

Various Functions of TMS Cell:

The cell is headed by CPD/TMS and assisted by Chief Engineer/TMS, this cell is dealing with IT Enablement of Civil Engineering Department on entire Indian Railways.

1) IT-Enablement of Civil Engineering Department of IR:

Indian Railways are one of the largest rail networks in the world with about 70 thousand route km. Manual record keeping of such huge number of assets has its inherent shortcomings. Collection of data, arriving at meaningful information is cumbersome, time consuming and inaccuracies are bound to creep into the analysis. Therefore, in order to bring efficiency and transparency in various management practices, e-enablement of all spheres of Civil Engineering Department working is being done.

- ❖ Accordingly, Railways have developed and implemented various IT applications related to asset management and expediting/monitoring of various processes/approvals. The Applications which have been already developed & implemented include:
 - i) Track Management System (TMS),
 - ii) Indian Railways Projects Sanctions & Management (IRPSM),
 - iii) IR- Works Contract Management System (IR-WCMS),
 - iv) ROB/RUB GAD Approval Monitoring System (RRCAS),
 - v) IR- Construction Asset Transfer Application (IR-CAT),
 - vi) IR Rail Bhoomi Crossing Seva (IR-RBCS) and IR Lease & License Processing System as a part of Land Management System (IR-LAMS),
 - vii) CRS - Sanction Monitoring System,
 - viii) Track Standard Committee (TSC).
- ❖ Applications presently under development are:
 - i) GIS Mapping & Geospatial database for Indian Railways Assets (IR-Geo-Portal),
 - ii) Bridge Management System (IR-BMS),
 - iii) Track Machine Management System (IR-TMMS),
 - iv) Buildings & Structures Information System (IR-BSIS),
 - v) IR-Tunnel Management System (IR-TuMS) etc.
 - vi) Project Monitoring & Information System (IR-PMIS),



- vii) Collection and Assimilation of Field Sensor Data, Drone Recording of IR Track and CC Camera Live Feed from Projects,
 - viii) Disaster Recovery (DR) Site for Civil Engineering Projects and,
 - ix) Bridge Standards Committee (BSC) and,
 - x) Works Standards Committee (WSC).
- 2) Preparation, vetting and sanctioning of Detailed and Revised Estimates etc. of ongoing Projects.
 - 3) Preparation, vetting and sanctioning of O&M (Revenue) Estimates of already developed & implemented Projects.
 - 4) Preparation & signing of MOU with CRIS and other entities as per Railway Board's guidelines.
 - 5) Budget management and releasing of funds to CRIS & other entities as per demand and MOU signed.
 - 6) Planning and conducting Training Workshops by CRIS for Zonal Railways/Divisions online and offline at CRIS & IRICEN/Pune for various field units.
 - 7) Monitoring and providing user requirement (Software Requirement Specifications- SRS) to CRIS and other entities for Applications/Projects which are under development.
 - 8) Providing day to day support to various end users of Indian Railways, especially in regard to IR-TMS, IR-WCMS, IR-RBCS etc.
 - 9) Coordination with other Departments/Ministries for integration of key Applications pertaining to them.
 - 10) Any other work assigned by PCE.
 - 11) Salient Features:
 - These IT Applications are being designed for decentralized data capturing, speedy information dissemination along with centralized data keeping and analysis.
 - System generated alerts in the form of SMS to all concerned, right from Jr. Engineer in field upto the Railway Board for taking decision to improve condition of Railway assets.

With the IT enablement, it is expected that not only the standard of maintenance will undergo a qualitative leap, but will also go a long way in improving the services/safety.

