25 May 2016
REQUEST FOR PROPOSALS
An immersive demonstrator for the protection of crowded places at UK Security Expo
30 Nov – 1 Dec 2016

The Home Office's Security Innovation and Demonstration Centre (SIDC) on behalf of the Home Office, the Centre for the Protection of National Infrastructure (CPNI) and other relevant Government Departments, invite innovative proposals from industry for technologies and techniques that will form part of an immersive demonstrator at the UK Security Expo under the general theme of 'Protecting Crowded Places'. Using the event venue itself as the place to be protected, the aim is to provide an integrated experience in which visitors are able to see innovative technologies and techniques in operation. This will provide a realistic context as well as allowing discussion with Government and industry experts. There will be a charge to participate in this opportunity. Preference will be given to proposals that showcase UK innovation, especially from smaller companies.

A Crowded Places Demonstrator
2.   Protecting spaces that are normally crowded with people (transport hubs, shopping malls, sports stadia, etc.) from terrorist threats is perhaps one of society's greatest security challenges. High assurance approaches such as individual screening at the boundary are often impossible given the volumes of people and the time, space and cost involved. However, innovative modern technology; the application of good design; and the imaginative use of human resource can all combine to improve the security of a crowded place with minimum interference to people's lives and activities.

3.   Nineteen Events, the organisers of UK Security Expo (Olympia, London - 30 Nov and 1 Dec 2016) have offered part of their exhibition space for an immersive demonstrator that can explore these issues. The aim is to show how a combination of technology, processes and techniques can be applied imaginatively in a variety of operational scenarios to improve protection from unexpected terrorist attack.

4.   The main focus of this crowded places demonstrator (CPD) will be the display area situated at the front left of the exhibition hall (purple area 1 in Annex A). This will be divided into three zones:

- **Screen** – identifying threats at the boundary of the crowded place. The focus here is to move away from 'traditional' solutions, such as intensive individual screening designed to identify small threat items, to ones which can deliver a reasonable level

of assurance that in high volumes of people, no one is carrying a major threat item (e.g., a machine gun or suicide vest). The emphasis will be on the ability to identify threats remotely with the minimum of interference (e.g., without the need to take of jackets, etc.) and to cope with high volumes of throughput

- **Track** – monitoring suspicious activity. The focus of this zone is on the ability to identify and maintain coverage of suspicious activity irrespective of the density of people involved. Proposed solutions might involve biometrics (e.g., facial recognition), monitoring of social media for indications of hostile activity, or the exploitation multiple CCTV sites for remote surveillance. Some proposals may involve human intervention (e.g., structured questioning by security staff), or a combination of technology and human intervention

- **Respond** – resolving incidents safely and swiftly. This focus of this zone is the rapid deployment and co-ordination of flexible resources, both technical and human, in response to an unexpected incident. Proposed solutions might involve the use of robotic vehicles (to inspect suspicious items), the co-ordination of remote CCTV feeds to inform decision making and the use of reliable communication systems to aid command and control.

5.   However, the CPD footprint will be wider than just the display area. The aim is to have scanning equipment, detectors, cameras and other sensors at locations around the exhibition hall relaying data back to the display area so that visitors can see the technologies operating in as realistic environment as possible. There will also be space set aside for innovative screening technologies to be deployed at the entrance to the site. The aim is for Olympia itself to be seen as the crowded place to be protected. Annex B shows an outline sketch of how the CPD stand might look.

6.   We seek innovative proposals from companies with appropriate technologies, processes or techniques to participate in the CPD. Proposed solutions might involve new technologies, or existing ones used in different ways. We also encourage proposals concerning the design and construction of the crowded place, although we acknowledge that these may not fit naturally within the three zones proposed. The total size of the CPD display area is 18m x 3m, so each of the three zones will be roughly 6m x 3m. As there will be a number of technologies in each zone, the overall footprint for any one company is likely to be quite small. Companies may have technologies applicable to more than one zone and imaginative ways of demonstrating this are encouraged. Although some integration of related technologies may be required (e.g., biometric identification systems linked to entry gates), in general we seek to minimise the amount of bespoke technical integration required to minimise risk and expense.

