



Expression OF INTEREST

**Establishment of Railway Engineering, Technologies & Skills
School (NURETTS)**

**NUTECH /SCM/ Feasibility Study NURETSS
(Advance Railway Technologies/24-25 TD-728**

NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH)

National University of Technology Islamabad

Request for EXPRESSION OF INTEREST

Project: Establishment of NUTECH Railway Engineering, Technologies and Skills School (NURETSS) at National University of Technology (NUTECH) – Hiring of firm for Feasibility Study of Advanced Railway Technologies Innovation Centre (ARTIC).

National University of Technology (NUTECH) Islamabad invites Expressions of Interest from qualified consultants to conduct a comprehensive feasibility study for the establishment of the Advanced Railway Technologies Innovation Centre (ARTIC) under the NUTECH Railway Engineering, Technologies and Skills School (NURETSS). This initiative aims to support Pakistan Railways and allied industries through high-end education, research, development and innovation.

NUTECH plans to establish ARTIC, focusing on high-speed rail (HSR) technologies based on R&D and human resource development.

SHORT LISTING CRITERIA

- As mentioned in Bidding documents.

Feasibility Study NUURETSS (ARTIC)

- a. Technological viability for future in global perspective.
- b. Academic viability for R&D support to Pak Railways for development.
- c. Business development prospects and viability for future.
- d. Envisaged benefits for National & Global Railway industry
- e. Anticipated R&D value in terms of technologies & skills development for Pakistan.



TENDER NOTICE

National University of Technology Islamabad

NUTECH / SCM / Feasibility Study NURETSS (Advance Railway Technologies) / TD-728

- Bidders will be required to submit Pay order/DD amounting to Rs.1.00 Mn as bid bond in favour of NUTECH (AC # 0341-00316702674-7)
- Detail of bids and submission of tender is provided below: -
- Tender will be submitted through EPADs under “**Single Stage Two Envelope Method**”

Sr.	Description	Bank Account Details	Tender Closing time/ date	Tender Opening time/ date
a.	Feasibility Study NURETSS (Advance Railway Technologies) TD-728	NBP, Development Project Security, AC # 0341-00316702674-7	18 March 2025 1130 hrs.	18 March 2025 1200 hrs.

- Pre Bid meeting will be held on **06 March 2024, 1100 hours** at below mentioned address.
- Tender can be downloaded from PPRA and NUTECH websites.

Note: - All bidders participating through EPADs will be bound to submit original bid security along with letter head at the address given below.

Supply Chain Management Office (SCM)
 National University of Technology, (NUTECH)
 Main IJP Road, Sector I-12, Islamabad
 Ph: 051-5476768, Ext: 278, 308
 Cell No# 0301-8081726
 Email Add: scm.office@nutech.edu.pk

EXPRESSION OF INTEREST

Tender submission time: 1130 hrs. on 18 March 2025

1. NUTECH desires to hire services of consultancy firms for “**Feasibility Study of Advanced Railway Technologies Innovation Centre (ARTIC)**”.
2. **Conditions Governing Contracts.** The contract made as result of this tender documents will be in accordance with the draft contract published on NUTECH University website and other special conditions (Mentioned in this document) that may be added to given contract for the supply of equipment.
3. **Delivery of Tender.** The offer is to be submitted through EPADs PPRA as per “**Single Stage Two Envelope**” method.

Validity of Offer. The validity period of quotations must be indicated and should be **90 days** from the date of opening of financial offer.

4. **Withdrawal of offer.** If the firm withdraws its offer within validity period the competent authority may place such firm under embargo for a period, which may be extended up to one year. Moreover, the bid security of the firm will be confiscated.
5. **Earnest Money / Bid Security.** Rs 1 Million in shape of DD/ Pay order in favour of NUTECH
6. **Return of Earnest Money/Bid security.**
 - a. Bid security to the unsuccessful bidders will be returned on finalization of the lowest evaluated bidder.
 - b. Bid security of the successful bidder/bidders will be retained as performance bond until the completion of warranty/ guarantee period

7. **Terms of Payment**

No mobilization or advance payment will be made to the consultant. The payment will be made as per schedule given below:

- (1) Upon Submission of Inception Report 05%
- (2) Upon submission of draft report 30%
- (3) Upon submission of final report 30%
- (4) Upon approval of final report 35%

(Applicable government taxes will be deducted at source at the time of payment. Payment will be made in PKR)

8. **Taxes/ Duties/ Custom clearance** All taxes /duties /import Licenses Fee as applicable under government laws in Pakistan as well as country of supplier shall be on Seller

9. **Insurance.** (Not Applicable)

10. **Delivery Schedule.** Services/ final report will be delivered within **90 Days** from contract signing date.

