



COST Action TU1203: Working Group 3
Crime Prevention through Urban Design & Planning



Manchester

Design for Security – A police crime prevention consultancy service integrated within the design and planning process

Case Study Resource

September 2018

Working Group 3: Case study compendium resource

Contents

Foreword		ii
<i>What is COST?</i>	ii	
<i>About COST TU1203</i>	iii	
<i>From the Chair of the Core Group</i>	iii	
Executive summary		v
Acknowledgements		vi
Introduction: Case study focus & scope		1
<i>Case study methodology</i>	1	
1. Context: Key contextual factors relevant to case study		3
2. Timeline: Summary of key actions/events		7
3. Action undertaken: Development of the GMP <i>Design for Security</i> consultancy service		
4. Conclusion & recommendation		14
Appendix 1: Reference materials		17
Appendix 2: Key contacts for further information		21

Foreword

What is COST?

COST – European Cooperation in Science and Technology is an intergovernmental framework aimed at facilitating the collaboration and networking of scientists and researchers at a European level. Established in 1971 by 19 member countries, COST currently includes 35 member countries across Europe, and Israel as a cooperating state.

COST funds pan-European, bottom-up networks of scientists and researchers across all science and technology fields. These networks, called 'COST Actions', promote international coordination of nationally-funded research.

By fostering the networking of researchers at an international level, COST enables break-through scientific developments leading to new concepts and products, thereby contributing to strengthening Europe's research and innovation capacities.

COST's mission focuses in particular on:

- ✚ Building capacity by connecting high quality scientific communities throughout Europe and worldwide;
- ✚ Providing networking opportunities for early career investigators;
- ✚ Increasing the impact of research on policy makers, regulatory bodies and national decision makers as well as on the private sector.

Through its inclusiveness, COST supports the integration of research communities, leverages national research investments and addresses issues of global relevance.

Every year thousands of European scientists benefit from being involved in COST Actions, allowing the pooling of national research funding to achieve common goals.

As a precursor of advanced multidisciplinary research, COST anticipates and complements the activities of EU Framework Programmes, constituting a “bridge” towards the scientific communities of emerging countries. COST Actions are also open to participation by non-European scientists coming from neighbour countries (for example Albania, Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Lebanon, Libya, Moldova, Montenegro, Morocco, the Palestinian Authority, Russia, Syria, Tunisia and Ukraine).

COST's budget for networking activities has traditionally been provided by successive EU RTD Framework Programmes. COST is currently executed by the European Science Foundation (ESF) through the COST Office on a mandate by the European Commission, and the framework is governed by a Committee of Senior Officials (CSO) representing all its 35 member countries.

More information about COST is available at www.cost.eu

Executive summary

This case study describes the redesign of the Greater Manchester Police (GMP) Architectural Liaison Unit, which was relaunched in 2009 under the brand 'Design for Security' (DFS).

In partnership with local planners in Greater Manchester, Design for Security developed the *Crime Impact Statement* (CIS). This is a document that provides the architect or designer with information on crime risk for a development site, reviews development plans against crime prevention principles and makes design recommendations on how crime risks might be mitigated. The CIS draws on data and intelligence unique to the police, including accurate location-specific crime incident data and intelligence on offender *modus operandi* (MO) and emerging crime risks.

The CIS is a required document for submission with all applications for Planning Consent (permission to build) made to the Local Planning Authority. The requirement for the CIS means developers must contact Design for Security prior to submitting finished plans to the local planners, and encourages engagement with Design for Security consultants earlier in the design process.

The service has advantages for both crime prevention and building developers:

1. Early-stage consultation enables architects to more effectively integrate crime prevention at the concept design stage, and to develop more sympathetic design solutions that prevent crime and security issues arising.
2. Consultation with police DFS consultants prior to application for planning consent reduces the likelihood of the police raising a formal objection with the local planners during the planning approval process. Any issues are able to be raised by DFS consultants and addressed by the designer prior to planning submission. Thus, the CIS minimises the risk of delay — and additional cost — for the developer during the planning process.

Providing a timely and professional service, tailored to the needs of architects, developers and planners, that reduces the risk of planning delay has allowed GMP to charge developers for the CIS service. This has resulted in Design for Security becoming a self-financing unit within GMP. In turn, this has insulated delivery of crime prevention services in GMP from the effects of public sector austerity that have affected police forces in England and Wales since 2010.

An additional benefit of the CIS relates to counter-terrorism issues. Through the CIS consultation process, Design for Security gain early insight into all new developments planned for the city. Design for Security consultants are able to screen developments against counter-terrorism priorities and risk factors. Relevant projects can then be followed up by GMP counter-terrorism officers.

This case study identifies a range of enabling factors that supported the development of Design for Security, including:

1. All the Design for Security consultants have a background in the development industry (i.e. architecture, planning; urban or environmental design)

2. Mike Hodge, the original Head of the Architectural Liaison Unit at GMP benefited from a constructive relationship with the Head of Planning for Manchester City Council — the most influential Local Planning Authority in Greater Manchester. This was an important factor in the roll-out of the CIS to other Greater Manchester planning authorities
3. The Crime Impact Statement was originally developed and continues to be refined through evidence-based research and development undertaken as part of a strategic partnership between GMP and the *Design Against Crime Solution Centre* at the University of Salford

The authors recognise that replicating this model for design-led crime prevention delivery in other UK police force areas or other EU countries is not a simple matter. The CIS process was developed for the Manchester context and relies on a number of structural factors. For instance, police in many EU countries are not permitted to charge for services. Nevertheless, the authors identify a number of aspects of the Design for Security approach that may be relevant, beneficial and transferable to other regions and contexts.



Figure 1. *The GMP Design for Security brand*

Acknowledgements

Authorship

This case study was written by Dr Caroline L. Davey and Andrew B. Wootton, Design Against Crime Solution Centre, University of Salford.

