

NEXTSTATION

MARRAKECH 2015



5TH INTERNATIONAL CONFERENCE ON RAILWAY STATIONS



Palmeraie Palace

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Comprehensive Protection

LARGE CONGREGATIONS AT RAILWAY STATIONS: MANAGEMENT AND SECURITY CONCERNS

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COMPREHENSIVE PROTECTION





Comprehensive Protection

Comprehensive Protection comprises of the protection against:

- **Violent Attacks (Terrorists, Mob, Unions etc.)**
- **Crime (Theft etc.) and Organized Crime.**
- **Commotions etc. due to Large Gatherings.**
- **Natural or Man Made Disasters/ Accidents.**





Challenges

- Crowd– day to day.
- Special Occasions such as Festive seasons, Political rallies, examinations etc.
- Extra-ordinary Congregations like Kumbh-Mela etc.
- Disasters / Accidents.
- Terrorist Threats.





Challenges at Crowded Railway Stations: Types of Crowd

Crowd and its likely Behavior Daily Passengers in Metro Cities



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Challenges at Crowded Railway Stations: Types of Crowd

Crowd and its likely Behavior Crowd during Festive Season





Challenges at Crowded Railway Stations/ Trains: Types of Crowd

Crowd and its likely Behavior

Crowd during vacations and Political Rallies



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Challenges at Crowded Railway Stations/ Trains: Types of Crowd

Crowd and its likely Behavior

Recruitment Drives & Student Crowd : More Unruly than others





Challenges at Crowded Railway Stations: Types of Crowd

Crowd and its likely Behavior **Squatting (*Dharna*) against Demands**



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Challenges at Crowded Railway Stations: Types of Crowd

Crowd and its likely Behavior

Anxious Crowd - Evacuation from Disaster/ Accident -site



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Challenges at Crowded Railway Stations: Types of Crowd

Crowd and its likely Behavior Crowd on Pilgrimage



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Consequence of Uncontrolled Behaviour

- **Delays (ACP / Logistics)**
- **Loss of Property due to Vandalism**
- **Crowd generated Accidents**

On 15 May 2010, at New Delhi Railway Station, 2 persons killed and 15 injured due to stampede, caused by sudden change in platform of a departing train.





Consequence of Uncontrolled Behaviour

- **Unhappy Passengers: Loss of time and Problem in access to Facilities**
- **Squatting (*Dharana*) on Track or at Stations**
 - (a) Delay
 - (b) Diversion
- **Crowd usurping Reserved Seats**
- **Scamper for Seats**
- **Security of Women Passengers**
- **Conflict with Police**
- **Possibility of Criminal Acts**





Challenges at Crowded Railway Station

Possibility of Crime during Heavy Rush

Snatching
Baggage Theft

Child Lifting
Missing Persons



Extra-ordinary Congregations



KUMBH-MELA: Case Study

- ◆ Kumbh Mela: Biggest congregation of human beings on earth. At one place: 120 Million pilgrims (Allahabad: 2013, spread over few weeks)
- ◆ On five specific dates, their number swells between 20 to 30 million. As in India, Railways is the cheapest mode of transport, railway stations should prepare for passengers around 3-5 million spread over 3 stations per day.





Kumbh Mela 2013

On Feb 10, 2013, the most auspicious day, 30 million dipped in the holy river. A sudden surge in crowd at Allahabad Railway Station at around 1830 hrs.



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Challenges at Crowded Railway Stations

Despite arrangements made, on 10 February 2013, at Allahabad Railway Station, 36 people were killed in a stampede caused by huge and uncontrolled crowd at a foot over bridge, in rush to catch the train.