11. **Force Majeure.** If non-compliance with the period of delivery or services can be proved to be due to Force Majeure, such as but not limited to mobilization, war,

riot, strike, lockout, pandemics/epidemics or the occurrence of unforeseen events, the period shall be reasonably extended.

12. **Subletting** Consultancy firms are allowed to sublet part of the contract to any other foreign/ 3rd party evaluation firm/ company with prior permission of NUTECH. Firm found in breach of the clause will be dealt with as per purchaser's right and discretion.
13. **Arbitration.** Will be as under: -

"All Claims, disputes, controversies, differences arising out of or in connection with this contract, including any question regarding its existence, validity, interpretation performance, breach or termination, shall be referred to and shall finally be solved by binding arbitration. An Arbitration Committee Shall be constituted comprising Rector NUTECH and two Arbitrators to be nominated on mutual agreement by each party. The venue of the Arbitration shall be the place of issuance of this contract or as Rector NUTECH may determine. In case of any difference, the clauses of Arbitration Act 1940, Rules and Regulation made thereof for time being enforce shall prevail. The award shall be final and binding on both parties.

 - a. Provided that written record of any such arbitration and its award shall be arranged properly.
An award of such arbitration may be confirmed in a court of competent jurisdiction at Islamabad.
 - b. Provided further that incase of any other question /dispute not covered under this clause, the decision of Rector NUTECH shall be final."
14. **Redress of Grievance.** In case of dispute, case shall be reviewed by NUTECH Redress of grievance committee and decision of NUTECH shall be final and binding on both parties.
15. **General Instructions:** Following must be noted:-
 - a. The firm should provide point to point acceptance of each clause of tender documents and special instructions attached with tender documents.
 - b. Firm will render a certificate with technical offer that firm is neither defaulter nor blacklisted by any Government / semi Government organization directly or indirectly. (On Judicial Paper)
 - c. The stipulated delivery period should be strictly adhered to. Any anticipated delay that is beyond the control of Seller will be informed (in writing) well in advance of the expiry of the due date of the activity along with reasons thereof, requesting for the grant of extension in delivery period. If the consultancy firm fails to do so, or the buyer is not convinced with the

rationale provided by the seller, liquidated damages up to/at 0.10% per day will be imposed. However, the maximum limit of the Liquidated Damages will not exceed 10% of the delayed store value.

If even after applicability of 10% LD, the Seller fails to deliver the required services, the Client will be at liberty to Cancel the contract, and /or procure the of services from an alternate source, on the "Risk & Cost/Expense/Method".

- d. NUTECH reserves the right to cancel the Contract without assigning any reason whatsoever during its currency / execution / after placement, if the firm is found to be involved in any dubious activity, litigation, lacking to meet contractual obligations with the purchaser or is blacklisted with any other Public procurement agency. No claims / loss /damage of whatsoever nature shall be entertained and NUTECH's decision in this regard will be final / binding on the Seller.
- e. An appropriate amount may be paid for mobilization against Bank Guarantee/CDR/Demand Draft/Pay Order.
- f. Firms with previous pending/outstanding projects/business and unsatisfactory performance with NUTECH may not be considered for award of any further business.
- g. Lowest evaluated bidders must send their authorized representatives (with authorization letter) for signing of the contract within three days of sharing of the draft contract.
- h. For technical opening firm will send a representative who has knowledge about the quoted items otherwise representative will not be allowed to sit in tender opening.
- i. Stamp duty for Contract will be taken as per Section 22-A of Stamp Act 1899 Pakistan.

Deputy Director
Supply Chain Management Office

Scope and TORs
Feasibility Study for Establishment of
Advance Railway Technologies Innovation Centre (ARTIC)
Under NUTECH Railway Engineering, Technologies and Skills School
(NURETSS)

1. **Scope of Feasibility Study.** The consultant is required to conduct feasibility study, ensuring that the work complements the concept and design of ARTIC by the other experts in the development of the proposal. The consultant is expected to coordinate with and get technical and professional inputs from related international and national consultants, PR, MoR, National/International universities offering similar academic / R&D services, relevant industry and stakeholders as deem relevant. On the basis of information and data collected, consultation sessions will be organized with above mentioned relevant stake holders. The record of discussion (RoD) of consultation session will be made part of feasibility study. The consultation will liaise with the relevant professionals, academia and industry to obtain their valuable inputs for the feasibility study. The study will cover all important aspects as part of its scope. The scope will entail need assessment, impact analysis, infrastructure requirements to achieve desired objectives. The scope will ascertain sustainability of ARTIC by exploring return on investments (RoI) viability in terms of intellectually academic and skills systems etc. The study will have the scope to ascertain financial and economic viability of ARTIC project including development plan of project.

