### SecureStation

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1. To increase resilience of passenger stations/terminals through structural design, interior design, and building services design, therefore realising everyday benefits while designing for security.
2. To deliver a Constructive Design Handbook addressing new build and retro-fit projects to serve as a powerful decision support tool for owners and operators.
3. To avoid excessive costs to infrastructure and the design of stations/terminals, through an application of analysis methodologies, which will allow calculation of specific risk levels for each case.
4. To establish a standardisation of both design principles and risk assessment methodologies, which can be easily implemented by transport organisations and designers alike.

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### Coordinators

Coordinated by Spanish defence company Isdefe, ten organisations from across Europe form the consortia set up for SecureStation:

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### Participants

- **2004 bombing at Madrid Atocha Station, Spain**

### SecureStation

**Passenger Station and Terminal Design for Safety, Security and Resilience to Terrorist Attack**
In today’s climate, where public transport operations have been seen to provide attractive targets for terrorism and attack, the consideration of security is a major concern in the design of stations and terminals. Each station, with its idiosyncrasies, poses different challenges in relation to security, requiring an individually tailored response. The requirements of stations and the complexities of possible attacks are continually changing and it is necessary for the understanding of security within design to evolve with this progression.

The aim of the SecureStation project is to provide an approach to improving station and terminal safety and security through design. This will be achieved through developing a risk assessment methodology, conducting simulation of pedestrian movements in an emergency and analysing the effects of critical incidents with the use of advanced predictive tools.

Bringing together the project’s outputs, a constructive design handbook will present to practitioners a set of necessary principles to build safer and more secure infrastructure whilst providing maximum operating resilience. This will be achieved in the context of maintaining normal operation and an uninterrupted public travel experience, without incurring excess costs. SecureStation will help ensure that security issues can be considered as integral to the design of stations from the point of concept, rather than as an addendum.
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COORDINATOR
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Isdefe
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Madrid, 28040
Spain
www.securestation.eu

PASSENGER STATION AND TERMINAL DESIGN FOR SAFETY, SECURITY AND RESILIENCE TO TERRORIST ATTACK
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**APPROACH**

In order to achieve the objectives of the project, SecureStation is divided into eight work packages.

- **WP1** Management
- **WP2** Design strategies and user requirements
- **WP3** Risk assessment methodologies and critical scenario selection
- **WP4** Constructive Design Handbook
- **WP5** Advanced Predictive Tool for physical/functional resilience
- **WP6** Simulation of pedestrian behaviour and movements in emergencies
- **WP7** Maximising the impact of the SECURESTATION results
- **WP8** Dissemination and exploitation

Clockwise from above - Lisbon Station, Portugal by Santiago Calatrava; London Kings Cross Station redevelopment visualisation, UK by John McAslan and Partners; Rome Termini Station, Italy
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