Contributors

Editorial support was provided by Dr Luba Pirgova-Morgan, Design Against Crime Solution Centre and the COST Action TU1203 Editorial Group

The authors would like to thank the following for their contribution to the case study:

- ✎ Greater Manchester Police Design for Security
- ✎ Manchester City Council Planning Department.

Introduction

Case study focus & scope

This case study focuses on the development of the *Design for Security* consultancy service within Greater Manchester Police (GMP). *Design for Security* provides advice to architects, developers and urban planners on how to reduce the risk of crime and antisocial behaviour, helping to create safe and secure urban environments. This service was developed from the previous Police Architectural Liaison service offered by GMP to achieve earlier engagement in the design process and so enable more substantive design-led crime prevention interventions. This case study provides an overview of the context and objectives that underpinned the need to develop *Design for Security*, the role of the different actors involved, and how the service redesign was achieved.

The service redesign involved three organisations working together: (a) the Head of GMP's Architectural Liaison Unit, supported by the GMP Assistant Chief Constable; (b) the Head of Manchester City Council's Planning Department; and (c) the *Design Against Crime Solution Centre* at the University of Salford. The case study covers the period 2004 to the present.

The Design Against Crime Solution Centre

Design Against Crime began as a UK initiative to improve security by embedding crime prevention within design education and practice, with the aim to make everyday products and places less vulnerable to crime. The University of Salford was involved in the initial initiative (1999–2002) and continues to deliver research projects on urban security across Europe.

Established 2003–05, the *Design Against Crime Solution Centre* is a partnership between the University of Salford, Greater Manchester Police (UK) and DSP-groep (NL), an independent institute for policy research and social innovation.

What is an Architectural Liaison Officer?

Police forces provide advice to architects, developers and urban planners on how to reduce the risk of crime and antisocial behaviour, helping to create safe and secure urban environments. Advice is provided by Architectural Liaison Officers (ALOs), often referred to as Crime Prevention Design Advisors (CPDA) or sometimes Designing Out Crime Officers (DOCO). In Greater Manchester Police, ALOs are referred to as 'Design for Security Consultants' —to reflect GMP's unique approach to the role.

“The ALO is a specialist in security and crime risk management who will prepare a site-specific risk analysis and recommend appropriate measures to design out crime.”

(Secured By Design website, www.securedbydesign.com)

All police forces in England and Wales employ specialist police officers to assess the vulnerability to crime of proposed developments and make recommendations to reduce crime risk and impact. Such officers have different names, including: Designing Out Crime Officers (DOCOs); Crime Prevention Design Advisors (CPDAs); and Architectural Liaison Officers (ALOs). While the role of these specialist officers was more usually referred to as ALO back in the early 2000s, in recent years CPDA and DOCO have become the more common terms.

Police forces in England and Wales—and GMP

There are 43 police forces in England and Wales (<https://www.police.uk/forces/>). Greater Manchester Police (GMP) serves the Greater Manchester area, which is in the North of England. GMP works together with a number of local authorities—there are ten in Greater Manchester (http://www.manchester.gov.uk/info/100004/the_council_and_democracy/66/councils_in_greater_manchester).

To aid comprehension, throughout this case study such crime prevention specialist officers in other police forces will be referred to as Architectural Liaison Officers (ALOs). In Greater Manchester Police, ALOs are referred to as ‘Design for Security Consultants’—to reflect GMP’s unique approach to the role.

Case study methodology

The COST Action approach

Participants in COST Action TU1203 visited different cities to learn how Crime Prevention Through Urban Design and Planning (CP-UDP) is being delivered. Each visit was written up in the form of a case study to capture and communicate the knowledge and learning generated.

The first visit was hosted by the University of Salford, and a protocol for the visit and subsequent case study was developed by the Design Against Crime Solution Centre. The Solution Centre also developed a structure and template that all case studies would follow. Each subsequent COST case study visit adopted this development protocol and case study template. The protocol included:

- Meetings regarding suitability of proposed locations prior to the COST Action visit
- A standard format for the visit (presentations followed by visits to urban development and regeneration projects)
- A standard process for writing up after the visit, using the COST case study template (via a COST *Short-Term Scientific Mission* (STSM) by one or more Junior Network members)
- Circulation of the draft COST case study to all Management Committee members
- Final editing of the COST case study by the authors, with support from WG3.

An outline of the COST Case Study Protocol is shown in Figure 2, below.

	MONTH	ACTIVITY DETAIL
BEFORE	CS -6 months <i>(minimum)</i>	CORE GROUP <ul style="list-style-type: none"> ➤ COST Core Group meeting held at prospective MC meeting location - Core Group visit potential Case Study (CS) location(s) and meet potential CS experts / hosts
	CS -5 months	<ul style="list-style-type: none"> ➤ CS experts / hosts (x2) formally invited to attend COST MC meeting as WG3 "invited experts"
	CS -4 months	<i>(prior to CS visit)</i> <ul style="list-style-type: none"> ➤ WG3 meeting - CS experts / hosts present potential Case Study (20 min) - Potential Case Study discussed by WG3 (40 min)
	CS -2 months	<ul style="list-style-type: none"> ➤ Skype meeting with WG3 leaders to assist preparation <i>(if required)</i>
CASE STUDY		(& CASE STUDY VISIT) <ul style="list-style-type: none"> ➤ CS presentations and visit <i>(within MC meeting)</i>
AFTER	CS +1 month	<ul style="list-style-type: none"> ➤ Short-term Scientific Mission (STSM) by Junior Network member to collect data and complete / edit Case Study Template (5 days duration)
	CS +2 months	<ul style="list-style-type: none"> ➤ Draft Case Study circulated to WG3 members for review and feedback
	CS +3 months	<ul style="list-style-type: none"> ➤ Editing of final Case Study (WG3) and online publication (WG5)

Figure 2. The COST TU1203 case study protocol

The case study template required researchers developing a crime prevention case study to follow a standard structure for reporting the results as follows: outline aims, development process, method of delivery, impact and key learning points. The context for the case was described using a crime prevention timeline, and detailing relevant national, regional and city/municipal context factors. The implications of the case for future practice were considered in relation to emerging issues, tensions and opportunities for development.