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Management of Crowd in Simhastha Kumbh Mela, Nasik-2015

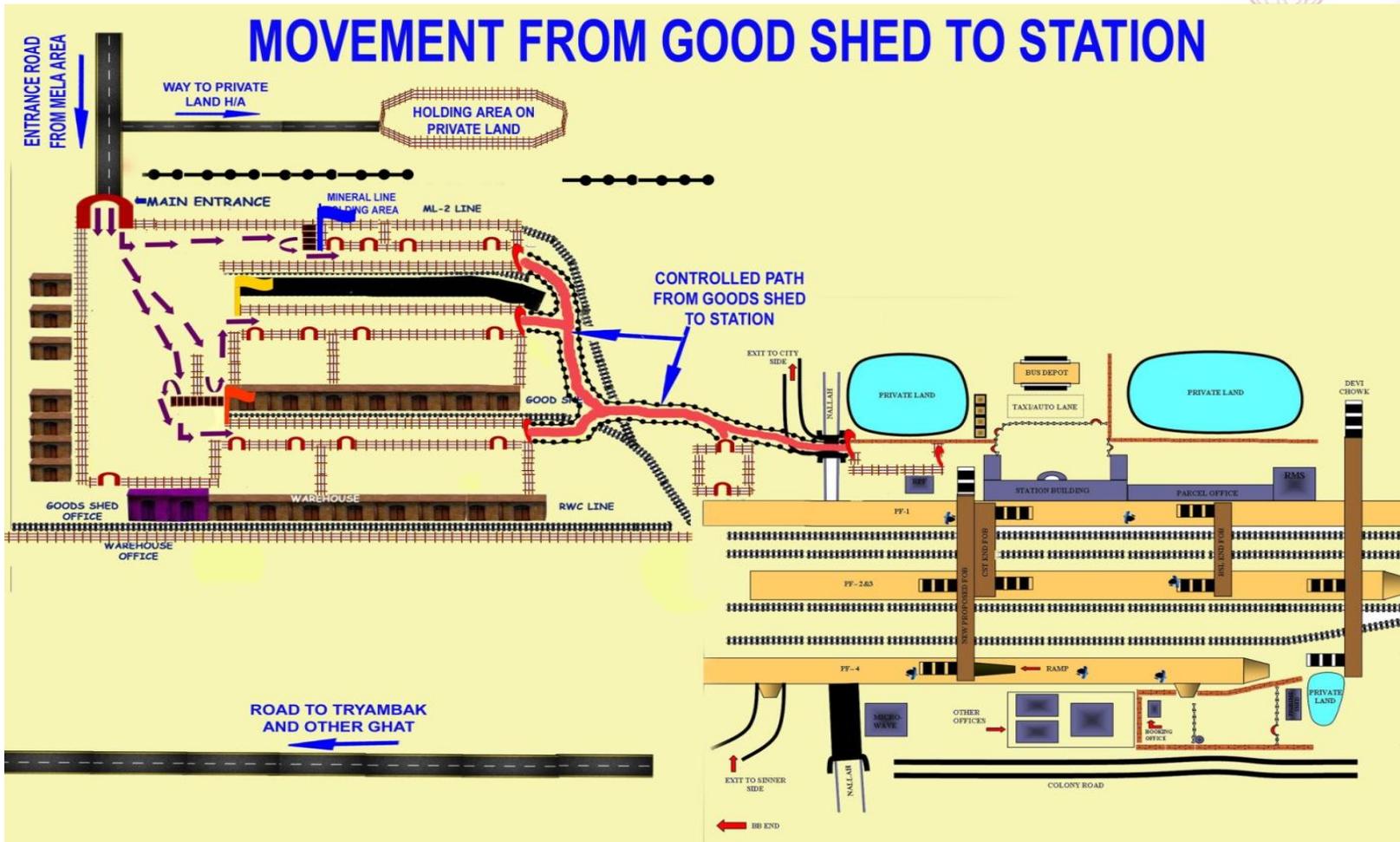


Statistics:

Shahi Snan Dates	Full Scale Security Deployment	Police Man power	No. of people in Station per day
29 Aug. 2015	28-31 August	1200	225,000
13 Sept. 2015	12-15 August	1489	350,000
18 Sept 2015	17-20 August	1384	312,000
25 Sept 2015	24-26 September	1384	150,000

