ग्राहक सेवा में.....

"अग्रगामी से अग्रणी, उत्कृष्ट से सर्वोत्कृष्ट"

पश्चिम मध्यरेल

WEST CENTRAL RAILWAY

भोपाल मंडल

BHOPAL DIVISION

GUIDELINES FOR WORKING ON TMS

इंजीनियरिंग विभाग

पश्चिम मध्य रेल्वे। भोपाल मण्डल द्वारा जारी।

TMS System

Track Management System (TMS) is Web based application that integrates track structure data, inspection data to assist railways and checks level of maintenance and accuracy. The main purpose of introducing TMS in Indian Railways is to enhance level of safety of passengers and goods.

TMS
TRACK MANAGEMENT SYSTEM

TMS : Inputs

- **Initial – One time**
  - Jurisdiction and domain data of Division
  - Master Assets (All – Rail, sleeper, P&C, LC, welds, joints... everything) with correct chainage
  - One last inspection from all inspection registers
- **Periodic – Once in year**
  - Sanctioned works (once a year)
  - GMT (once a year)

- **Regular Working**
  - TRC/OMS/Oscillograph results
  - USFD testing
  - All Inspections (Individual assets, trolleys, FP/RV, etc.)
  - All Works (Maintenance, Renewal, Machines, gang input, etc..)
  - Track machine work being entered by Engg. Ctl./MTS
  - Contractual works/inputs

All data collected from field and updated records of sections available in SSE p.way office must be entered accurately in TMS. All assets entry should be entered through sectional JE's log-in & 100% entries checked and confirmed by SSE. After confirmation by SSE, all entries 100% test checked by ADEN & 20% test check by Sr.DEN/ DEN. Details of Bridges & Tunnel should be entered only by ADEN's log-in ID.

TMS
TRACK MANAGEMENT SYSTEM

Data Unification

- One data (type) entered only **once** and used to update/populate at all places needed.
- For every data the **ownership and responsibility** is defined & fixed in the application design.
- Same data is **used & sourced** for compiling information at all levels and for all types of information.

INDIAN RAILWAYS

TMS
TRACK MANAGEMENT SYSTEM

Data Unification

- **GMT data** : asset life carried, track diagram, renewal proposal, etc.
- **TRC/Oscillograph Recording** : running and track parameter analysis, track diagram, track health chart, track degradation modelling,
- **OMS Recording** : running analysis, historical comparison,
- **Track Machine data (Progress, machine related)** : track diagram, tamping chart, due/overdue tamping, track input analysis, machine failure analysis,

TMS
TRACK MANAGEMENT SYSTEM

Data Unification

- **Asset Change data** (rail, sleeper, crossing, etc) : track diagram, renewal proposal, compliance,
- **Work data** (gang, external agency, etc) : input to track, manpower utilisation, compliance,
- **Inspection data** : location requiring attention, inspection charts, due/overdue inspection alerts,
- **Sanctioned Works data** : progress entry, to be linked with stores and new proposals,

INSPECTIONS TO BE DONE ON TMS

LWR INSPECITON
POINT & CROSSING INSPECTION
CURVE INSPECTION
LEVEL CROSSING INSPECTION
TROLLEY INSPECTION
FOOT PLATE INSPECTION
RAIL INSPECTION
BALLAST INSPECTION
FASTENING INSPECTION
SLEEPER INSPECTION
WELD FRACTURE
RAIL FRACTURE
GLUED JOINT
TOE LOAD MEASUREMENT
SAND HUMP
LAND BOUNDARY

After implementation of TMS following points to be noted:-

Manual registers to be kept for record purpose
On daily Basis entry of :-
Any changes in any of the Asset
Inspection details
Gang attendance & work done
USFD Test results
Track machine works (by Engg control)
Works done by contractual Labours.
Compliance of location needing attention
On periodic Basis entry of :-
Sanctioned Track renewal works
Annual GMT, Rainfall & Rail temperature data
PME/RCT data
TRC/OMS Run data
Up loading of Imp Letters & CE circulars (Zonal HQ)
PCDO Annexures
Innovation/Technical suggestions
Updated yard plan

SSE/ADEN to keep information dump of Assets and Inspections done in pdf format in their netbook.

