



# Memorandum of Understanding

on

'Evaluation of Entries received during Public Challenges floated by Ministry of Railways'

## Between

Research Designs and Standards Organisation, Lucknow

Ministry of Railways, Govt. of India

and

Indian Institute Of Technology, Roorkee

December, :2017

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#### 1 PREAMBLE:

- 1.1 Whereas, the Research Designs and Standards Organisation, Ministry of Railways (hereinafter referred to as RDSO) is the sole R&D organisation of the Indian Railways and functions as technical advisors and consultants to the entire Indian Railways. In response to Hon'ble Prime Minister's clarion call for innovation in Railways under the Navrachna Initiative, Ministry of Railways has decided to conduct six public competitions hosted at www.innovate.mygov.in on the following topics
  - 1.1.1. Easy accessibility to trains from low level platforms
  - 1.1.2. Increasing Passenger Carrying Capacity of Coaches of Indian Railways
  - 1.1.3. Digital Capabilities at the stations of Indian Railways
  - 1.1.4. Design of Wagons for efficient loading and transportation of new traffic commodities
  - 1.1.5. New Ideas/ Suggestions to improve the working of Indian Railways
  - 1.1.6. Identifying New Non-Fare Revenue sources for Indian Railways
- 1.2 Whereas the Indian Institute of Technology, Roorkee, (hereinafter called IIT/Roorkee) having its premises at Roorkee, is one of the leading technical, academic, educational Institute of India higher technological education and in engineering, basic and applied research. Since its establishment the Institute has played a vital role in providing the technical manpower and know-how to the country and in pursuit of research. The Institute ranks amongst the best technological institutions in the world and has contributed to all sectors of technological development. It has also been considered a trend-setter in the area of education and research in the field of science, technology, and engineering
- 1.3 The proposal in connection with the 'Evaluation of Entries received during Public Challenges floated by Ministry of Railways' at <a href="https://www.innovate.mygov.in">www.innovate.mygov.in</a> and listed at 1.1 is submitted and will be effective for a period of 03 months from the date of its approval, which can be extended, if required, with the mutual consent of both the parties.

### 2 BACK GROUNG OF THE PROJECT:

- 2.1 In response to Hon'ble Prime Minister's clarion call for innovation in Indian Railways under the Navrachna Initiative, Ministry of Railways has decided to conduct six public competitions hosted at https://innovate.mygov.in.
- 2.2 The innovation challenge is an effort to motivate people to think and contribute in the development and value addition efforts of the country's main rail transport service provider. The competition encourages out of the box thinking and solutions for the current aspirations of the stakeholders.

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#### 3 OBJECTIVE OF THE PROJECT:

3.1 Evaluation and Validation of entries of six public competitions designed as an online competition hosted at https://innovate.mygov.in.

#### 4 Scope of work:

- i. The scope of this project is the evaluation and validation of entries received forsix public recompetitions designed as online competitions hosted at Government of India website of Innovation (https://innovate.mygov.in)
- ii. **Scope of work for RDSO, Lucknow**: To make available data required for evaluation of entries of six public competitions designed as an online competition hosted at Government of India website of Innovation (<a href="https://innovate.mygov.in">https://innovate.mygov.in</a>) to the evaluators.
- iii. Scope of work for Nominated Agency:
  - Evaluation &validation of entries of six public competitions designed as an online completion in stages
    - In 1<sup>st</sup> stage, evaluation of entries by two evaluators including re-evaluation as necessary in case of wide disparity in evaluations (More than 30 marks)
    - In 2<sup>nd</sup> stage, evaluation of top thirty entries for each challenge (6)
    - Validation of top thirty entries
    - Final report submission and recommendations

#### 5 LOCATION OF PROJECT:

5.1 Entire work will be co-ordinated by IIT/Roorkee at their premises.

#### 6 TIME FRAME:

- 6.1 The Evaluation of approximate 4600 entries to be completed within a period of 30 days.
- 6.2 Starting Date for the project will be date of award of work (i.e. approval of project proposal)

No.	Activity/Time in quarters	15 Days	10 Days	05 Days
1	First stage evaluation of entries by two Evaluators including reevaluation as necessary	X		
2	Stage second evaluation of top thirty entries		X	
3	Final report submission and recommendations.			X

### 7 TERMS & CONDITION OF PAYMENT:

CALL

Details of Estimated Cost of Work are as under-

	S.N	Activity	Rate	Cost (Rs)
\ /	1	First stage; evaluation of entries by	@ Rs. 100/Entry	Rs. 9,36,800/-
\_/		two evaluators for 4684 entries		(4684x100x2)
2	2	Revaluation to be done, say in	@ Rs.	Rs. 46,840/-
		approx. 10% cases for each of 468	100/Entry	
		entries		
	3	Second stage evaluation of top thirty	@Rs. 800/Entry/	Rs. 7.20,000/-
V		entries by 5 evaluators for six	Challenge	(30x5x800x6)
	1	challenges		
	4	Evaluation Cost	(1+2+3)	Rs. 17,03,640/-
	5	i) Overheads for administrative,		
		technical and logistic support to		
		evaluators, salary for support		