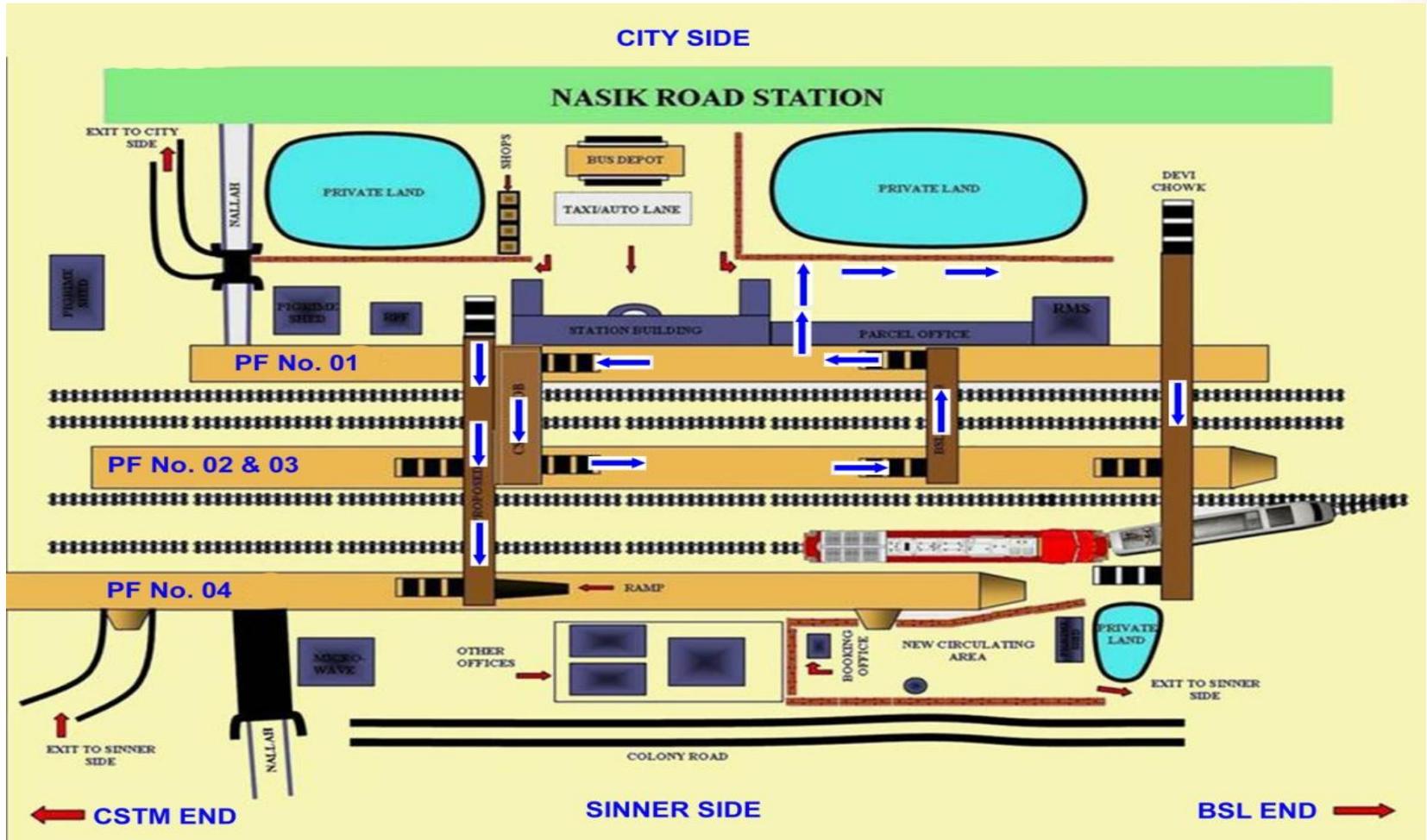


Management of Crowd in Simhastha Kumbh Mela, Nasik-2015





Management of Crowd in Simhastha Kumbh Mela, Nasik-2015



The Management of Crowded Railway Station

- ✓ Plan Ahead
- ✓ Station Capacity & Infrastructure
- ✓ Technical Aids
- ✓ Deployment
- ✓ Supervision
- ✓ Feed Back
- ✓ Co-ordination
- ✓ Intelligence and Information Dissemination