The template was applied to the case study on GMP's Design for Security service.

GMP Design for Security case study

This case study focuses on a police architectural liaison service redesigned to better meet the needs of architects, developers and planners in Greater Manchester (UK) – Greater Manchester Police's (GMP) *Design for Security* service. The research for this case study was undertaken by researchers at the Design Against Crime Solution Centre, University of Salford.

COST TU1203 visited the Design Against Crime Solution Centre at the University of Salford Monday 13th to Wednesday 15th May 2015. Held at its MediaCityUK campus, presentations were given by the GMP's Design for Security consultancy, Manchester City Council's planning department, and the

University of Salford. In addition, visits were made to sites across Greater Manchester to investigate security problems and explore new developments.

Timeframe	Data collected
2017	Consultancy for GMP
2016	Information about the approach adopted in Greater Manchester was obtained from a two-day COST to Manchester (UK). Presentations were given by a planner, a police Design for Security Consultant and researchers. COST members also visited local developments (Davey & Wootton, 2016).
2015	The redesign of the police architectural liaison service has been re-analysed and presented in various papers and presentations (Davey & Wootton, 2015).
2003–2009	The redesign of the police architectural liaison service has been reviewed since 2003 (Wootton et al, 2007, 2009).

Table 3. Sources of data for the crime prevention approaches.

The case study drew on research conducted between 2007 and 2013.

In 2007, the Solution Centre was commissioned by GMP to evaluate and improve its crime prevention service (Wootton *et al*, 2007). The Solution Centre was subsequently employed by the UK Association of Chief Police Officers (ACPO) to assess crime prevention services delivered in 43 police forces in England and Wales (Wootton *et al*, 2009). These research projects provided the team with a unique insight into the development of GMP’s crime prevention service as well as access to research data on the service’s characteristics and capacities compared to those delivered by other forces in England and Wales.

In addition, the Solution Centre has organised events and presentations to explain the service to stakeholders across Europe, delivered in collaboration with GMP and Manchester City Council (www.designforsecurity.org).

1. Context

Key contextual factors relevant to case study

Level of crime

Like many other European countries, England and Wales suffered from rising crime levels from the 1980s to the mid-1990s (British Crime Survey, 2001). England and Wales were categorised as high crime countries in 2005, compared to other European Countries. However, crime has reduced significantly in England and Wales—a significant achievement for the UK. According to analyses of results from the International Crime Victimization Survey (ICVS), better home security has been helping to reduce burglary since 2005 (van Dijk, 2012).

In the 12 months preceding March 2013, there were 8.6 million crimes in England and Wales, according to data obtained from telephone interviews with a representative sample of approximately 50,000 households undertaken for the Crime Survey for England & Wales (CSEW). These prevalence rates were substantially lower than those measured by the CSEW in the mid-1990s. Indeed, the 2013 estimate is the lowest since the survey began in 1981 (CSEW, 2013a).

The CSEW survey identified that 14 out of every 100 households experienced some type of household crime. In particular, 5 in every 100 households were a victim of vandalism, 5 in every 100 a victim of vehicle crime, and 2 in every 100 a victim of burglary — some 468,000 households. In terms of the impact on the individual, 5 in every 100 adults were a victim of crime against the person. In addition, 3 in every 100 adults were a victim of some type of violence (Davey & Wootton, 2017; CSEW 2013a, b).

Outside of the UK's capital (London), Greater Manchester has one of the highest rates of crime in England and Wales. In Manchester, problems have included: burglary, robbery, violence, and disorder, resulting in particular from the Late-Night Economy (BCS, 2001; MCC, 2001–2014). The link between violence and alcohol consumption is highlighted by the International Crime Victimization Survey (ICVS), which suggests that violence is generally higher in countries with higher levels of alcohol consumption per capita (van Dijk *et al*, 2007).

Legislation driving crime prevention

In the UK, local authorities are under pressure to consider crime issues. Section 17 of the 1998 *Crime and Disorder Act* (Great Britain (1998) states that:

“It is the duty of the authority to exercise its various functions with due regard to the likely effect of the exercise on crime and disorder in its area, and the need to do all that it reasonably can to prevent crime and disorder in its area.”

While the wording is relatively vague, the result was that local authorities and providers of public services were all made aware of their responsibility to prevent crime and disorder. In addition, Crime and Disorder Reduction Partnerships (CDRP) were established to address crime issues within the region. These brought together police, local authorities (including planners and city managers), fire services, health authorities, public transport services, registered social landlords (such as housing associations), the voluntary sector, businesses and local residents.

This piece of legislation ensured that local authorities are expected to consider prevention of crime and disorder through the planning process. In general, crime prevention is considered when a local authority is deciding whether to award “planning permission” —i.e. give formal permission for the erection or alteration of a building or development. Developments judged at risk of crime may be required to re-design or risk being denied planning permission.

In 2004, the Office of the Deputy Prime Minister published “*Safer Places. The Planning System and Crime Prevention*”. This guidance document outlined clear policy statements arising from *Planning Policy Statement 1*, delivering sustainable communities, that put “*crime prevention at the heart of the planning process*” (p. 45). It drew attention to the importance of designing out crime and designing in community safety stated within Planning Policy Guidance (PPG), including PPG3 (Housing), PPG6 (Town centres and retail developments), PPG13 (Transport) and PPG17 (Open space, sport and recreation). *Safer Places* draws on Crime Prevention Through Environmental Design (CPTED) principles.

Crime Prevention Through Environmental Design (CPTED)

CPTED is a multidisciplinary approach to deterring criminal behaviour through the design and management of the environment. CPTED strategies rely upon the ability to influence offender decisions that precede criminal acts. Europe, the term “Designing Out Crime” is often used.

