Real time tracking and surveillance for Yatra management through RFID technology and CCTV network and Digitalisation of Pilgrim services by Shri Mata Vaishno Devi Shrine Board.

Introduction of RFID Based Yatra Access Cards for real-time tracking of each pilgrim on whole track of 28 Kms - e-surveillance through CCTV cameras and Integrated command and control centre along with MIS Reporting systems - Digitalisation of services for pilgrims including payments, Helicopter and Battery Car bookings etc.

Every pilgrim registering for the Yatra being issued Radio Frequency Identification (RFID) based Yatra Access Card since 13 Aug 2022; More than 65 lakh pilgrims covered since launch -26 UHF devices and 62 RF devices installed along the 28 km long track for real-time capturing of sector-wise pilgrim footfall data -Real-time sharing of Yatra figures through MIS Dashboard with multiple agencies for Yatra management as per Carrying capacity of the track -Network of 720 CCTV Cameras with Control Rooms at Katra and Bhawan being manned 24*7 for crowd management and strengthening of security grid. - RFID based Access Cards issued to all Pony, Pithu and Palkiwalas with verification counters enroute to check any malpractices and ensure pilgrim

safety -Collaboration with Paytm and TCS for introduction of digitial platforms including QR Scanners and POS machines for accessing services and facilities including Helicopter and Battery Car services, Prasad and Donations.

Earlier, pilgrims were being issued paper slips at the time of registration and there was no mechanism to assess the actual number of people on the track at any point of time. Accordingly, crowd management as per carrying capacity was based on human assessment of various personnel deployed on the track. Moreover, it was a huge challenge to track any lost pilgrim who got separated from his/her group during the journey and was not carrying an operational phone. Verifying credentials of pilgrims obtaining Yatra slip without photograph via online mode was a huge challenge for security forces. The unfortunate incident of stampede in the Bhawan area on the intervening night of 31st Dec 2021 and 1st Jan 2022 triggered the conceptualisation of the project involving introduction of RFID based Cards with antennas all

along the track for real-time information of Yatra numbers. In addition, an overwhelming majority of payments were being made in Cash across the Board's establishments. This entailed problems of delayed accounting, difficulty in transactions, wastage of time and inconvenience for pilgrims besides scope for pilferages. A manual system for Current counter reservations in helicopter and Battery Car bookings and such others was in place that had a huge scope of human discretion causing inconvenience to pilgrims and often harassment at times.

RFID Network

RFID technology has been introduced for a scientific approach to Yatra management especially regulation of numbers on the track on a real -time basis. Track has been divided into 7 zones and real-time Yatra figures vis-a-vis carrying capacity of that respective zone are relayed through a dedicated RF Network to a Web Based MIS Dashboard. Analysis of Objective Reports based on this data enables the management and field personnel to regulate Yatra footfall accordingly. Cross verification of photo Identities stored in the RFID Card through Hand held readers has enabled security forces in crime control and keep a check on anti-social elements. In addition, CCTV Surveillance grid of over 720 Cameras has added another layer of security on the track with round the clock monitoring at 2 Main Control rooms at Katra and Bhawan. All strategic locations are now being continuously monitored through PTZ, Dome and Bullet Cameras for crowd management, petty crimes, monitoring of any forest fires, landslides, shooting stones etc and such other purposes. Digital payment solutions including QR based payments, UPI and POS Machines have been

introduced at 15 establishments across the track due to which the proportion of digital payments has crossed 20% from miniscule numbers earlier. This has checked pilferages, ensured ease of transactions besides eliminating long queues.

Impact and Advantage:

- Photo-identity and KYC details of Every pilgrim being captured in RFID based Yatra Access Card since 13 Aug 2022.
- 28 Km track divided into 7 Zones with defined Carrying capacities for scientific Yatra management.
- Real-time sharing of Yatra figures through MIS Dashboard with multiple agencies for Yatra management as per Carrying capacity of respective Zone.
- Verification Counters and teams at various strategic locations to verify credentials - Deterrence for anti-social elements
- Prompt Redressal of complaints regarding missing pilgrims analogous to GPS based tracking.

Initiative to be undertaken under ERP Module:

- E-procurement
- Estates Management
- Inventory management for Engineering and Non- Engineering stores
- Human Resource Management
- Management Information System including geo-tagging for developmental works and other assets including water sources.

RFID Card