

Public transport and anti-terrorism security

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Recent terrorist attacks on the Moscow metro and Madrid suburban rail show that public transport systems are vulnerable and potential targets for terrorists. It is clear that preventing and discouraging terrorist activities as such is the prime responsibility of national security agencies and similar bodies. Yet, the responsibility for the passengers requires public transport stakeholders to acknowledge the threat and to ensure the best possible level of prevention and preparedness¹.

Patrols pay particular attention to security flashpoints, like here in São Paulo



The analysis of past incidents reveals an increase in terrorist actions against public transport systems since the mid- 80s, which is confirmed for all modes but waterborne transport, where the total number of incidents is too low to derive any trend. Although terrorism is more and more turning into an international phenomenon, it is not only international transport which is target to attacks. According to a study carried out by Asstra, the Italian public transport association, local and regional public transport systems together were suffering more than half of all incidents.

Why are public transport systems vulnerable?

Today, public transport systems are rather easy targets for terrorists. The systems are used by a high number of passengers everyday, they are open and fully accessible, and no access control or seat assignment is carried out. The large geographical spread of public transport networks provides numerous options for access, and gateways, multiple stops and interchanges lead to frequent passenger turnover, which is difficult to monitor.

A potential terrorist attack on public transport systems would cause a large number of victims. The disruption of entire transport systems would confuse the public and lead to panic, as it affects mobility, which is normally considered to be a basic freedom. The extensive and worldwide media coverage potential attacks would

attract might not only affect the image of public transport but also discredit the state and government as such.

If the "attractiveness" of public transport systems as potential targets is linked to the number of passengers that would be affected, peak hours and major events, such as Sports and Cultural events, increase the risk for public transport.

Yet, it must not be concluded that small and medium sized cities and smaller public transport operators would not be potential targets.

Anti-terrorist measures in public transport systems

The prevention of terrorist actions as such is the primary responsibility of State governments.

However, the responsibility of public transport stakeholders to the customer requires them to recognise the existing threat and to get prepared.

Organisational measures and inter-agency collaboration

In order to set up efficient anti-terrorism strategies, close collaboration is necessary to ensure that all agencies concerned can contribute their part and all involved actors know about each other's capabilities and can support each other best.

There is a need to develop appropriate systems for permanent information sharing between stakeholders.

It seems to be crucial for success that the collaborating agencies know each other and their business very well; police forces have to know about the operational specifics of the public transport network. Consequently, special police forces should be dedicated to handle incidents in the public transport system. Examples for such dedicated forces do already exist: British transport police, Paris transport police, Special security force in Athens, etc.

Training and human resources

In order to ensure the best possible preparation for handling incidents, a corporate culture of security should be conveyed in public transport operating companies. Public transport staff need to be well trained to prevent dangerous situations and handle incidents once they have happened. Security-related human

resource aspects include several approaches:

To increase staff awareness and preparedness: Specialised agencies, such as fire brigades, police or dedicated security agencies should provide relevant background knowledge to enable public transport operator staff to detect potential threats and to take the correct immediate action.

Guidelines should be elaborated for all operators to support operational staff in case of terrorist attacks.

These guidelines should also provide a framework for reporting unusual incidents. Consequently applied, they might provide useful input for incident and security system analysis.

It is crucial not only to develop awareness, but also to maintain a sufficient level of attention by employees. Security flyers to be distributed to staff and radio announcements about security, announcing special situations and reminding them to remain alert, could support the lasting effect of awareness campaigns.

To strengthen human presence in the public transport system: Efforts to strengthen staff presence within the public transport system do not only concern security staff, but to a certain extent all frontline staff. While security staff would be assigned special tasks, other staff would mainly contribute by simple presence and attention,

reassuring the passengers and forwarding information.

Security patrols should be reinforced in cooperation with the police, fire brigades and by hiring security guards. They should be present in stops and stations, on board vehicles as well as in depots, paying special attention to security-sensitive areas (e.g. under seats) and allow quick intervention at any time. Clearly designated contact points should be developed to address security issues and avoid confusion.