Key drivers and enablers for development of Design for Security

The introduction of the **Manchester Planning condition** for new residential developments to meet Secured By Design standards was the driver for change. A ‘condition’ is an act or an event that affects the parties’ contractual duties. In 2004, a planning condition was introduced by Manchester City Council requiring new residential developments to conform to the UK’s *Secured By Design* standard. Manchester City Council was the first local authority in England and Wales to take this pioneering step. The planning condition would be applied to major developments (in relation to residential developments, those with more than 10 dwellings (Wootton & Davey, 2016).

Between 2004 and 2005, Greater Manchester Police had a team that included four Architectural Liaison Officers (ALOs), who were reviewing approximately 2,000 plans per year. Unfortunately, GMP did not have the resources to employ more ALOs and was not therefore in a position to meet the potential demand resulting from the new planning condition. There was a need for Greater Manchester Police to find a way to increase the number of ALOs to meet the Manchester Planning Condition. Also, another issue needed to be addressed regarding when advice to architects was

provided. The ALOs were reviewing the plans submitted for planning permission—i.e. after detailed design. They were not being consulted by architects during the early stages of the design process (Wootton & Davey, 2016).

There are a number of factors that enabled the development of a design-led crime prevention service in Greater Manchester able to meet demand resulting from the Planning Condition.

1. The background of the Head of the Architectural Liaison Unit at GMP

Greater Manchester Police (GMP) appointed its first Architectural Liaison Officer in 1991—an architect. The reason for appointing an architect rather than a serving police officer, as is the practice amongst other police forces, cannot be recalled. However, the practice continued, and it was to be the foundation for the development of a quite different type of service.

In the late 1990s, the GMP formed an Architectural Liaison Unit, staffed by an architect and two surveyors. By the mid 2000s (2004 to 2005), four Architectural Liaison Officers were in post—all with a background in the development industry. In 2003, a partnership was formed between GMP and the University of Salford—the *Design Against Crime Solution Centre* (Wootton & Davey, 2016).

2. The UK's Secured By Design accreditation scheme was available to act as a 'benchmark'

The Association of Chief Police Officers (ACPO) established an accreditation scheme for homes and commercial buildings—called *Secured by Design* (SBD). SBD is an industry standard for the prevention of crime prevention against homes and commercial premises. As a result, the planning department could use the achievement of Secured By Design as an attainment design goal that could be objectively measured (i.e. through Secured By Design accreditation).

Secured By Design

In 1989, the Association of Chief Police Officers (ACPO) established *Secured by Design*. This is an accreditation scheme for homes and commercial buildings. The scheme supports Crime Prevention Through Environmental Design (CPTED) through use of effective crime prevention and security standards. Developers and architects interested in achieving Secured By Design accreditation for a development, apply to ACPO. In some cases, a client may make it a planning condition that a development achieves Secured By Design (www.securedbydesign.com). However, Secured By Design was not made compulsory, and was not implemented on a wider scale up until the 2004. Nevertheless, the existence of an accreditation scheme resulted in crime prevention standards being developed, validated and accepted in the UK.

3. The constructive relationship between the Head of the ALO Unit at GMP and the Head of Planning at Manchester City Council

Setting up a process where crime risk is considered within the planning process required collaboration between the local authority planning department and GMP. The constructive relationship between the head of GMP's ALO Unit and the Head of Planning at Manchester City Council was therefore a key factor in the development of Design for Security.

4. The Head of the ALO Unit was reporting directly to GMP's Assistant Chief Constable and therefore given leeway to develop 'novel' proposals

The Head of the ALO Unit—Mike Hodge—reported directly to senior management within GMP. As a result of the support received from GMP's Assistant Chief Constable, Mike Hodge was able to progress Design for Security.

5. "Suck it and see approach", in that the legal basis was uncertain, but GMP and Manchester City Council decided to try it anyway

The legal basis for a service where developers / architects are required to pay for crime prevention advice was uncertain. Research was undertaken to explore the options and risks, but this was not conclusive. GMP and Manchester City Council decided to simply try the service—to see whether any developers objected.

6. The service redesign (where the GMP ALO Unit became Design for Security) was based on evidence from academic studies led by the Design Against Crime Solution Centre

The University of Salford's Design Against Crime Solution Centre worked closely with GMP to help establish Design for Security. The Solution Centre also evaluated the GMP's ALO service (Wootton *et al*, 2007).

7. Developers main concern is time and uncertainty, and the new service reduces uncertainty. The fact that there are benefits to developers fosters acceptance.

Developers construct, redevelop or refurbish buildings, aiming to make a profit in the process (<https://www.designingbuildings.co.uk/wiki/Developer>). Developers want their building projects to progress, as planned. Delays are likely to cause them practical and financial problems. Gaining permission to build within a set timeframe is therefore important. The new Design for Security service was designed to benefit developers—in that early consultation reduced the risk of planning permission being delayed or denied. As a result, developers accepted the new service.

8. GMP's senior management are supportive of a commercial approach service delivery and to income generation

GMP's senior management were open to a commercial approach where architects and developers pay for advice from Design for Security Consultants, recognising that income would support delivery of this vital service (Wootton & Davey, 2016).

9. Manchester City Council planners prioritise security as a planning issue

The local planning authority is responsible for deciding whether a development will be allowed to go ahead. They make decisions about all types of developments, from extensions on houses to new retail facilities (Planning Portal, accessed 2.11.17). Planners must take into account a range of issues, including the concerns of neighbours and environmental risks. Manchester City Council planners are committed to addressing problems of crime, disorder and insecurity—issues of concern to residents. The planners were also prepared to use the planning process to improve safety and security.

2. Timeline

Summary of key actions/events

Date	Item	Ref.
1989	<i>Secured By Design</i> established as crime prevention audit tool by Association of Chief Police Officers (ACPO)	2, 3
1995	Greater Manchester Police (GMP) appoint architect as first Architectural Liaison Officer (ALO)	4
1996	GMP ALO team increases to four persons — two surveyors, one planner and one architect	
2003–05	<i>Design Against Crime Solution Centre</i> strategic partnership formed between the University of Salford and GMP – Research into design and delivery of GMP Architectural Liaison Service begins	6, 7
2006–07	GMP's <i>Design for Security</i> consultancy service created and launched - Research to evaluate design and delivery of GMP Architectural Liaison Service undertaken	
2010	Crime & Disorder Reduction Partnerships (CDRPs) renamed as Community Safety Partnerships (CSPs), and focus shifts to " <i>...neighbourhood confidence in policing and crime prevention.</i> "	8
2008–present	Research undertaken to support Design for Security and improve the CIS.	