7.   The space available for innovative screening technologies at the entrance to the site is limited as this area also has to house traditional security equipment and other functions for visitor registration and the issue of passes. We anticipate that a single lane of 2m – 3m width will be available. A diagram of the entrance area is at Annex C. To cope with anticipated numbers, any screening technologies deployed in this area must be able to process visitors at a minimum rate of 2.5 per minute.

8.   Companies that are selected for the CPD will also be offered one short slot (of about 20 minutes per company across both days of the exhibition) in either the 'Live Response' or 'Technology Workshop' Theatres (purple areas 4 and 2 respectively in Annex A). The former area will enable the demonstration of specialised equipment, perhaps as part of a (simulated) incident. There are six proposed themes to presentations in the 'Technology Workshop' Theatre:

> CCTV and Video Surveillance
> Perimeter Protection and Intrusion Detection
> Access Control and Biometrics
> Armored Vehicles and Ballistic Protection
> Screening and Scanning
> Surveillance and Communications

Companies will be offered a slot in the theme that is best suited to their product or service.

9.   The CPD area will provide floor and wall space, power, data connectivity, background lighting and appropriate general images and illustrations. All other equipment, cabling, specialised fixings, etc., will be provided by the participating companies. It is likely that companies participating in the CPD will have to use specified types types of display units or TV monitors used in order to present a consistent appearance across the whole demonstration area.

10.   In order to cover the commercial costs of planning, design and construction of the demonstration space, there will be a fee for participating in CPD broadly in line with the degree of exposure each company receives for its products/services. We anticipate that this will be in the region of £3,000 to £5,000.

Resources
11.   The organisers of UK Security Expo (Nineteen Events) will provide:
- Space and power to the area and a data connection (probably via a dedicated Wi-Fi 'hot spot')
- Input into the final design of the CPD stand for each of the participating companies
- Appropriate signage to the demonstration area
- Full marketing support: website dedicated page; listing for all participating companies; a section in the show guide; email promotions; PR support; and exposure on Social Media
- Reserved times for presentations or displays in an appropriate area.

12.   The selected companies will provide:
- The agreed participation fee
- All equipment and cabling necessary to connect their technology to the CPD stand
- Appropriate support for the build, set up, running and dismantling of the CPD. NB: The build must take place between 08:00 and 19:00 on 29 November 2016 only
- Sufficient staff during the Expo itself to support their contribution to the CPD and any associated presentations or demonstrations (although we may be able to supply a small number of role players at no extra cost).

- All printed material related to their technology.

Submitting Proposals

13.   Proposals should be submitted in PDF format and be a maximum of 1,200 words in Ariel Font 12 plus one sketch diagram. Proposals should be emailed to the Home Office's Security Innovation and Demonstration Centre (SIDC) at: SIDC@homeoffice.gsi.gov.uk. Please start the subject line with the text "UKSECURITYEXPO2016" in each email. The deadline for submissions is 12:00 on 21 June 2016. Successful companies will be informed as soon as we can after this.

Selection Criteria

14.   The event organisers and the Home Office will select companies to participate in CPD on the basis of the following:
- Most effective and innovative technology or technique for the protection of crowded places
- Most stimulating and interactive visitor experience
- Greatest involvement of smaller and medium sized companies (SMEs), especially from the UK
- Greatest confidence that the proposed technology, etc., can be deployed in the time and space available and will work reliably throughout the exhibition.