To control human presence in the public transport system: In order to keep the overview about movements within the public transport network, the access for visitors and employees to non-public areas has to be restricted and strict identification procedures for all personnel working on the network need to be introduced.

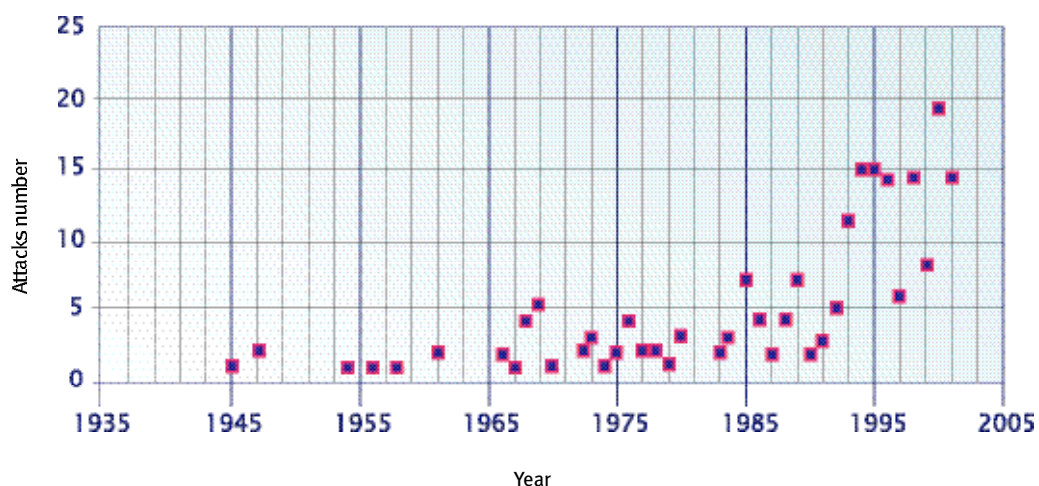
Information and communication

Information and communication-related measures concern external contacts with passengers and the general public as well as staff-internal procedures.

As communication is a crucial element of reaction strategies, it is essential to have all measures well prepared.

For anti-terrorism measures, there is a need to develop a collaborative approach towards passengers. Given the extensive media presence of terrorist actions, passengers have to be reassured that

TREND OF TERRORISM AGAINST PUBLIC TRANSPORT



Source: ASSTRA

SECURITY

public transport stakeholders are aware of their responsibility and take preventive action. Beyond pure information, passengers should be encouraged to be cautious themselves by means of posters, flyers and public announcements.

As a key feature of preparation to react to a potential terrorist attack, crisis communications, announcing incidents that have happened or been prevented to the public have to be drafted in advance to avoid passing on the wrong message in case of general public confusion and shock. For immediate information to passengers, vocal announcement systems should be extended to all the stations' rooms and tunnels.

Clear procedures and systems of communication need to be established for emergencies and regularly tested, in order to ensure a working communication during crisis situations.

It has to be ensured that police radio communication systems are implemented in the whole public transport network and all different communication systems are compatible with each other.

Besides the need to have staff internal communication systems

set up, passengers should also be provided with access means to report threats or ask for help.

Infrastructure and equipment

In order to make public transport systems less attractive targets for terrorist activities, security concerns have to be integrated in the design and construction phase.

While this is no major problem for new systems, it is difficult to upgrade existing systems in order to improve security. Some basic design principles, which would enhance public transport system security, include:

- Streamlined infrastructure layout, which facilitates visibility and surveillance;
- Improved station lighting, avoiding dark areas;
- Easy access and egress routes, escape routes that are sufficient also for peak hour passenger numbers;
- First aid kits and emergency equipment (e.g. masks) to be stored at stops and in vehicles
- Restricting access to secure areas;
- Reconsideration of design for equipment, such as trash cans, self-service machines or passenger seats to avoid their use to

store explosive or inflammable substances

- Installation of fire-proof systems to allow quick and safe evacuation of the stations, including fire detection system, station and tunnel ventilation system, water fire proof system, CO₂ fire proof system, sectioning by means of fire barriers, etc.

In general it defining a security-related minimum equipment standard should be considered which could be certified in order to reward public transport stakeholders who proactively address the threat.