Plan Ahead

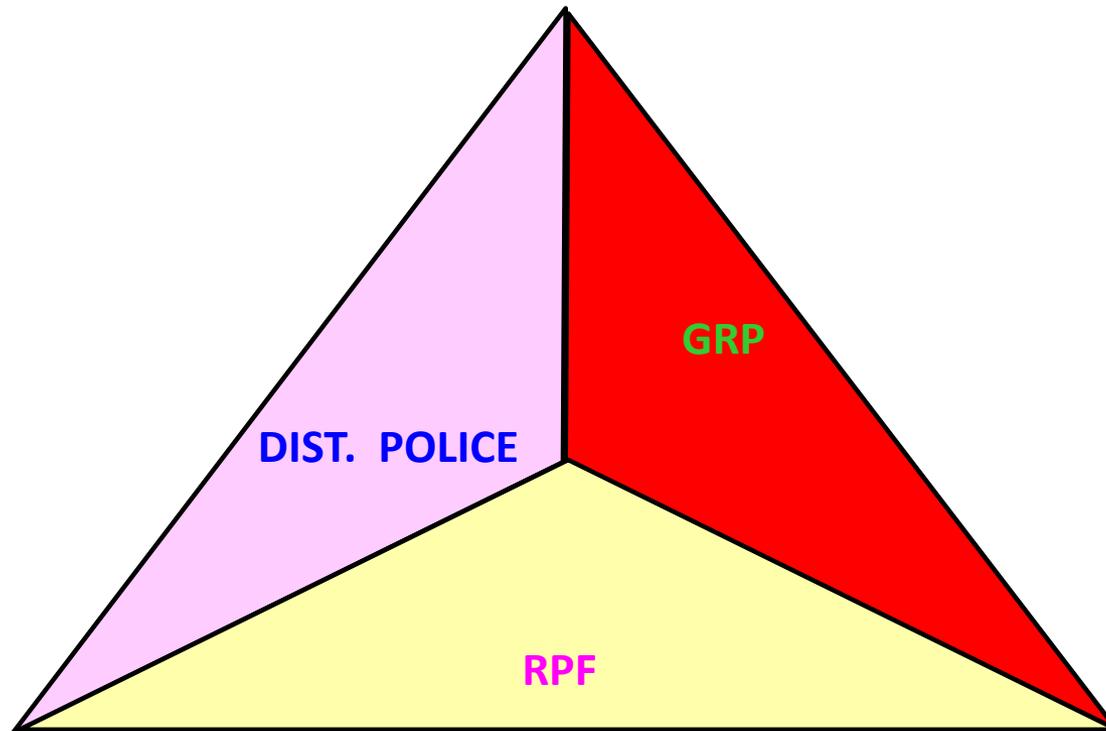
- ◆ Type of Crowd and the numbers expected
- ◆ Extra space required over and above existing facilities
- ◆ Sanitation and Cleanliness
- ◆ Staff Deployment, Dynamic Assessment of Situation
- ◆ Reserve Force
- ◆ Removing Irritants.





Management of Crowded Railway Stations : Good Practices

Plan Ahead Co-ordination with Police



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Plan Ahead

- ◆ Co-ordination with other stake holders
- ◆ Media Management
- ◆ Planning for Old and Physically Challenged passengers
- ◆ Emergency Plans:
 - Containment, Evacuation, Scotching Rumours, Diversion – Physical and Mental.
- ◆ Mock Drills
- ◆ Debriefing of Staff and their 4 hourly Recycling





Plan Ahead

Medical Aid

Tie up with Hospitals, Blood Banks in Vicinity.

Arrangements for First Aid.

Training of Staff for First Aid.

Volunteers for First Aid.

Stretchers, Ambulances, and Relief Vans.



The Management of Crowded Railway Station

Infrastructural Requirements

- ◆ Physical Lay out of the Station: Ingress, Egress.
- ◆ Station, Platforms, Foot Over Bridge Designs and Partitions.





