

**INDIAN RAILWAYS**  
**RESEARCH DESIGNS & STANDARDS ORGANISATION**  
**MANAK NAGAR, LUCKNOW – 226 011**  
**([www.rdsso.indianrailways.gov.in](http://www.rdsso.indianrailways.gov.in))**

No. RDSO-TMM0LK0(CD TT)/2/2023

Dated: 16.10.2023

**Notice for Expression of Interest (EOI)**  
**Notice No. RDSO/TM/HM/1 of 2023**

**1.0 DISCLAIMER**

Ministry of Railways, Research Designs & Standards Organisation (RDSO) has prepared this document to give interested parties the background information with regard to subject matter i.e. Inputs/Suggestions from stake holders regarding aspects related to SG DTT utilization & operations. While RDSO has taken due care in preparation of information contained herein and believes it to be accurate, neither RDSO nor any of its officers, employees gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so. The information is provided on the basis that it is non-binding on RDSO or any of its officers, employees, or advisors.

RDSO reserves the right not to proceed with the service contact at a later stage or to change the process or procedure to take the service contact forward. In such eventualities, RDSO will not be held responsible. It also reserves the right to decline to discuss the matter further with any party expressing interest. No reimbursement of cost of any type will be paid to persons, or entities, expressing interest.

**2.0 PURPOSE OF INVITING THE EOI**

Indian Railways is constructing SG test track parallel to BG test track between Gudha Salt & Thathana Mitri Stations of Jodhpur Division of NWR. (Approx. 93 Kms from Jaipur by Road & 89 Km by Train). Designed for testing of Rolling Stocks as per International Standards UIC-518/EN-14363. This EOI is being called for suggestions/inputs from different stake holders, manufacturers, suppliers and testing agencies for better utilization and operation of the Test Track regarding tests and trials to be expected on DTT.

**3.0 SUBMISSION OF EOI BY INTERESTED FIRMS**

Interested firms are requested to submit their EOI to the officials nominated for assistance at Para 6.0. The firms should mention RDSO's Notice No. RDSO/TM/HM/1 of 2023. The EOI submission should be made by post/email, the respondents must furnish the following details:

- a) Turn-over of the firm during the last three financial years with the copies of annual report.
- b) Details of various items being manufactured/consultancy undertaken/Tests & trials being done.
- c) Details of customer(s) and supplies made in the field of item under EOI.
- d) Experience and expertise for the items proposed in EOI.

**4.0** The SG DTT is being constructed with the objective given below:

**Primary objective:**

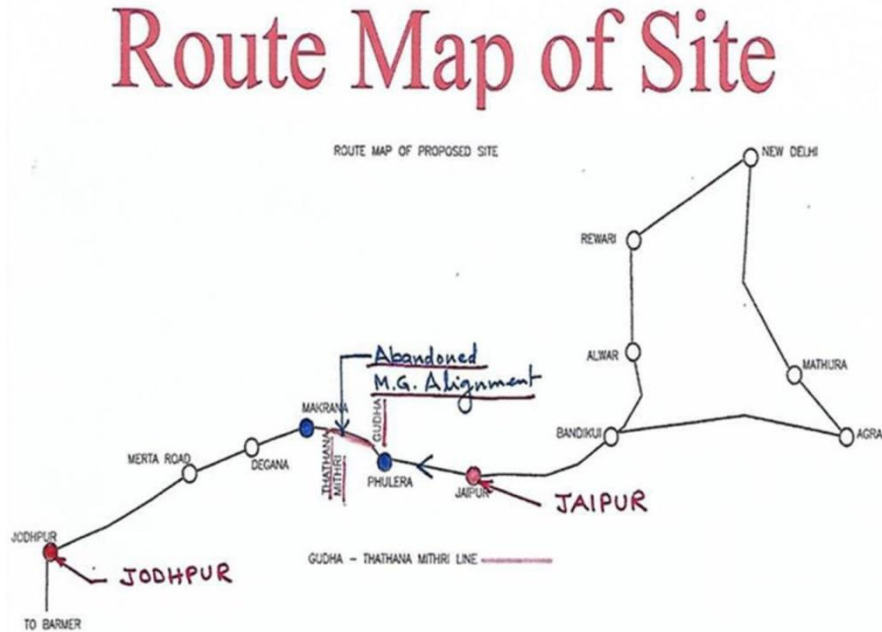
- Trials of Rolling Stocks as per EN-14363 up to design speed of 200 kmph (Trial Speed of 220 Kmph).
- All Rolling Stocks can be tested on Dedicated Test Track.

- Additional trials of Rolling Stocks, such as EBD, Rating and Performance, Crashworthiness Testing, Jerks, EMC/EMI/RFI etc.