3. Action undertaken

Development of the GMP *Design for Security* consultancy service

This section discusses the redesign of the Greater Manchester Police Architectural Liaison Unit—which was rebranded as the “*Design for Security*” consultancy service in 2007. GMP’s Design for Security service was established to meet the needs of architects, planners and police, and to better integrate design-led crime prevention within the urban design and planning processes.

A. Stakeholders & team

As explained earlier in this case study, the redesign of the GMP Architectural Liaison Unit was enabled by a number of factors.

- ↘ There was a ‘coming together of minds’ between: (i) an Assistant Chief Constable of GMP; (ii) the Head of the Architectural Liaison Unit at GMP; and (iii) the Head of Planning at Manchester City Council.
- ↘ A close working partnership between GMP and the University of Salford’s Design Against Crime initiative since 2000. This situation led to the establishment of the *Design Against Crime Solution Centre* as a strategic partnership between the University and GMP. The Solution Centre conducted research to support the development of GMP’s ALO service (Wootton *et al*, 2007) and improve crime prevention in England and Wales (Wootton *et al*, 2009).

B. Problem & purpose

The need to extend and improve GMP’s Architectural Liaison service arose because Manchester City Council implemented a planning condition for Secured by Design (SBD), meaning all new building designs had to conform to the standard of the UK accreditation scheme (<http://www.securedbydesign.com>).

Planning conditions

In “*Safer Places*”, the Office of the Deputy Prime Minister (2004) stated that “where crime prevention or the fear of crime is material to a proposed development, local planning authorities may wish to consider planning conditions to secure measures that reduce the possibility of crime” (ODPM, 2004, p. 49). The local authority was allowed do to do this in situations where it could be demonstrated that the planning condition was necessary and relevant to the development—i.e. that design changes could prevent crime or promote community safety.

Formal consideration of crime issues within the planning control process was welcomed by ALOs. However, the implementation of a Secured By Design planning condition revealed a gap in GMP's ability to deliver. They lacked the capacity (i.e. the trained staff, IT support, and procedures) to be able to assess all the planning applicants submitted to Greater Manchester's planning department.

The vision therefore was:

“To establish an innovative Architectural Liaison Unit that increases the use and effectiveness of design-led crime prevention across Greater Manchester, and becomes a focus for innovation and best practice in the Northwest”

As well as there being more work than the ALO team could reasonably deliver, there was also a realisation of the need to:

- ✚ Influence designers much earlier in the design process, where design changes were less likely to incur cost and time penalties for the developer
- ✚ Formally integrate CPTED or Designing Out Crime advice within the planning process
- ✚ Generate funding to employ additional staff to cope with additional demands on the service

The vision was realised in part through the development of the *Crime Impact Statement* (CIS). The CIS fitted within the ‘Impact Statement’ model common for considering issues in building development, such as the “Environmental Impact Statement” and “Traffic Impact Statement”.

An example of an Environmental Impact Statement in England

The Environmental Impact Assessment ensures that a local planning authority considers the impact on the environment when granting permission for a project. Importantly, the Environmental Impact Assessment enables the public to participate in decision-making procedures by informing them at an early stage about potential projects. The Assessment describes the project and its likely impact on aspects of the environment. The applicant should consider the short and longer-term effect. Local planning authorities have a well established general responsibility to consider the environmental implications of developments subject to planning control. The 2011 Regulations integrate Environmental Impact Assessment procedures into planning control. However, the Government is keen to stress that such Impact Assessments in England “*should not be a barrier to growth and will only apply to a small proportion of projects considered within the town and country planning regime*”.

Sources: For general information on the purpose of the Environmental Impact Statement see Department for Communities and Local Government (DCLG 2014a). Information on the content available from DCLG 2014b).

The CIS format integrates crime prevention into the planning control process and helps gain acceptance from architects and developers, who are familiar with the approach. Over the longer term, it also reduces demand on police through reductions in crime and disorder.

The University of Salford's *Design Against Crime Solution Centre* conducted research to support the achievement of Architectural Liaison Unit's vision, and develop strategies to help improve police crime prevention services across England and Wales (Wootton *et al*, 2007). The research identified

problems with consultation late in the design process and potential benefits with early consultation for developers and architects.

C. Development & implementation

Influencing designers much earlier in the design process

The development process

In simple terms, the development process may be conceptualised as comprising three key stages (i) briefing; (ii) concept design, and; (iii) detailed design. These three stages, which take six months to two year (or more), occur prior to a planning application being submitted. If the application is granted planning approval, then construction can begin on receipt of formal approval.

The stage at which the majority of ALOs in England and Wales review design proposals is at the planning application stage—i.e. after detailed design had been completed, and the client has signed off the project—i.e. approved the design. Any changes required at this late stage delay construction and are therefore problematic for the developer with respect to both time and money. The potential to change the design at this late stage is also limited. For example, the demand for reduced vulnerability to crime of a development could likely result in the need to retrofit security devices.

Generally, ALOs were notified about applications by the planners, and this practice was dependent on local protocols. For instance, a local authority might specify that the ALO should review plans for “major developments”. In contrast, GMP ALOs aimed to consult at the concept design stage, when it is possible to influence the overall design of a development.

The mechanism for this early stage consultation is the Crime Impact Statement.

