple accounts created for same company across departments.	Enable Master Company with Sub-Department structure , allowing multiple teams under one GST or master entity.
Track Usage vs. PO Line Items	No live linkage between PO value and booking usage.	Create a real-time consumption tracker that displays available PO balance (hours/value) to customer and admin.

Module / Area	Observed Limitations	Resolution / Enhancement Scope
Add-on Services (Sandbags, Weigh Bridge, etc.)	Job cards and manual records not linked to PGMS.	Introduce digital/manual job card issuance , linked to booking ID, with real-time updates by gatekeeper/facility operator.
Instruments Issuance Record	No linkage between instrument issue and booking.	Develop Instrumentation Management sub-module integrated with booking and usage logs.
Workshop Ledger	Incomplete linkage of workshop in/out data with main booking.	Sync Workshop Calendar, Usage Logs, and Track Bookings into one invoiceable record.
Canteen Coupons	Customer canteen usage not linked to booking.	Sync Canteen Coupons with customer booking ledger; auto-reflect in billing.
PO Verification (Repetitive)	Repetitive PO uploads and approvals even for annual customers.	Exempt annual/long-term contract customers from repetitive PO uploads; system to auto-track consumption and alert before limits.
Live Booking Edits	No flexibility for rescheduling due to weather, maintenance, etc.	Introduce Live Booking Modification & Rescheduling window for customers with admin approval and full audit trail.
Exclusive Booking Window	Exclusive slot booking not functioning.	Enable robust exclusive booking calendar , with auto-slot blocking, cutoff timings, and admin override rights.
Quotation Management	Limited to 2-hour estimates; not customizable.	Expand RFQ categories (standard, customized, event, agency-based) with self and admin quotation generation, discounts, and finance approval hierarchy.
Track Downtime / Maintenance	Customers not informed of planned maintenance.	Show Live Downtime and Maintenance Schedules on booking calendar with alerts.
Weather Data	Absent from portal.	Integrate Live Weather and Track Condition APIs , with historical data logs accessible to customers.
Usage / Consumption	No real-time PO usage linkage.	Enable Dynamic PO Consumption Dashboard and auto-generation of utilization sheet (by booking, company, and month).
RFID Linking	Non-functional RFID data not linked with booking.	Allow manual override, replacement RFID synchronization, and real-time correction window for data integrity.

B. Laboratory, Workshop, and Miscellaneous Booking Issues

Module / Area	Observed Limitations	Resolution / Enhancement Scope
Powertrain / Lab Booking	Incomplete master data and overlapping bookings.	Update master lists , ensure calendar-based scheduling with conflict resolution.
Quotation Management	No online quotation generation.	Enable unit-rate and customized quotation generation , with workflow to Lab In-Charge → Customer approval.
Usage Sheet Editability	Manual edits without audit logs.	Maintain audit-tracked edit logs , editable by authorized roles only before billing.
VDY Lab Document Verification	Missing verification/rejection flow.	Add document verification tab with reject & comment fields; auto-email feedback to customer.
Scheduling & Sample Tracking	Missing start/end testing periods.	Add sample receipt, test start/end date fields; linked to utilization tracking.
Instrument Booking	Availability and scheduling not reflected.	Introduce instrument calendar view with availability status, approval workflow, and notification system.
Instrument Usage & Return	No linkage of usage and return in PGMS.	Automate handover-return tracking , with damage reporting workflow.
Workshop Scheduling	Workshop availability not visible.	Introduce Workshop Calendar Integration with Track Booking.
Misc. Services (EV Charging, Sandbags, etc.)	Manual job cards and no live usage tracking.	Implement Job Card-based usage recording with admin review and automatic billing integration.