Surveillance and detection

Video-surveillance systems, allowing recording, should be installed to observe train stations, turn-out tracks at the endings of the lines as well as depots.

The video recordings should be transmitted in parallel to the public transport operator control centre as well as the police control centre. Dummy cameras could be installed to increase the perceived risk for criminal action. Video images have to be constantly analysed to detect abnormal situations. However, alert systems should also work automatically based on the video recording.

There is a need to develop CBRN (chemical, biological, radioactive and nuclear) detection and alert systems as well as decontamination systems for stations and rolling stock, in order to restore operation as quickly as possible. The introduction of a sniffer dog service to detect explosives should be considered.

Evacuation

The preparation of evacuation strategies are the key concern for public transport stakeholders to prepare reaction to incidents. It is considered important to do them not only as a desk exercise, but also as real-world practice in order to test internal procedures and external collaboration.

The general public should be informed about such activity to avoid panic and confusion, yet to underline that public transport operators are concerned by passengers' security.

Potential international collaborative actions

Needs for security-related actions are numerous. They could help

One of the recommended security measures is to install CCTV, which, as well as being efficient, ultimately maintains a discreet presence



the public transport sector to better prepare to prevent and handle incidents.

- A common language has to be established and fundamental knowledge has to be improved. There is a need to establish basic notions and common definitions.
- The awareness of the public transport sector regarding terrorism threats and potential preventive measures has to be increased. The understanding of the terrorism threat has to be improved in order to provide a sound basis for an analysis of public transport system vulnerability.
- A risk assessment has to be initiated, which should comprise a worldwide monitoring of threats and forwarding of relevant information and a systematic analysis of past incidents to get comparable data in order to learn lessons.
- Security-related experience from other sectors, such as aviation, should be explored.
- Cooperation with specialised agencies should be set up to provide advice and training (e.g. checklists to handle specific situations).
- Information-sharing principles should be set up, that allow speedy spreading of up-to-date information.

- There is a need for recommendations on design standards, which have to address the design and construction of new public transport systems, but also explore the potential for improvement and upgrading of existing systems.
- Guidelines on operational procedures should be developed that facilitate immediate and coordinated action to respond to threats and incidents.
- Experiences and good practices have to be disseminated. A benchmarking system could be launched to allow public transport stakeholders to compare their own approach with other options.
- A security certificate could be developed for public transport companies who commit to comply with a set of related standards.

In the field of security, tighter co-operation between the various protagonists is crucial when defining and implementing preventive actions.

Besides intersectoral co-operation, international collaboration and exchange of experience is also needed.

In this context, UITP could play a leading role by offering an international platform facilitating information sharing.

¹ This article uses the synthesis report of the expert round table on terrorism and security organised by the European Commission and UITP in December 2003, prepared by the authors and available at UITP.

RECENT EXAMPLES OF DRAMATIC AND HIGH IMPACT TERRORIST ATTACKS IN URBAN AND REGIONAL RAIL SYSTEMS

1986	Paris	RER line A, a device loaded inside a gym bag exploded after a rider hurled the bag off the train.
1994	Baku	Two bomb attacks in the metro led to 19 dead and 90 wounded.
1995	Tokyo	Metro system experienced a sarin gas attack that killed 12 people and injured 5,600 more.
1995	Paris	A bomb attack at the Saint Michel station caused 8 dead and 120 wounded passengers.
1996	Paris	An explosion in the Port-Royal station killed 4 persons and injured 91 others.
1996	Moscow	An explosion in a metro car killed 4 passengers and injured 12 others.
2000	Moscow	An explosion in the pedestrian subway street near the metro station resulted in 11 dead and 60 injured persons.
2003	Daegu	A milk container containing flammable liquid was set on fire in a carriage. The fire led to 120 dead and 100 wounded passengers.
2004	Moscow	A suicide bomb attack destroyed a metro train during the morning rush hour and resulted in 40 casualties and about 140 injured passengers.
2004	Madrid	10 bombs concealed in rucksacks exploded within a few minutes in commuter trains during the morning rush hour. The explosion killed 190 passengers and injured about 1400. 3 more bombs have been found and destroyed.