Timescale

15.   The outline timescales for the delivery of the CPD is as follows (all dates provisional):
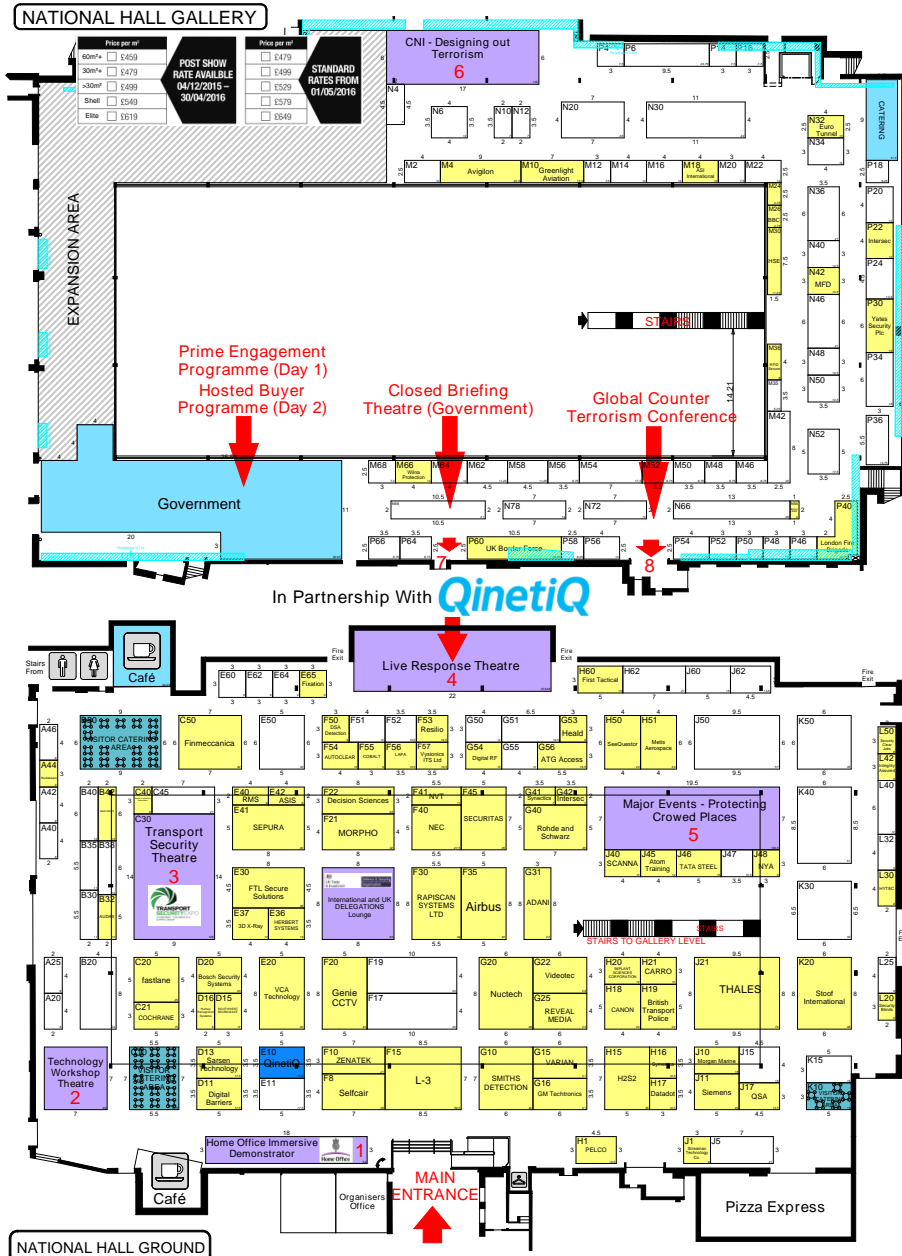- 25 May – Invitation to industry issued
- 21 June – Deadline for submissions from industry
- 11 July – Selection of companies to be involved in CPD announced
- 18 July – Initial planning workshop of CPD companies. Provisional plans of display area and associated equipment prepared.
- End July – Design of CPD finalised
- Aug and Sep – Further workshops/meetings as required
- Early Oct – Plans approved by site host
- 29 Nov – Construction of display area and associated equipment at site
- 30 Nov – Event opens.

Enquiries

16.   Further questions relating to this RFP should be directed to: SIDC@homeoffice.gsi.gov.uk. Please start the subject line with the text "UKSECURITYEXPO2016" in each email. Whilst we will endeavour to answer all questions as soon as possible, we cannot guarantee this as we anticipate considerable interest in this opportunity.

