

# **CROSSRAIL INFORMATION PAPER**

# E4 – PUBLIC SAFETY, SECURITY AND CRIME PREVENTION

This paper sets out arrangements for ensuring public safety on trains, stations and operational property on the Crossrail network.

It will be of particular relevance to potential users of the proposed Crossrail trains, stations and operational property.

This is not intended to replace or alter the text of the paper itself and it is important that you read the paper in order to have a full understanding of the subject. If you have any queries about this paper, please contact either your regular Petition Negotiator at CLRL or the Crossrail helpdesk, who will be able to direct your query to the relevant person at CLRL. The helpdesk can be reached at:

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### E4 – PUBLIC SAFETY, SECURITY AND CRIME PREVENTION



#### 1. Introduction

1.1 This Information Paper summarizes arrangements for ensuring public safety on trains, stations and operational property on the Crossrail network. Information Paper D14, Worksite Security is also available.

### 2. Public Safety

- 2.1 Overall control and monitoring of train and station operations on Crossrail will be exercised through a dedicated route control centre (RCC), which will co-ordinate all key elements affecting public safety including tunnel ventilation, fire control, emergency and incident control, station crowding, security and train movements.
- 2.2 All below ground station facilities for Crossrail will be designed in accordance with appropriate standards for public safety. Below ground stations will have the following safety features:
  - platform edge doors to eliminate the risk of falls onto the railway line;
  - platforms and passenger routes designed to minimize congestion and to achieve required emergency evacuation target times;
  - continuously recorded colour closed-circuit television (CCTV) coverage of platform areas and passenger routes;
  - public address systems and emergency and information help points linked to the station control room, with stations staffed throughout opening hours;
  - use of non-flammable and fire-resistant materials in all below ground structures and finishes;
  - fire detection, alarm and suppression systems and emergency lighting, with at least two independent emergency staircases to allow evacuation from Crossrail platforms; and
  - ventilation systems to minimize/reduce smoke in evacuation routes.
- 2.3 All Crossrail tunnel infrastructure will be designed in accordance with appropriate standards and policies for public safety, and will be subject to approval by Her Majesty's Railways Inspectorate. Safety measures provided in the design of Crossrail's infrastructure include:
  - two lit emergency walkways in each tunnel, one for passenger evacuation and the other for access for the emergency services;
  - emergency intervention shafts along the tunnel route, for use by the emergency services;
  - a forced ventilation system with the ability to direct smoke away from people being evacuated; and

- automatic train protection system provided in tunnel sections of route, with surface routes provided with train protection and warning system in accordance with Network Rail practice.
- 2.4 All surface-level infrastructure and station facilities provided by Crossrail will be designed in accordance with latest Railway Group and Network Rail company standards for public safety. Safety features will include public address system and emergency and information help points on all station platforms, lighting levels high enough to minimise slipping and tripping hazards, and security fencing at all boundaries at risk of trespass.
- 2.5 Operation of Crossrail facilities at existing surface-level stations will be integrated with the train operating companies' (TOCs) station control arrangements. Safety arrangements at non-Crossrail areas within existing surface-level stations will be reviewed during design development of the Crossrail project in conjunction with Network Rail and the TOCs concerned, with the aim of ensuring consistency of safety provision.

#### 3. Security and Crime Prevention

3.1 Security features of Crossrail stations will include:

- continuously recorded colour CCTV coverage of public areas; linked to the Crossrail RCC;
- lighting levels high enough to maximize visibility and CCTV effectiveness;
- public address system and emergency and information help points linked to the station control room;
- highly visible control rooms at central below ground stations, able to deploy station staff to deal with incidents; and
- design of buildings and landscaping to maximize visibility and minimize hiding places.

In addition, Crossrail below ground stations will be staffed throughout opening hours.

- 3.2 Security arrangements on trains and on non-Crossrail areas within existing surface-level stations will be integrated with the TOCs' station control and security arrangements. These will be reviewed during design development of the Crossrail project in conjunction with Network Rail and the TOCs concerned, with the aim of promoting consistent best practice. Typically such best practice measures could include:
  - CCTV coverage of passenger areas within trains;
  - maximizing visibility between carriages on trains;
  - lighting, fencing and CCTV coverage of the route to the train, ie the forecourt, car park and cycle rack areas;
  - public address system and emergency and information help points linked to 24-hour control centre;

- security guard patrols in stations and car parks; and
- measures aimed at reducing insecurity, eg graffiti removal, visible staff presence and signage informing the public of security measures in place.