The Crime Impact Statement (CIS)

The Crime Impact Statement (CIS) is the report that has to be submitted with planning applications. The CIS is more than a report—it is both a consultation and an evaluation process undertaken by *Design for Security* (<http://www.designforsecurity.org/crime-impact-statements/>). The CIS process involves identifying, predicting, evaluating, and mitigating the crime and disorder effects of a development proposal early in the design process—prior to planning decisions being taken and commitments made. The CIS is divided into two parts, as follows:

↘ **PART A:** Crime Impact Assessment

- 12-month crime pattern analysis of 1km area around development site based on recorded police crime data
- General risk assessment relating to type of building and its uses
- Site visit and site-specific risk assessment

↘ **PART B:** Crime Prevention Recommendations

- ALO comments and assessment of plans/drawings (layout and spatial relationships)
- Secured by Design (e.g. target hardening)
- Conclusions.

The CIS was introduced in 2006, but initially only applied to residential developments (new or conversions) where six or more units are created. It currently covers the full range of developments, including: office and commercial developments; change of use to licensed premises or bookmakers; new build student accommodation; all cash machines located within or outside a building in public space; schools; health facilities; transport infrastructure, and stations. The CIS includes all the requirements for Secured By Design accreditation. However, if the applicant wishes to obtain Secured by Design accreditation, they have to apply for the award separately (<http://www.designforsecurity.org/crime-impact-statements/>).

Redesigning GMP's ALO service

The service was tailored to better reflect the needs of architects, designers, developers and police. The Solution Centre rebranded GMP's Architectural Liaison Service as "*Design for Security*" and the ALOs as "*Design for Security Consultants*". The CIS and the information brochure were also redesigned to communicate a more professional, design-based consultancy service.

A critique of a design from a security, crime and fear of crime perspective is provided by a *Design for Security Consultant*. GMP states that its consultants act as "*a critical friend*". The Design for Security website, reassures architects that its Consultants understand and support architects. According to the website, the Design for Security team (<http://www.designforsecurity.org/about/>):

- ↘ Understands the competing considerations and trade-offs involved in design decision-making
- ↘ Ensures balanced advice and intelligence-led solutions that relate to a development's context
- ↘ Supports innovation and creative thinking.

Design for Security charges developers for CIS service, based on the "polluter pays" principle. This generates funding to cover increased ALO resources required by CIS. It enables a much more professional, customer-focused 'consultancy' approach and improved training. It has also increased research and evaluation opportunities.

Charging for police services in the UK

Police services are generally performed for the "*benefit of the public at large*" and are paid for from public funds. However, UK police also have the power (under s.25 of the Police Act 1996) to provide "*special police services*" for which they can levy a charge. The levying of a charge may in some instances be challenged by arguing that the service is an ordinary police service—not a "special service". Alternatively, the level of charges may be challenged on the grounds that they are contrary to competition law. However, the applicability of competition law to special police services remains an open question (Odudu, 2012).

Integrating the CIS into planning control

The UK government requires that most new buildings or major changes to existing buildings or to the local environment need consent—known as planning permission. The planning system ensures that any changes to buildings or use of land do not impact negatively on the people who live and work in the area. The local planning authority is responsible for deciding whether a development should go ahead, deciding on everything, from an extension to a house to a new shopping centre. Currently, applicants apply for planning permission and a range of other consents online through the Planning Portal (<http://www.planningportal.gov.uk/planning/applications/>).

The CIS was implemented within planning control by embedding it within the Local Planning Authorities' 'Local List' of information required to accompany all major planning applications (<http://www.manchester.gov.uk/info/200074/planning/5865/planning>). The purpose of the CIS is to ensure that design decision-makers consider crime, disorder and fear of crime before determining whether to proceed with new projects (<http://www.designforsecurity.org/crime-impact-statements/>).

Developers commission and pay for a CIS that is specific to the location and proposed development. The amount paid by the developer depends upon the size of the development.

In effect, developers are paying for a timely and professional advice service. Developers benefit from fewer "last-minute surprises" and costly planning delays. Experience shows that once the requirement to consider crime and security is understood, architects tend to rise to the challenge.

D. Outcome & impact

The University of Salford's *Design Against Crime Solution Centre* conducted research to support the achievement of Architectural Liaison Unit's vision, and develop strategies to help improve police crime prevention services across England and Wales. As part of this, the Solution Centre conducted a survey in 2008 with ALOs of all 43 police forces in England and Wales, from which 78 per cent of questionnaires were returned (Wootton *et al*, 2009).

The survey asked about the amount of time allocated to the Architectural Liaison Officer ALO role. The results showed that only 14 per cent of ALOs were allocated solely to an ALO role, and that 86 per cent of them were utilised for non-ALO duties. Furthermore, the amount of time dedicated to ALO activity was often relatively small. Sixty per cent of ALOs spent less than half their time on ALO activities. GMP were fortunate in that their ALOs were dedicated solely to ALO tasks (Wootton *et al*, 2009).

The survey examined early consultation, asking about the approximate percentage of planning applications the ALO is consulted on *before* the planning application is submitted. The majority of ALOs (64 per cent) were rarely consulted at an early stage—i.e. in less than 10 per cent of cases. The survey finding was important because it clearly demonstrated the relationship that the majority of ALOs had to the planning process.

A developer does not have to consult with GMP, but can purchase a CIS from another service provider, such as a private consultancy firm. In practice, most developers continue to consult with *Design for Security*, thus benefiting from the police's in depth and up-to-date knowledge of crime issues both locally and nationally.

In 2010, the Association of Chief Police Officers proposed that the approach adopted by *Design for Security*—called the “*Manchester Model*”—be rolled out across England and Wales and a National Police Crime Prevention Service (NPCPS) established. However, the NPCPS was not established due to changing political priorities. In addition, it is likely that many police forces will employ significantly less ALOs. ALOs are vulnerable to cuts in public spending because they are classified as “backroom staff”—rather than “front line police officers”. Many ALOs are also older and therefore more likely to be made redundant during cuts in public funding. In contrast, GMP continues to employ *Design for Security Consultants*, who are largely protected from redundancy because due to their income generating activities.

4. Conclusion & recommendations

A. Main findings

This case study demonstrates how Crime Prevention Through Urban Design and Planning can be integrated into the planning control process, in a way which meets the needs and requirements of architects and developers. The provision of a better quality service supports the development of a consultancy style service within the police, which is charged for in Greater Manchester. Income generation has protected GMP's Design for Security Service from redundancies due to cuts in police spending.