SIDC

Outline plan of Olympia exhibition space

HM Government

UK SECURITY EXPO 2016 THE GLOBAL SECURITY SHOWCASE
DESIGN | SECURE | RESPOND
30 NOV – 1 DEC 2016, OLYMPIA LONDON

TRANSPORT SECURITY EXPO

NATIONAL HALL GALLERY

Price per m²		Price per m²	
60m²+	£459		£479
30m²+	£479		£499
>30m²	£499		£529
Shell	£549		£579
Elite	£619		£649

POST SHOW RATE AVAILBLE 04/12/2015 – 30/04/2016

STANDARD RATES FROM 01/05/2016

CNI - Designing out Terrorism **6**

EXPANSION AREA

CATERING

Prime Engagement Programme (Day 1) Hosted Buyer Programme (Day 2)

Closed Briefing Theatre (Government)

Global Counter Terrorism Conference

STAIRS

Government

In Partnership With **QinetiQ**

Live Response Theatre **4**

Major Events - Protecting Crowed Places **5**

Transport Security Theatre **3**

STAIRS TO GALLERY LEVEL

Technology Workshop Theatre **2**

QinetiQ

Home Office Immersive Demonstrator **1**

Café

MAIN ENTRANCE

Organisers Office
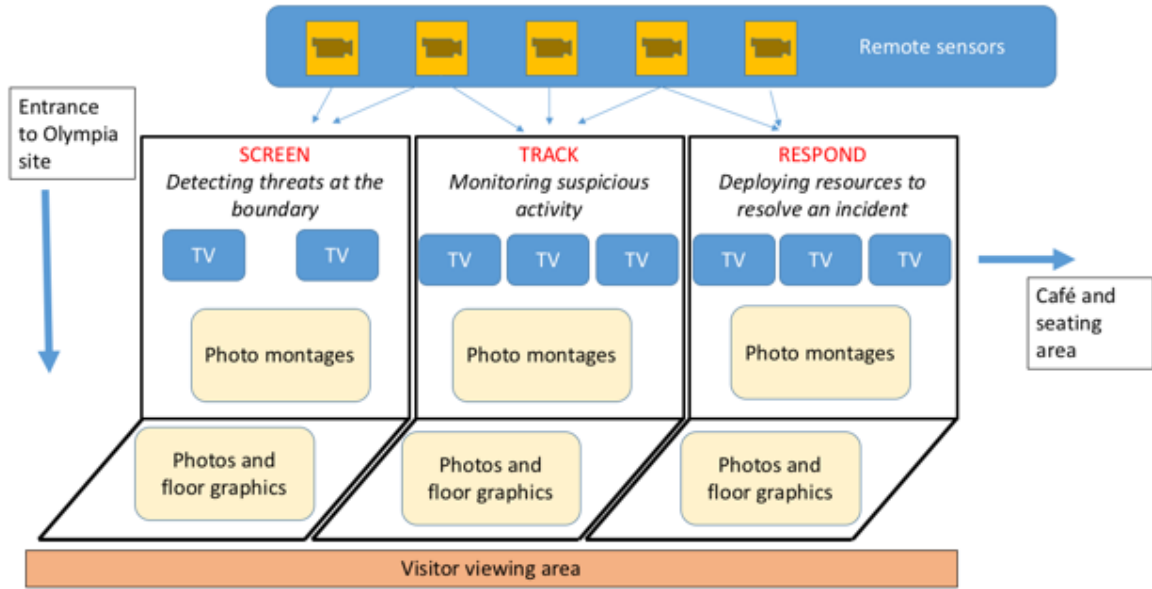
Pizza Express

NATIONAL HALL GROUND

CONTENT PROGRAMME

1. Home Office Immersive Demonstrator
2. Technology Workshop Theatre
3. Transport Security Theatre
4. Live Response Theatre
5. Major Events - Protecting Crowed Places
6. CNI - Designing out Terrorism
7. Closed Briefing Theatre (Government)
8. Plenary Global Counter Terrorism

