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Press Release

RailTel finalizes agencies to execute for the work of Video Surveillance System (VSS) at 756 major stations.

Project is being executed under the Nirbhaya Fund by Indian Railways and RailTel

The Work is scheduled likely to be completed by January 2023.

Need to rapidly absorb new technology in Railways, Sh. Ashwini Vaishnaw, Hon'ble Minister of Railways

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RailTel, a Mini Ratna Central Government PSU under Ministry of Railways, entrusted with the implementation of Video Surveillance System (VSS) project (CCTV cameras network) under Nirbhaya Fund at Railway Stations has taken a major step by finalizing the agencies for executing the job. First phase of the project will cover major stations of category A1, A, B, C numbering 756 (The list of stations is attached) and is likely to be completed by January 2023. The remaining stations will be covered in phase-2 of implementation. Safety and security of passengers is one of the key focus areas of Ministry of Railways. In order to enhance security at Railway stations which are major hubs of transportation, Indian Railways is in the process of installing Internet Protocol (IP) based Video Surveillance System (VSS) at stations, that is, waiting halls, reservation counters, parking areas, main entrance/ exit, platforms, foot over bridges, booking offices etc. Ministry of Railways has approved works for provision of Video Surveillance System over Indian Railways major stations under Nirbhaya funds.

Sh. Ashwani Vaishnaw, Hon'ble Minister for Railways said, "We Need to rapidly absorb new technology in Railways, be it for rolling stock, construction, safety, cyber security, or in situations where there is a human interface".

Smt. Aruna Singh Chairman & Managing Director, RailTel assured that with the finalization of the executing agencies, the implementation of the project will be fast-tracked. The most modern software & hardware will be used in this project.

This VSS system will be IP based and will have a network of CCTV cameras. These CCTVs are being networked on optical fiber cable and the video feed of the CCTV cameras will be displayed not only at local RPF posts but also at a centralized CCTV control room at divisional and zonal level. The CCTV cameras of stations and video feeds will be monitored at these 3 levels to ensure enhanced safety and security at Railway premises. The system comes with Artificial Intelligence (AI) enabled Video Analytics Software and Facial Recognition Software which will help to detect known criminals triggering an alert

when they enter station premises. Network Management System (NMS) has been also been provided for monitoring of Cameras, Server, UPS and Switches which can be viewed from any web browser by authorized personnel.

4 types of IP cameras (Dome type, bullet types, Pan Tilt Zoom type and Ultra HD- 4k) are being installed to ensure maximum coverage of the Railway premises. This will give an extra edge to the RPF officials for ensuring enhanced security. The recording of the video feeds form CCTV cameras will be stored for 30 days.

Safety Features of this system

The system implemented shall act as tool to respond to situations/incidents effectively, aiding faster decision making and act as a great learning for better preparedness to meet any incident and eventualities with some software based application like Video Analytic and Face Recognition, as per RDSO Version 6.0.
Artificial Intelligence (AI) enabled analytics software have the following features with a certain alarm and PoP UP view at the Operator end.

a. Intrusion Detection (People entering in Railway Operation areas)
b. Camera Tampering
c. Loitering Detection
d. Human & Vehicle Detection
e. Search of Humans based on Attribute
f. Colour Search
g. Fallen Person.
h. Combination Search (Human/Vehicle & Colour)

- FRS: The VSS (CCTV) system shall capture face images from live CCTV video feed and generate alerts, if blacklist match is found. FRS alerts should be pushed to the Video Management System/ NVR. (Seamlessly integrated with Video Management System /NVR).

- The VMS software will support Alarm Input monitoring and Output activation for the proposed IP Cameras. The VMS have the feature of mobile phones clients so that in case of any emergency, the authorized users can upload videos and snapshot to local VMS server from the registered mobile phones, which should include identification of location. Operator at centralized location shall have ability to view these alarms and playback video, if required, from stations. Operator at centralized location shall be able to push the alarms to selected RPF/Thana and registered mobile phone of concerned security officer.

- Panic Button: Two numbers of Panic Button are to be installed at each Platform. Once the Panic Button is activated by any person in distress, an alarm shall appear on the VMS

along with the pop-up of the associated camera on the operator workstation. In case, associated camera is a PTZ type, the camera shall move and zoom on to the Panic Button to see the person in distress.

- The recording of the video feeds from CCTV cameras of Stations will be stored in the nearest RPF Thana/Post for 30 days for playback, post event analysis and for investigation purposes. Important videos to be stored for longer duration at Data Centre (by using 240TB storage) & RPF Thana/Post by using additional 10% storage (as per Railway's requirement).

For effective operations and management of IT Operations, an industry standard Enterprise Management System (EMS) has been provisioned for monitoring of VSS Equipment (Cameras, Switches, Server/Workstation, Storage, PC Workstations and UPS etc.). Some of the critical aspects of EMS are as follows:

a. Centralized and Integrated Dashboard View
b. Centralized and Customizable Service Level Reporting
c. Server/workstation Change, Provisioning & Configuration
d. Network Automation
e. Service Management (Helpdesk) & SLA Management
f. Centralized IT Asset Inventory discovery & tracking
g. Server/Workstation Monitoring
h. Network Fault & Performance Management
i. Penalty Monitoring and Management

About RailTel:

RailTel, a "Mini Ratna (Category-I)" Central Public Sector Enterprise under Ministry of Railways, is one of the largest neutral telecom infrastructure providers in the country owning a Pan-India optic fiber network covering several towns & cities and rural areas of the country. Along with a strong a reliable network of 61000+ RKM of Optic fibre, RailTel has two MeitY empaneled tier III data centers as well. With its Pan India high-capacity network, RailTel is working towards creating a knowledge society at various fronts and has been selected for implementation of various mission-mode projects for the Government of India in the telecom field. RailTel offers a bundle of services like, MPLSVPN, Telepresence, leased line, Tower Co-location, Data center services etc. RailTel is also working with the Indian Railways to transform railway stations into digital hub by

providing public Wi-Fi at railway stations across the country and 6100+ stations are live with RailTel's RailWire Wi-Fi.

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