B. Emerging issues

Income generation has protected Design for Security from cuts in staff. However, the service is having to adapt to changes in structure, responsibilities, priorities and premises due to cuts in public funding. Research will need to be conducted to investigate the impact of the changes on Design for Security.

Early stage consultation enables architects to better integrate crime prevention into the design. In practice, effort may need to be invested by GMP in promoting greater early consultation. The current public funding cuts facing GMP—and all other UK police forces—makes focusing on service improvement problematic. Many ALO services are battling to survive the cuts.

Clearly, consideration of crime issues within building control is only possible for developments that require planning permission. Political changes may result in some developments being excluded from the building control process. Any changes in planning procedures should be scrutinised in terms of their impact on crime and security.

Recent changes to planning procedures in the UK may undermine efforts to integrate crime prevention into planning control by excluding some “change of use” applications.

From October 2015, changes to Building Regulations require doors and windows to comply with specific security standards. The UK Government introduced a mandatory Security Building Regulation requirement applicable to new dwellings only within a new section to the Building Regulations — Part Q (<http://www.planningportal.gov.uk/buildingregulations/approveddocuments/partq/approved>). The requirement states that the building must be designed and constructed in such a way that it adequately resists both unauthorised access from outside and, for flats inside a building, unauthorised access from within.

This new guidance is based on the provisions of British Standard PAS 24, which sets security standards for door and window designs, including tests and specifications for locks as well as the resilience to attack of the doors and windows themselves. Paul van Soomeren notes similar steps were taken in the Netherlands in 1999 and evaluated in 2011 by an economist (Vollaard and van Ours, 2011).

Vollaard, B. and J.C. van Ours (2011), Does Regulation of Built-in Security Reduce Crime? Evidence from a Natural Experiment. *The Economic Journal*, 121: 485–504.

C. Lessons learned

It is possible for the police to charge for a crime prevention advice service *if* that service is delivered professionally and offers clear benefits to the developers. Design for Security does this by (i) employing experts from the development industry (architects, planners, designers, etc.) who 'speak the same language' as the design teams they advise; (ii) the Crime Impact Statement (CIS) effectively reduces the likelihood that the police will object to a planning application—which itself could incur great cost for the developer.

The creation of Design for Security and the CIS process was only possible due to the strategic collaboration of the police and local authority at a senior level. The initiative was entrepreneurial in nature, requiring a high level of trust and commitment by the actors involved. A lot of this was dependent upon the personalities of the individuals who worked together at the time (they have all now retired), making the initiative 'of its time' and difficult but not impossible to repeat in another context.

D. Transferability

Design for Security was developed in response to specific problems in Greater Manchester, benefiting from the support of key senior stakeholders—including the police and local planning authority.

Transferability to other contexts is only possible when the planning department responsible for building control is willing and able to review the impact of development on crime, disorder and feelings of safety, as well as deny planning permission, where necessary.

The development of a consultancy service is only possible because the UK police are allowed to charge for services that fall outside of their main role. This income has funded increases in staffing needed to deliver the service. Police forces in many European countries would not be allowed to charge for such services.

While the “Manchester Model” cannot be simply be transplanted wholesale to other contexts, other European countries are certainly interested to learn about the approach. From 2009 to 2012, the Solution Centre participated in the *Planning Urban Security* (PLuS) project, led by the Landeskriminalamt Niedersachsen (Federal Police of Lower Saxony) in Germany. PLuS investigated the applicability of crime prevention measures and standards to different European contexts. The Solution Centre delivered several presentations and wrote several articles on Design for Security specifically for a German audience (See PLuS websites). The Danish Crime Prevention also visited Manchester / Salford specifically to learn about Design for Security.

Paul van Soomeren notes similarities in approach to Crime Impact Statements (CIS) across Europe—despite the fact that that they were developed independently. French started to work on more general

methods to assess the risks for possible crimes and feelings of insecurity in new to build – as well as existing - buildings or neighbourhoods in the 1990s. Similar to the CIS in Manchester, the French version is called l'Etude Sécurité et Sureté Publique (ESSP). The ESSP has become compulsory.

In the Netherlands, the Crime Impact Statement is called a Safety Effect Report (SER, see www.hetccv.nl; version April 2009). Before the actual construction takes place, possible risks are mapped out and safety measures are suggested. This is in accordance to the European Standard CEN/TR 14383-2:2007. In the Netherlands, the use of a SER is not compulsory though local authorities may ask the developer to make a Safety Effect Report before building permission is granted.

In Greater Manchester, the local authorities require that a major planning application is accompanied by a Crime Impact Statement (CIS). The CIS could be considered as compulsory. This CIS document resembles the Dutch and French documents mentioned above. A CIS includes an analysis of crime statistics, reports from site visits and local police knowledge on the potential crime risks in the area. The document also includes—like the Dutch and French documents—recommendations to mitigate the potential risks mentioned.

All these European approaches which have been developed between 1990 and 2010 more or less resemble an approach taken by CEN, the European Committee for Standardization, an association that brings together the National Standardization Bodies of 33 European countries. In 1995 work started to draft a European standard on “The Prevention of Crime through Urban Planning and Design” (CP-UDP). Reaching consensus in Europe is an extremely slow process, but in 2003 such a standard was accepted with a formal vote of all CEN members (see earlier note on CEN membership). The ‘name’ of this European standard is CEN/TR 14383-2:2007. It is actually one in a series (the 14383 series) which also comprises standards on Dwellings (TS 14383-3), Shops and Offices (TS 14383-4:2006), Petrol Stations (TR 14383-5:2010), Facilities for Public Transport (TR 14383-7:2009) and a standard on ram-raiding (Protection of buildings and sites against criminal attacks with vehicles, TR 14383-8:2009). Work on schools and medical facilities is still in progress.