Key
■ - Pillar

showlite
©All rights reserved

Date : 10 May 2016
Issue : 668
The dimensions on this plan have not been verified by Showlite Ltd and no responsibility can be accepted for any discrepencies
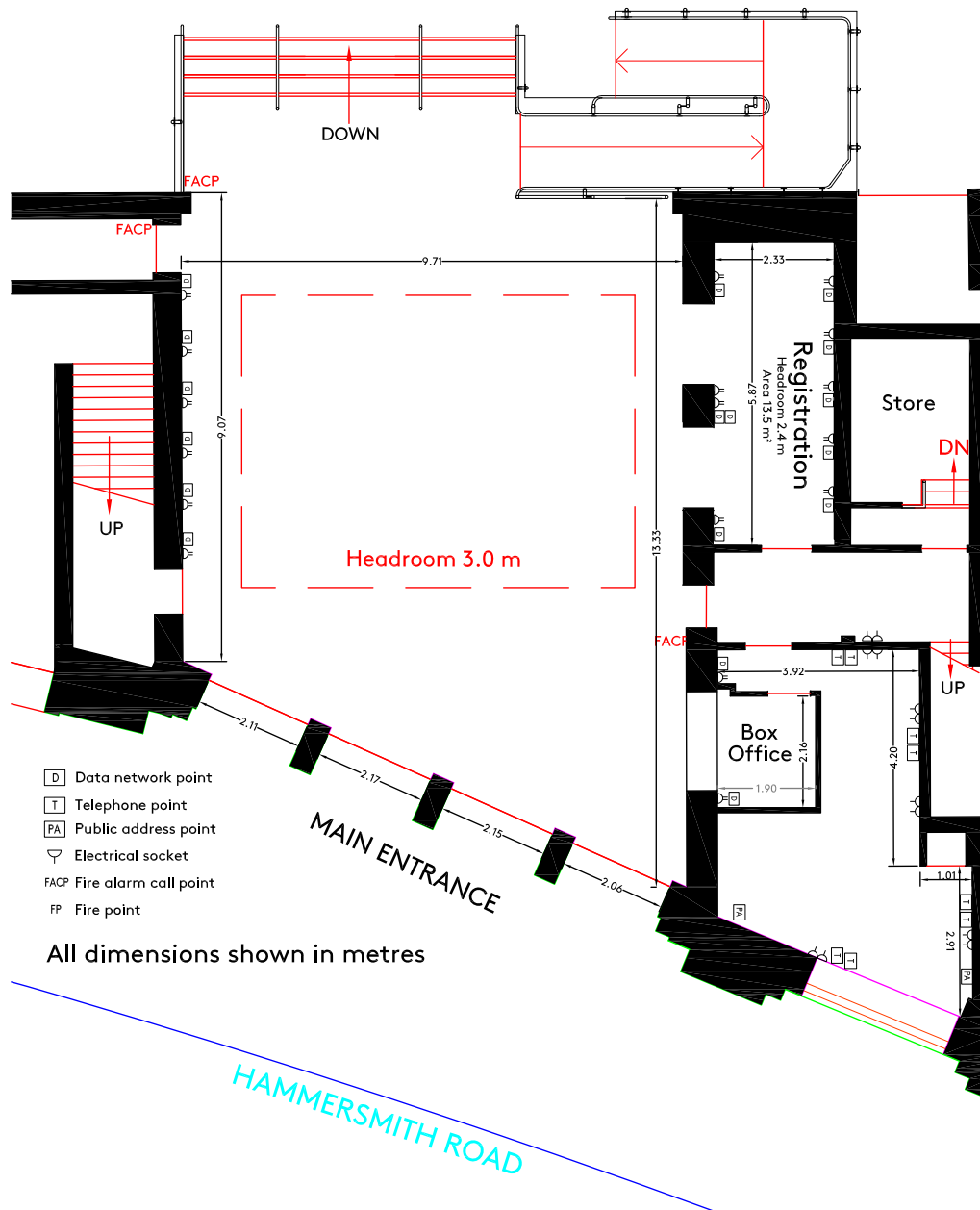
5

Outline sketch of the Crowded Places Demonstrator (CPD) stand

Entrance area to Olympia exhibition hall

Foyer - Olympia National

DOWN

FACP

FACP

9.71

2.33

Registration
Headroom 2.4 m
Area 13.5 m²

Store

DN

UP

Headroom 3.0 m

13.33

FACP

UP

3.92

4.20

Box
Office

2.16

2.11

1.90

1.01

2.17

2.91

2.15

2.06

MAIN ENTRANCE

PA

	Data network point
D	Data network point
T	Telephone point
PA	Public address point
⏚	Electrical socket
FACP	Fire alarm call point
FP	Fire point

All dimensions shown in metres

HAMMERSMITH ROAD

May 2014