



Department
for Transport

**Workshop on Vulnerability and Security of
Critical Transport Infrastructure
UNECE
Geneva
8 September 2015**

Security in Design of Stations (SIDOS)

**Andrew Cook
Department for Transport UK**

- Purpose of the SIDOS Guide
- The process
- Transport Threats
- Designing in security
- An integrated solution
- Conclusions



Purpose of the Guide

- To increase the protection of railway users from terrorism and crime
- Raise awareness to designers, planners, architects, etc
- Provide generic security advice
- Ensure engagement with the right stakeholders
- To deliver effective security measures cost effectively.





The Process

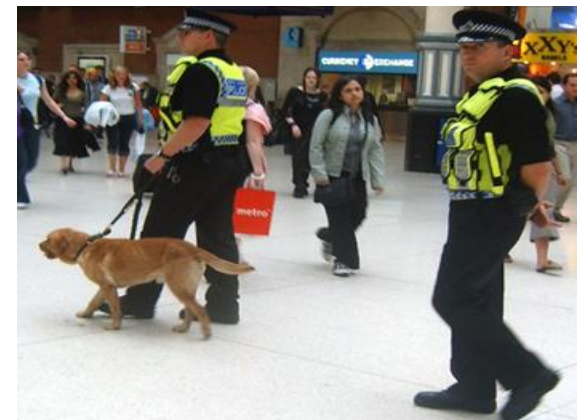
- Conduct a risk assessment
- Designate a senior security person
- Set up a steering group and sub-working groups
- Engage with stakeholders
- Consider H&S, disability, Heritage building consents
- Use the quick reference check list.





Transport threats

- Prevent and mitigate threats
- VBIED
 - Static
 - Suicide
- PBIED
 - Left Package (inside/outside station or on-train)
 - Suicide (inside/outside station or on-train)
- MAS, CBR,
- General crime.



Minimising the Impact

The effects:

- Detonating an IED will cause death and injury through either the effect of blast or from fragmentation.
- Blast Wave – release of energy and heat
- Protect people and critical assets.





Designing in security

Specialist advice:

- Buildings designed to resist a quantifiable degree of blast
- laminated glazing used to reduce secondary shrapnel
- Cladding that does not fracture or detach during blast
- Design in HVM and stand-off – every metre counts
- Non-public area access controlled and quality doors/locks to withstand intruders.





Designing in security

- Ensure staff & public parking is away from crowded places and critical areas
- Locate lost property away from crowded areas ideally near the perimeter
- Protect the station perimeter from unauthorised access & minimise number of entrances
- Provide good emergency service access.





An integrated approach

- Where practicable integrate security measures with
 - other local public realm areas
- Design in security to assist operational measures
 - no “gaps” conceal items
 - have good sight lines as this aids searching
 - Integrate lighting and CCTV
 - Well sited waste facilities, cycle parking
 - International screening operations.





Conclusions

- Security measures should be based upon a risk assessment
- The right stakeholders need to be engaged to ensure successful delivery of the project
- SIDOS is used to inform designers, planners and architects of the generic requirements
- Further discussions provide the detailed specification for the security measures
- Design in security at the earliest stage to achieve the most cost effective solution.



Department
for Transport

Security in Design of Stations - SIDOS

Thank you

Andrew Cook

<https://www.gov.uk/government/publications/security-in-design-of-stations-sidos-guide>