

## **ELECTRONICS & TELECOMMUNICATION**

In order to keep pace with advancement of communication and information technology the following steps have been taken:

Established MPLS VPN Managed network services by M/s. RAILTEL as service provider, for connectivity of 242 different locations spread across all the Areas of ECL in the state of West Bengal & Jharkhand including Data Centre at New Delhi and Data Recovery Centre at Mumbai for ERP in ECL.

Centralized high-speed internet services with 1 Gbps Internet Lease Line and minimum 160 Public IPs at ECL HQs, which is distributed at MPLS locations of ECL including Area offices, Agent & Manager offices of UG and OC mines, Central Stores, Central Workshops, Hospitals, Stores, Workshops, other offices within the ambit of the existing MPLS VPN end points.

Video Conferencing System is in place to facilitate various meetings and regular interactions with CIL, Subsidiary HQ, Ministries, Other PSUs & Govt. offices, other offices and all the Area offices of ECL based on MPLS VPN Network and with Public IP with video end points at 23 different locations.

Established LAN infrastructure along with Wi-Fi system for facilitating easy access to SAP-ERP application, internet at Company HQ, all Area offices, Central Hospitals of ECL.

Established Underground telephonic communication system across 46 different Underground mines for smooth telephonic communication in underground mines and up to surface level.

GPS/GPRS based Vehicle Tracking System (VTS) with 1207 nos. of GPS sets and Geo-fencing of Mine Areas is in place for effective live monitoring of movement of internal coal carrying vehicles in Mines and prevent pilferage of coal.

Electronic surveillance with Centralized CCTV surveillance system at vulnerable points like Weighbridges, Coal stock yards, Railway sidings, magazines, stores etc.

RFID and Boom Barrier based Weighbridge Automation system is implemented across total 124 Road Weighbridges to prevent entry of unauthorized vehicles and human intervention less automatic real-time transfer of weighment data to central server.



## **Special Achievements:**

LOA has been placed on M/s. Dadhwal Weighing Instrument Repairing Works for implementation of 1473 nos. GPS/ GPRS based Vehicle Tracking System (VTS) for effective live monitoring of movement of internal coal carrying vehicles in Mines and prevent pilferage of coal at ECL. Work order has been placed on 20.03.2024. Till date 924 GPS devices have been fitted in transport vehicle.

Work Order has been placed to M/s. Continental Engines Private Limited for establishment of new centralized monitored CCTV surveillance system for live monitoring and recording of video footage from CCTVs with Artificial Intelligence (AI) based video analytics for the different vulnerable locations of ECL with total 1144 new CCTV cameras. Till date 745 no. of cameras have been installed, commissioning of total system is expected within July, 2024.

Supply order has been placed to M/s. MIMEC Electronics Pvt. Ltd. for Procurement of 5 nos. of DGMS approved intrinsically safe underground communication system. All 5 nos.of DGMS supplied and commissioned i.e. (a) Satgram-Sripur- 2 nos. and (b) Sodepur- 3 nos.

Supply Order has been placed on M/s. RETCO India for procurement of different types of underground telephone cables. All types with full quantity supplied and all are distributed to Area for use in UG communication.

New Audio-Conferencing system integrated with video conferencing system has been implemented in “Sankalp” room ECL, HQ.