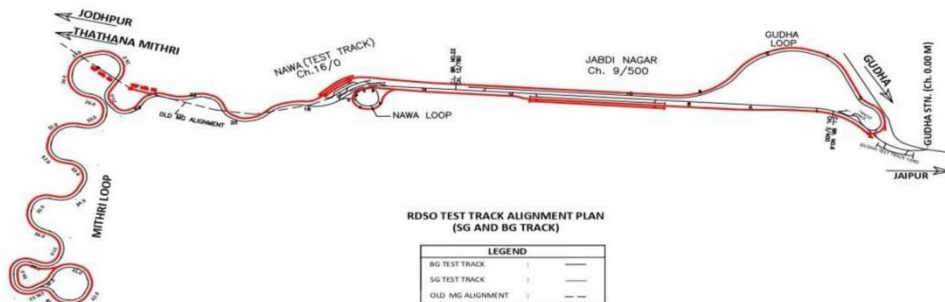
**Secondary objective:**

- Accelerated Testing facility for rolling stock and infrastructure components.

The route map of SG DTT is shown below:



- A.** Total track length approximately 62.0 kms for SG test track. The alignment plan of SG DTT is shown in figure given below:



**B. Salient Features**

S.No.	Item	Total
1	Route Kms. ( km)	62.0
2	Number of curves	54
3	Total Curve length ( Km)	39.56
4	Maximum degree of curve	7.808
5	Minimum degree of curve.	0.68
6	No. of stations/yards	3
7	No. of major bridges	7
8	No. of minor bridges	129
9	Standard of signaling interlocking	Special class
10	Traction	1x25 KV

## **C. DETAILS OF TESTS ENVISAGED AND PLANNING IN B.G. TEST TRACK**

### **a) *Test - Rolling Stocks***

- Testing for riding characteristics/behaviour of the vehicles as per UIC-518/EN-14363 by dynamic measurements (at semi high speed and low speed) of ride quality, accelerations, stability, jerks, wheel and rail contact forces
- Braking performance tests.
- Coupler force trials.
- Semi high speed rolling stock components testing.
- Crashworthiness testing.
- Rating, performance and adhesion test of locomotive.
- HV and LV Testing.
- Acoustic Measurement.
- Weighing and distortion, Twist and Yaw Rig Testing.
- Static & Impact Tests i.e. compressive end load, coupler vertical loads, jacking test, Twist load, curve stability, Impact Test – Single Car Impact.
- Current collection test of electric locomotives.
- Temperature measurement test of traction electronics.
- Accelerated testing of vehicle components on a separate close test track loop.
- Weighing and Distortion, Turn Table-Tilting Test.

### **b) *Test – Track***

- Accelerated testing of track components on a separate close test track loop.

### **c) *Test – Signal and Telecom***

#### **c.1 *EMI/EMC tests:***

- EMI/EMC testing of rolling stock.


#### **c.2 *Interoperability tests:***

Interoperability tests between different sub signaling systems are also planned.

5.0 India is gradually enhancing capacity of producing different type of Rolling stocks i.e. locos, coaches, and wagons etc. which will not only catering domestic requirement but also able to meet export opportunities. As of March 2023, India has 859 km of operational metro lines and 16 systems. Also more than 980 km of the metro network are currently under construction in 27 cities, according to Ministry for Housing and Urban Affairs. Bombardier, Alstom, BHEL, BEML, Titagarh and Texmaco manufactures SG coaches in India – potential for export of SG rolling stock. Worldwide Rolling stocks are running on Standard Gauge (S.G.) track. Therefore, production and testing of rolling stocks of S.G. is desired for export perspective. These testing facilities will also been used for testing of SG rolling stocks for export perspective, making them more cost competitive as testing cost will be reduced substantially. It presents huge opportunity for testing of SG rolling stocks for not only domestic market but also for export. IR can earn from testing of SG rolling stocks of manufacturers/suppliers/metro systems. In near future, it is expected a huge quantity of Standard Gauge coaches due to a separate dedicated passenger corridor. In view of above, IR has decided to construct a test track for dedicated testing of S.G. rolling stocks. For better utilization of the Test Track input/suggestion from different stake holders, manufacturers, suppliers and testing agencies is highly appreciable to develop the facilities on DTT as per their requirement. Also Indian Railways is of the view that the operation and maintenance of DTT may be outsourced.

**6.0 ASSISTANCE: FOR ANY ASSISTANCE MAY PLEASE CONTACT:**

- (i) Shri S.K. Singh,  
Executive Director/Track Machines,  
Track Machine & Monitoring Directorate,  
Research Design & Standards Organisation,  
Manak Nagar, Lucknow-226011  
Mb. No. 9794863080  
email: etmcrdso@gmail.com
- (ii) Shri Jainendra Kumar Singh,  
Director/Track Machine-6,  
Track Machine & Monitoring Directorate,  
Research Design & Standards Organisation,  
Manak Nagar, Lucknow-226011  
Mb. No. 9794863386  
email: dtkm6rdso@gmail.com

  
16.10.23  
Executive Director/Track Machines,  
Track Machine & Monitoring Directorate,  
RDSO/Lucknow-226011  
Mb. No. 9794863080  
email: etmcrdso@gmail.com