2. **Term of Reference (TORs)**

- a. To highlight the current status of Pakistan Railway (PR) from an operational, technical, financial and other related perspectives by analyzing the various factors responsible for affecting the performance of PR both at the local and global level.
- b. Breakdown of Pakistan Railways (PR) Human Resources (HR) of various categories; management, engineers, technologists, support staff etc. Forecasting current and future 10-15 years technical and management HR requirements of PR and allied industries particularly with reference to future ML-1, 2 and 3 projects.
- c. A comparative study with regional / neighboring countries who are generating revenues and providing cost effective services to the public by utilizing latest technology.
- d. Readiness for transforming PR into technologically advanced enterprise of 21st century and creating PR capacity in terms of HR, O&M technologies and required skills for ML-1, 2 & 3 projects.

- e. Determine the number of established academics Engineering Technologies and Skills Institutions and R&D centers around the region / world.
- f. Identify the impact of absence of academic / R&D and similar institutions on Railway, allied automobile industry and socioeconomic development.
- g. Conduct a need-benefit analysis for establishing ARTIC in Pakistan and role of other higher learning institutions, R&D organizations and concerned Industry.
- h. Identify processes to develop and implement laboratories of ARTIC in accordance with international standard ISO / IEC 17025 in order to recognize ARTIC globally as product certification / accreditation / testing center of NURETSS.
- i. Possible collaboration of similar institutions between Academia. PR and allied industry at national / regional / world level.
- j. Business plan for sustainability of NURETSS and ARTIC. The consultancy firm shall be required to prepare and present different financing / investment options for the NURETSS / ARTIC. These options can include, but are not limited to investment based on grant from GoP etc. The consultancy firm shall recommend the most optimal method of financing and sustaining the NURETSS / ARTIC based on an implementable business model and supported by a detailed.
- k. In collaboration with the engineering team, design and prepare schematic drawings with technical specification of the required infrastructure with bill of quantities (later on if required).
- l. Outline realistic time line for the proposed set of activities
- m. Identify the barriers and challenges - if any - that could determine the sustainability the project
- n. Identify and analyze any governance and capacity issues that will be critical during the implementation of the project as well as to ensure sustainability of the project
- o. **Third Party International Evaluation of Feasibility Study.** Technical services of sister international ranked institutions, preferably having experience of conducting / supervision of similar study OR offering similar academics and R&D programs will be hired for evaluation of draft feasibility study and input before finalization of feasibility study.

3. **Feasibility Study Conduct Modality**

- a. Data Collection. Consultants also have to collect data from all relevant stakeholders in the ICT region i.e Universities, R&D Organizations of MoST Universities and department etc. for construction of ARTIC at ICT region in specific and generally for

overall all country with respect to HE research development for both universities and industry. Undertake the required studies on a random sample based on primary or secondary data for analysis to achieve the objectives of the study. The consultant will compile and analyze the data. The consulting firm is required to select sufficient sample required keeping in view the diversification in subject area, national/international distribution, national and international job market conditions and research courses, existing research support based infrastructure facilities in the country but not limited to following;

- (1) Collection of data from relevant stakeholder through desk review, interviews, focus group discussion, surveys/investigations and use of appropriate statistical tools to come up with realistic and applicable proposals and report.
- (2) How effective, efficient, relevant and sustainable would be the construction of ARTIC at ICT its possible research labs, programs, infrastructure in light of demography and local research support resources.
- (3) Relevance of construction of proposed center (ARTIC) to the job market of Islamabad Lahore and Karachi regions and overall HE research sector of Pakistan, current and future prospects.
- (4) Analysis of exiting research programs and infrastructure of universities in the ICT territory and recommendations for provision of expert research based workforce locally to cater current and future needs of the country.
- (5) Identify the research knowledge gap of existing potential researchers of the country from multiple disciplines.
- (6) Identify the research programs and contents for existing and future technology research in railway sector of Pakistan keeping in view national and international railway industry, resources, etc.
- (7) Propose a sustainable model for province wise development, expansion and future roll over plan of Higher Education research sector of Pakistan.

b. **Business Plan for ARTIC.** The consultant will prepare comprehensive business plan of ARTIC in the light of prevalent best international practices of similar R&D institutions/ setups/ centres around the world. The plan most incorporates the identified needs of national and international industry in terms of the creation, development and commercialization of emerging railway technologies. The plan should ensure economic sustainability of the project through anticipated earnings from industry in the long term and in sustainable basis, business plan of the project must be an integral

part of the study by the consultant. All relevant data, graphs and pictures will be attached with the plan as part of the study.

