

8. SECURITY MEASURES IN METRO SYSTEM

8.1 INTRODUCTION

Metro Rail System has emerged as the most reliable mode of urban transportation system in India. The inherent characteristics of metro system make it an ideal target for terrorists and miscreants. Metro systems are typically open and dynamic systems which carry thousands of commuters. Moreover, high cost of infrastructure, its economic impacts to the society, being the life line of city with high news value pose greater threat to its security. Security is a relatively new challenge in the context of public transport. It addresses problems caused intentionally and differs from safety which addresses problems caused accidentally. Security problems or threats are caused by people whose actions aim to undermine or disturb the public transport system and/or to harm passengers or staff. These threats range from daily operational security problems such as disorder, vandalism and terror threat.

The public transportation system is increasingly becoming important for urban areas to prosper in the face of challenges such as reduction in congestion and pollution. Therefore, security system for public transportation like metro rail plays an important role in helping the system to become the preferred mode choice for commuters. Therefore, provision of an excellent and reliable security system is a prerequisite for metro system for increasing its market share. Metro railway administration must ensure that security model keep pace with the rapid expansion of the metro and changing security scenario.

8.2 THREE PILLARS OF SECURITY

Security means protection of human, intellectual assets and infrastructure either from criminal interference, destruction by terrorists or criminals or incidental to technological failures or natural hazardous events. Three important pillars of security are as follows:

- i. The Human factor;
- ii. Procedures; and
- iii. Technology

Staff interaction with passengers creates a sense of re-assurance which cannot fully be achieved by technology. For human factor to be more effective, staff has to be qualified, trained, well equipped and motivated. The staff members should be skillful, trained, drilled and experienced. The security risk assessment is the first step for understanding the needs and prioritizing resources. The organization of security should be clear and consistent. Security incidents, especially major ones, often happen without warning. Emergency and contingency plans must be developed, communicated and tested in advance. There are number of technologies which can be used to enhance security e.g. surveillance systems. The objectives of the security systems differ i.e., detection of the plan before an attack, deny the access for carrying out an attack and mitigation measures after an attack.

8.3 DIFFERENT PHASES OF SECURITY

There are three different phases associated with the security system in metro. These phases are as under:

i. Prevention

These are the measures which can prevent a security breach from taking place. These can be identified by conducting risk assessment and gathering intelligence. Prevention begins with the daily operational security problems. Care has to be given in controlling unused, damaged properties which could otherwise prove to be a breeding ground for more serious crimes.

ii. Preparedness

Plans have to be prepared to respond to incidents and to mitigate the impacts. Staff has to be accordingly trained to carry out the exercises. The results of the risk assessment will give basis for such plans.

iii. Recovery

Urban transport system should have laid down procedures/instructions for quick recovery of normal service after an incident. Financial health is important for the recovery operation, but it also sends a clear message to public, it reassures passengers and gives them confidence to continue using the system. Communication is key to the quick restoration after such incidents. Restoration should also include an evaluation process for the lessons learnt.

8.4 SCOPE OF WORK

The responsibility of the Security lies with the state. Security in public requires clear governance. Responsibility should be clearly defined. In the present scenario, this is the responsibility of the State Government to ensure secured travel in Varanasi Metro.

8.5 STUDY AREA TRANSPORT CHARACTERISTICS

For providing an efficient security system in metro station areas the following provisions are suggested:

- i. CCTV coverage of all metro stations with provision of monitoring in the Station Security Room as well as at a Centralized Security Control Room with video wall, computer with access to internet TV with data connection, printer and telephone connection (Land Line and EPBX) for proper functioning, cluster viewing for stations.
- ii. Minimum one Baggage Scanners on all entry points (1 per AFC array). Additional requirement of baggage scanners at heavily crowded stations i.e. at interchange may also be required.
- iii. Multi-zone Door Frame Metal Detector (DFMD) minimum three per entry (2 per AFC array). The number can increase in view of the footfall at over crowded stations.
- iv. Hand held Metal Detector (HHMD) as per requirement of security agency, minimum two per entry, which varies from station to station with at least 1.5 per DFMD installed at the station.
- v. Bomb Detection Equipments with modified vehicle as per requirement of security agency. One BDS team per 25 - 30 station will be required at par with present criteria of DMRC.
- vi. Bomb Blanket at least one per station and depot.
- vii. Wireless sets (Static and Handheld) as per requirement of security agency
- viii. Dragon light at least one per metro station.
- ix. Mobile phones, land lines and EPBX phone connections for senior security officers and control room etc.

- x. Dog Squads (Sniffer Dog), at least one dog for 4 metro stations. Dog Kennels alongwith provision for dog handlers and MI room will also be provided by metro train depot administration including land at suitable places line wise.
- xi. Bullet proof Morcha one per security check point (i.e. AFC array) and entry gate of metro train depot administration.
- xii. Bullet proof jackets and helmets for Quick Response Team (QRTs) and riot control equipments including space at nominated stations. One QRT Team looks after 5-6 metro stations as per present arrangement. One QRT consist of 5 personnel and perform duty in three shifts.
- xiii. Furniture to security agency for each security room and checking point at every entry point at stations. Scale is one office table with three chairs for security room & office and one steel top table with two chairs for checking point.
- xiv. Ladies frisking booth - 1 per security check point (AFC) Wooden Ramp - 1 per DFMD for security check points.
- xv. Wall mounted/ pedestal fan at security check point, ladies frisking booth and bullet proof morcha, as per requirement.
- xvi. Physical barriers for anti-scaling at Ramp area, low height of via duct by providing iron grill of appropriate height & design/concertina wire.
- xvii. Adequate number of ropes. Queue managers, cordoning tapes, dragon search lights for contingency.
- xviii. Iron grill at station entrance staircases, proper segregation of paid and unpaid areas by providing appropriate design grills etc.
- xix. Proper design of emergency staircase and fireman entry to prevent unauthorized entry.