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	staff/project attendant, contingency expenses, cartridges etc.  ii) Expenditure (TA/DA) for calling outstation evaluators for briefing of 5 Evaluators		Rs. 3,60,000/-
6.	Coordinating Fee for two Persons		Rs.1,00,000/-
75		Total (4+5+6)	Rs. 21.63,640/-
8.	Institute Overheads	, , , , , , , , , , , , , , , , , , , ,	0
9,	Service Tax (7 + 8)		Rs. 3,89456/- @18% of (7+8)
	Total Contracted Amount (7+8+9)		Rs. 25,53,096/-

Total cost including service tax as applicable, shall be governed by the rates decided in this MoU.

**SCHEDULE OF PAYMENT**: Upto 50% advance payment shall be made as and when requested by IIT Roorkee to be adjusted against the final payment. Final payment shall be made on actual basis on submission of final report & recommendations.

## 8 PROJECT MONITORING:

- 8.1 A project review committee shall be formed with representatives of IIT/Roorkee and RDSO for interaction and monitoring of stage by stage progress of project and to evaluate/analyses the final results, IIT/Roorkee shall depute project coordinator or an expert of standing not less than the project coordinator for this review meeting.
- 8.2 Project monitoring shall be done by this committee for each stage of the project
- 8.3 To start with, monthly progress report of the project shall be sent by IIT/Roorkee to RDSO, Lucknow, in the second week of every month.

## 9 TERMS & CONDITIONS:

- 9.1 **Declaration**: All work undertaken by IIT/Roorkee as part of the project will be in good faith and based on highest research standards and validated through material/data/other relevant information given by RDSO, and field trials facilitated by RDSO, through Zonal Railways.
- 9.2 **Confidentiality:** Due care will be taken by IIT/Roorkee to maintain confidentiality and discretion regarding confidential information received from Indian Railways through RDSO, in all aspects i.e. results reports, identity etc. Due care will be taken by RDSO to maintain confidentiality and discretion regarding confidential information received from IIT/Roorkee.
- 9.3 **Work performance:** Every effort will be made to complete the specified Schedule of tasks according to the planned time schedule. However, IIT/Roorkee will not be held responsible for delays caused beyond its reasonable control.

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- 9.4 Conflict of Interest: IIT/Roorkee may take up work for other clients also in the same area provided, to the best of the institute's knowledge, there is no conflict of interest in undertaking such projects.
- 9.5 Termination: If due to any unavoidable and unforeseen reasons, it becomes necessary to terminate the project, expenditure incurred will be reviewed and the amount/items procured against the project will be returned to the RDSO.
- 9.6 Liability: !IT/Roorkee shall not be held liable for any loss, damage, delay or fallure of performance, resulting directly or indirectly form any cause, which is beyond its reasonable control (Force Majeure). The liability of IIT shall be limited to the funds received for the project
- 9.7 Intellectual Property Rights (IPR):IPR of the work (i.e. source codes of any software program developed, technical drawings & design improvements pertaining to the project) during the execution of this project & subsequent to its completion, shall vest with RDSO & all the software, source codes, design, documents & reports will be passed on to RDSO with unencumbered rights to their usage.
- 9.8 Extension of Project: Extension of the project from its actual time duration as given in Para 4 due to any technical reason if any, shall be within the power of Executive Director/Research RDSO Lucknow.

#### 10 ADMINISTRATIVE:

- 10.1 The Results/ Report will be the property of DG/RDSO and the use of the report, Information contained in the submissions in whole or part in any form and for any purpose shall be made only with the prior approval of DG/RDSO.
- 10.2 The expenses on road travel by IIT/Roorkee and RDSO Officials will be borne by IIT/Roorkee .
- 10.3 Rest House accommodation will be provided by IIT/Roorkee to Railway persons at Roorkee and vice versa at RDSO/Lucknow, free of cost.
- 10.4 Any technical modifications in the scope of the project shall be mutually agreed to between RDSO Lucknow and IIT/Roorkee. In case of any disagreement, the matter shall be referred to a committee consisting of Exe. Director (Research), RDSO, Manak Nagar, Lucknow and IIT/Roorkee for review. The decision of the committee shall be considered final.

In witness where of the undersigned, duly authorized, have signed this Memorandum of Understanding at LUCKNOW on the 23<sup>th</sup> day of January 2018.

(Dr. Satish C. Sharma)
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(S.K. Singh)

Executive Director /Research

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