- c. **Deliverables Under Contract.** The consultant will submit Four (4) copies of Inception Report within 15 days from the award of the contract. The firm should also be bound to submit all data and information collected. The Client will submit its comments within 14 days on the inception report. The Consultant will incorporate these comments and will submit 10 copies of the final report after incorporating the comments of the client. After completing the techno-economic feasibility study, the firm should submit first draft of the report within 30 days and present the results to selected audience. The consultant should present and submit a draft comprehensive report to the client for comments. This draft report should be fully supported by the data, tables, pictures and illustrations where necessary and should include following aspects:
- (1) Business Plan for ARTIC at NURETSS
 - (2) Technical Viability & Sustainability of the project
 - (3) Forecasted HR development in next 5 years, Research output, industrial- academia revenue generation, industrial forecasted business revenue direct & indirect.
 - (4) Forecasted Railway HR, technology and Research deliverance commercialization to other countries in region & Golf countries.
- d. 4 copies of the final report will be required after incorporating the comments of the client. Procuring agency will publish the final report for wider circulation. The final contents and graphics/illustrations must be in printable form. The deliverables will be property of the client and cannot be used without prior written permission of the client. The consultant will submit electronic copies of all the deliverable to the client along with above mentioned hard copies.
- e. **Time Period for Assignment.** Total time allocated for conducting the assignment is 90 days starting from the date of signing agreement with procuring agency for the issuance of award letter.
- f. **Shortlisting Criteria.** Qualification & Experience: -
- (1) Five (05) years overall experience having minimum 01 project to conduct academic and techno-economic studies in public and/or private sector
 - (2) Valid Registration with PEC/PCATP, SECP and FBR.
 - (3) Verifiable statistical and research expertise, as relevant to the TORs
 - (4) Proof of experience of preparing quality reports which are concise and succinct to allow policy and technical decisions.

- (5) Profile of the firm and clients served in last five years in relevant academic research assignments of similar nature.

g. **Evaluation/ Qualification Criteria** is mentioned below.

Technical Evaluation Criteria (St)		
Ser	Description	Marks assigned
1	PEC registration	5
2	FBR active tax payer	5
3	General experience as consultancy	10
4	Specific experience related to particular assignment	15
5	Enlistment records / Certifications with different Govt organizations / agencies	5
6	Approach & Methodology (work schedule, staffing schedule, proposed solution for this project, suggested changes for improvement in TORs, identification of problems / objectives, problem statement / understanding of objectives, conciseness, clarity and completeness of proposal)	15
7	Key Staff related to current study	15
8	a. General performance certificate from different client	05
	b. Performance certificate from past clients related to current projects	05
9	Current professional engagement	10
10	Working capital in last 3 years (Audit Report of last 3 years)	5
11	Blacklisting / litigation	5
Total		100
Note: Technical Evaluation 70% Financial Evaluation 30% Total = 100%		

Financial Evaluation Criteria (Sf)

Evaluation of Financial proposals can be evaluated through the formula given below:

$$\mathbf{Sf} = 100 \times \mathbf{Fm} / \mathbf{F}$$

Whereas,

Fm = 1st Lowest financial Proposal

F = 2nd Lowest Financial Proposal

Sf = Financial Score

NOTE: The lowest Financial proposal among all shall be given a financial Score (Sf) of 100 Points.

Combine Evaluation (S)

Proposals, in the Quality cum Cost based selection shall finally be ranked according to their combined technical (St) and financial (Sf) scores using the weightages i.e., Tech = 70% & Fin = 30%.

$$\mathbf{S} = \mathbf{St} \times \mathbf{T} \% + \mathbf{Sf} \times \mathbf{F} \%$$

NOTE: The highest scored consultancy firm will be considered as the "Most Advantageous Bidder"

Special Conditions

1. The contract will be awarded on quality cum cost basis. Criteria is given in scope & TORs.
2. The firm will incorporate a third party international firm for preparation of feasibility study.
Charges of this service will be borne by the consultancy firm. NUTECH will examine the credibility of such third party international firms.
3. As this is a technology based feasibility study, lead has to be with the technical side.
4. The original bid security should be submitted along with letter head of the firm to NUTECH.
5. **Outline on which the feasibility study will be done is given below.**
 - a. Technological viability for future in global perspective
 - b. Academic viability for R&D support to Pak Railways for development
 - c. Business development prospects and viability for future
 - d. Envisaged benefits for National & Global Railway industry
 - e. Anticipated R&D value in terms of technologies & skills development for Pakistan.