Management of Crowded Railway Stations: Good Practices

Operational Planning

Mixing Crowd on FOB





Management of Crowded Railway Stations: Good Practices

Operational Planning

Flow: No intermixing of Passengers.



The Management of Crowded Railway Station

Infrastructural Requirements

- ◆ **Caring for Old and Illiterate.**
- ◆ **Sanitation, Cleanliness and other arrangements for millions of people.**
- ◆ **Making arrangements for Forces - Accommodation, Food, and Transport.**
- ◆ **Vehicle Parking, Traffic and Routes.**





Management of Crowded Railway Stations: Good Practices

Operational Planning

Operating Environment: Obstructions, Gates, Barricades, FOBs, Staircases.





Operational Planning

Operating Environment: Small incidents need to be contained to avoid escalation.

On 27 October, 2013, when a massive election rally of the then Prime Ministerial Candidate of the BJP, Mr Narendra Modi was scheduled, a series of bomb blasts rocked the Indian city Patna.

A bomb also blasted at PF No. 10 on Patna Railway Station. Crowd was quickly contained at safe place. Two live bombs were defused.





Necessary Barricades.



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Management of Crowded Railway Stations: Good Practices

Operational Planning Crowd Density / Containment Areas





Operational Planning Regulation of Crowd Flow at Platform

The number of passengers is much more than 2000 - capacity of an express train : Enforcing Regulation of Flow.



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Management of Crowded Railway Stations: Good Practices

Operational Planning Regulation of Crowd Flow at Platform





Management of Crowded Railway Stations: Good Practices

Using Staff Effectively To Monitor, Control and Communicate



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Management of Crowded Railway Stations : Good Practices

Information and Its Dissemination Other than PA System

Assistance Booths Assistance



Signages



On the spot



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Information and Its Dissemination

Management of Crowd: Most of the pilgrims are illiterate





Carrying Passengers in a more Organized Manner

- ◆ **Provision of Special Trains.**
- ◆ **Providing adequate Halts.**
- ◆ **Wisely shifting destination / arrival stations**
- ◆ **Provision for Last Mile Connectivity.**





Management of Crowded Railway Stations : Good Practices

Technological Aids

Use of Technology for Safe Crowd Management

◆ Metal Detectors (DFMDs)



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Management of Crowded Railway Stations : Good Practices

Technological Aids

Use of Technology for Safe Crowd Management

◆ X-ray Baggage Scanner Machines



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Technological Aids

Use of Technology for Safe Crowd Management

- ✓ CCTV
- ✓ Profiling of anti-social elements
- ✓ The Capabilities and Training of the Operator
- ✓ The System Design and its maintenance
- ✓ Number of Monitors per operator
- ✓ Control Room Environment: Representative of police and civil authorities.
- ✓ Adequate Lighting in the premise





Management of Crowded Railway Stations :Good Practices

Control Room with a Supervisor having authority



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Equipping the Force

For Safe Crowd Management

The Force and every Railway Employee present need to be provided individual equipment.

Force: Two kinds

1. In vicinity of the Crowd.
2. Riot Control Force (Armed Force to be kept away from the crowd)

Equipment:

- ✓ Communication System including wireless
- ✓ Shock Delivering Deterrents
- ✓ Rubber Bullets
- ✓ Protective Gear





Operational Planning

- ◆ Avoiding VIP Movements
- ◆ Plain Cloth Staff to scotch rumours etc.
- ◆ Crime Prevention



Management of Crowd : Crime Prevention



- ◆ Adequate number of Police Personnel near the Station
- ◆ CCTV Profiling
- ◆ Intelligence Sharing
- ◆ Dog Squad



Management of Crowd : Security



Vantage Points: Sentry Posts, Watch Towers with night vision devices, telescopes.

Manpower Deployed at Foot Over Bridges to thwart any terror attack and to facilitate unidirectional flow. At watch towers for an overview and to alert against terror attacks .





Co-ordination and Assistance

- ◆ **Police and Civil Authorities.**
- ◆ **Media Management.**
- ◆ **Balancing Role of NGOs.**
- ◆ **Trust and co-operation of Local Population.**



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