C. Canteen & Visitor Management System Issues

Module / Area	Observed Limitations	Resolution / Enhancement Scope
Canteen - Customer Module	Add-on service booking not linked to canteen; one-day limitation.	Integrate Canteen Booking with Test Facility bookings; issue RFID Lunch Cards auto-linked to PO, with daily swipe-based consumption recording.
Canteen - Guest & Cash Modules	Forms and flows non-functional.	Enable Guest Coupon & Cash Coupon workflows through Security/ Admin panel with complete reconciliation in daily reports.
Visitor Management System	Only one-page entry, no workflow for approvals or exit.	Build End-to-End Visitor Workflow including: pre-registration, employee approval, RFID/barcode gate pass issue, access control, and exit logging. Include categories for customers, contractors, and staff.

D. Finance & Accounts (F&A) Related Issues

Module / Area	Observed Limitations	Resolution / Enhancement Scope
PO Verification	Usage not reducing from PO; no alarms on consumption.	Auto-deduct usage values from PO ; generate alerts when 90% consumed; restrict further booking.
Verification Authority Control	PO verification rights open to all.	Restrict verification access to Accounts Department only .
Service Sheet & Booking Corrections	Maintained manually.	Automate Service Sheet Generation via PGMS, with multi-level validation before invoicing.
Tally Integration	Partial or non-functional.	Enable bi-directional Tally integration , ensuring synchronized invoicing and payment ledgers. The Tally Integration API shall be at NATRAX End.
Pre-Invoice Generation & Review	Delays and visibility issues.	Automate trigger-based pre-invoice creation post-usage finalization; provide customer preview with approval and digital acknowledgment.
Notification Delays	Email/alert failures cause delayed approvals.	Strengthen notification engine for email/SMS/app alerts with redundancy and delivery tracking.

3. Key Enhancement Deliverables

1. **Unified Workflow Integration** – Tracks, Labs, Workshops, and Add-ons in a single digital flow.
2. **Comprehensive Reporting Dashboards** – Real-time booking, consumption, and billing visibility.
3. **Automated Billing System** – Linked to PO, quotation, and usage sheets with audit-trail-based invoice generation.
4. **Customer-Centric UI/UX Improvements** – Self-service tools, interactive help, and intuitive navigation.
5. **Compliance and Audit Controls** – Immutable logs, approval hierarchies, and secure data storage.
6. **Visitor & Canteen Integration** – RFID-based monitoring and billing linkage.

NATRAX has tried to include all essential functional, technical, and operational requirements within the above Scope of Work. However, it shall be the **sole responsibility of the prospective bidder** to thoroughly **study, evaluate, and interact with the existing system**, including its hardware, software, network, and integration limitations, and to propose a **comprehensive, stable,**

and fully functional solution that meets the complete operational requirements and satisfaction of NATRAX.

The **preparation, validation, and submission of a detailed Software Requirement Specification (SRS)** document – covering all modules, integrations, and workflows – shall also form an integral part of the bidder's deliverables under this scope.

B. Other Terms and conditions

1. **Payment:** 50% payment within 30 days from the date of completion of Development & fixation work, on submission of tax invoice with supporting documents. Balance 50% shall be released in 4 equal parts (quarterly) after successful completion of respective quarter.
2. **CONTRACT PERIOD:** For Development & fixation of existing software- 04 (Four) Months from the date of work order, failing which LD will be charged.
3. The annual maintenance shall be One year from the date of successful fixation and acceptance by NATRAX.
4. **Bidder may submit additional one more year AMC charges as an optional item of work and Bidder. Being optional item the bidder to adhere to the additional AMC quote.**
5. **PENALTY FOR DELAY/LD:** on any delay in completion of Development & fixation of existing software NATRAX reserve the rights to impose LD/Penalty upto 10% of contract value (0.5% per week).

C. Price Bid Format (to be executed on the letter head of bidder)

Note: this should be submitted in separate sealed envelope or password protected file and not submitted in technical bid.

S.N.	Description	Unit	Qty	Unit Rate (with GST)	Total Amount with GST
1.	Development & fixation, of PGMS software as per scope of work defined in this tender document. Within a period of 4 months	Nos.	01		
2	First year AMC (comprehensive) after successful commissioning of PGMS	Quarterly	04		
	Sub Total				
3	Optional for additional one year AMC (comprehensive)	Quarterly	04		
	Total				

NATRAX reserves the right to award AMC.

Signature of bidder