Regular entries to be done during day to day working

- Location Needing Attention
- Compliance
- General Compliance
- Asset Change
- Gang Work
- Machine

Miscellaneous entries-

Miscellaneous records of section to be maintained on TMS as and when prescribed.

Message Centre

- Temporary Speed Restriction
- ODC
- Circulars
- Publications
- Inspection Notes
- Inspection Shortfall
- Morning Position
- Gang Usage
- Employee List
- PME
- Training
- Additional Welder/ Supervisor
- Rain Fall Register
- Temperature Register
- ERC (TOE Load Register)
- Gate Duty
- Site Particular

Important schedule of inspections

Description of items	Sectional SSE/JE	Incharge SSE/JE	ADEN
LWR Inspection	Once in a fortnight during two coldest & two hottest months, otherwise once in two months by rotation.		Once in every six months
Points & Crossing	On passenger running line-Once in three months by rotation On other lines & yard lines-Once in six months by rotation. Note-For Pts & X-ing laid on PSC sleeper, the detailed inspection should be done once in a year.		On passenger running line once in a year all Pts & X-ing. On other lines- 10% of the Pts & Xing in a year.
Joint Inspection Points & Xing:- Interlocked Points on Passenger running lines	Once in three months by rotation with JE/SSE(S&T)		Once in a year or as specified with ADSTE
Interlocked points on other than passenger running lines	Once in six months by rotation		
Curve	Once in six months by rotation		One curve in each SSE/PW/Jurisdiction every quarter
Level Crossing	Once in a month by rotation		Once in six months
Push trolly	Once in a fortnight	Once in a month	Once in two months. On unimportant branch lines having less than 2 GMT traffic-Once in three months
On Foot	Entire section once in six months	Entire section once in a year	
Foot plate/Rear vehicle	Once in a month	Once in a month	Once in a month
Night foot plate	Once in a month should be done between 0.00 hrs to 4.00hrs	Once in a month should be done between 0.00 hrs to 4.00hrs	Once in a month should be done between 0.00 hrs to 4.00hrs
Land Boundary Verification	Once in six months	Once in a year	In Station yard- Once in a year. In Section- Once in a year to check encroachment register.
AT welding site	At least two inspections in a month	As much as possible but at least once in a month.	As much as possible but at least once in a month.
Of USFD work			Once in month in each round of testing

Description of items	Sectional SSE/JE	Incharge SSE/JE	ADEN
Check on Patrolling:-			
Equipments	Once in a month	Once in a month	
Rules	Once in a week	Once in fortnight	
Monsoon patrolling	Once in a week	Once in fortnight	Minimum once in a month
Hot weather patrolling	Need based during hottest temperature. Minimum of once in a week	Frequently need based during hottest temperature.	As needed.
Bridge		Once in a year prior to monsoon	Once in a year after monsoon
Tunnels		Once in a year after monsoon	Once in a year before monsoon
Keyman inspection	Each round of push trolly	Each round of push trolly	Each round of push trolly
Gang inspection	Once in fortnight during push trolly including rules & equipment	Once in month during push trolly. Equipment & rules once in two months.	Minimum one gang in each SSE/P.way's jurisdiction every quarter.
Joint track circuit	Once in six months by rotation with JE/SSE (S&T)		
Track machine		Twice a week during block working	Once in a month
Small track machine		Once in three months	Once in six months.
TRC/OMS	Accompanying alternate with Sr.Section Engineer	Accompanying each TRC and OMS run	Accompanying each TRC and OMS run
RAW/RAT			List of RAWs/RATs to be specified by Sr.DEN/DEN for joint inspection with a state authorities every year after scrutiny of the report submitted by the local/Govt.Body.
Cuttings		Once after monsoons. More frequent inspections if past history and vulnerability so requires.	Once a year before onset of rains. Vulnerable cuttings to be decided by Sr.DEN/DEN
Side drain, catch water drain and water ways	Once in a year in the month of April, prior to monsoon	At least once in a year prior to monsoon	Before onset of rains
Inspection of ongoing work of construction and other organisations e.g. RVNL	As much as possible during foot plate/trolley inspections to check quality & safety of running trains	As much as possible during foot plate/trolley inspections to check quality & safety of running trains	As much as possible during foot plate/trolley inspections to check quality & safety of running trains