E. Recommendations

Research is required to evaluate the scope and quality of the service offered by ALO services across England and Wales. This will involve the Solution Centre re-administering the survey conducted in 2009. Comparison of the results from 2009 and 2015 will help reveal the impact of the cuts in public spending on the police ALO service in England and Wales.

Further research is required to compare the use of Crime Impact Statements across different contexts. Comparisons have been drawn between Greater Manchester Police and New South Wales, Australia (Monchuk, and Clancey, 2013) where a study was conducted to identify whether Crime Impact Statements measure crime risk (Clancy, Fisher and Lee, 2011).

Studies into developments in France would be of particular value and COST TU1203 has visited Lyon to review current practice (<http://costtu1203.eu/publications-on-urban-safety-in-french/>).

Appendix 1

Reference materials

A. Timeline references

1. Great Britain (1998) *Crime and Disorder Act 1998*, Section 17. London: HMSO

B. Other case study materials

The Solution Centre had access to materials such as CIS and case visit information was shared with COST TU1203.

C. Websites

Planning Urban Security (PLuS). Reports available for download from:

http://www.lka.niedersachsen.de/praevention/vorbeugung_themen_und_tipps/staedtebau-152.html

COST Action TU1203. Information about the Action available from:

http://www.cost.eu/domains_actions/tud/Actions/TU1203

Part Q of UK Building regulations. Available to download from:

<http://www.planningportal.gov.uk/buildingregulations/approveddocuments/partq/approved>

Planning Portal, UK (accessed 2.11.17)

(https://www.planningportal.co.uk/info/200127/planning/102/about_the_planning_system).

D. Bibliography

British Crime Survey (2001) *The 2001 British Crime Survey*. London, UK: Home Office.

Clancy, G., Fisher, D. and Lee, M. (2011) "Do Crime Risk Assessment Reports Measure Crime Risk?" *Current Issues in Criminal Justice*, Vol. 23, no.2, pp. 235–254.

CSEW (2013a) *The likelihood of becoming a victim of crime*. Part of Crime Statistics, period ending March 2013 Release, Office of National Statistics; London, UK. Released: 18 July 2013, see: <http://www.ons.gov.uk/ons/rel/crime-stats/crime-statistics/period-ending-march-2013/sty-a-victim-of-crime.html>

CSEW (2013b) *Crime in England and Wales, Year Ending March 2013*. Office for National Statistics, Statistical Bulletin, London, UK. Download full report from: http://www.ons.gov.uk/ons/dcp171778_318761.pdf

Davey, C.L. and Wootton, A.B. (forthcoming) "Design Against Crime" to contribute to "Socially Responsible Design Series", (Ed) Cooper, R. Gower: UK.

Davey and Wootton (2015) Transformation Design – Creating security & wellbeing“. In “Transformation Design”, (Eds) Jonas, W., Rammler, S., Zerwas, S. and von Anshelm, K. BIRD: Germany.

Davey, C.L. and Wootton, (to be published May 2016), 'Integrating crime prevention into urban design and planning', Journal of Place Management and Development.

Davey, A. B. and Wootton, A. B. (2015) “Design for Security in Greater Manchester: Entwicklung eines Dienstes zur Integration von Kriminalitätsprävention in Urban Design und Stadtplanung“. DIFU publication. Berlin, Germany. www.difu.de/publikationen/2015/sicherheit-in-der-stadt.html

Davey, C.L. and Wootton, A.B. (2014) The Crime Prevention Capability Maturity Model. International Perspectives of Crime Prevention 6. Contributions from the 7th Annual International Forum 2013 within the German Congress on Crime Prevention. Forum Verlag Godesberg GmbH, Mönchengladbach, Germany. Available from:

<http://www.gcocp.org/kriminalpraevention/Module/Buecher/ISBN-978-3-942865-29-6.pdf>

Davey, C.L, Hodge, M. and Wootton, A.B. (2005) “Designing Against Terrorism,” Engineering Designer, Vol. 30, Iss. 1 (January/February), pp. 10-13. Winner of Hornsby Cup–2006.

DCLG (2014a) Environmental Impact Statement. Department for Communities and Local Government, (accessed 6.10.2014).

<http://planningguidance.planningportal.gov.uk/blog/guidance/environmental-impact-assessment/the-purpose-of-environmental-impact-assessment/>

DCLG (2014b) The Town and Country Planning (Environmental Impact Assessment) Regulations 2011, Department for Communities and Local Government. the National Archives (accessed 2.10.2014). <http://www.legislation.gov.uk/ukSI/2011/1824/schedule/4/made>

DCLG (2013) “Streamlining the planning application process”. January 2013. Department for Communities and Local Government. London, UK. Available for download from:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66061/Streamlining_the_planning_application_process_-_consultation.pdf

HMIC (2011) Adapting to Austerity, Her Majesty’s Inspectorate of Constabulary (HMIC): London, UK. p.23. Available from www.hmic.gov.uk

MCC (2001 to 2014) “One Team. Manchester Crime and Anti-social Behaviour Strategy”, 2011 - 2014, Manchester City Council: Manchester, UK. Download from:

http://www.manchester.gov.uk/info/200030/crime_antisocial_behaviour_and_nuisance/720/manchester_community_safety_partnership/2

Monchuk, L. and Clancey, G. (2013) A Comparative Analysis of Crime Risk Assessments and their Application in Greater Manchester and New South Wales. Built Environment, 39 (1). pp. 74-91. ISSN 02637960. This version is available at <http://eprints.hud.ac.uk/17017/>

Odudu, O. (2012) Regulating charges for special police services. *Competition Bulletin*. 2 September 2012. (accessed 25.05.2015) <http://competitionbulletin.com/2012/09/02/regulating-charges-for-special-police-services/>

ODPM (2004) "Safer Places. The Planning System and Crime Prevention". Office of the Deputy Prime Minister. Thomas Telford Ltd: Tonbridge, UK.

Pidd, (2014) How Manchester is designing out crime in Moss Side and Wythenshawe estates, *The Guardian*, 30th June, available at: <http://www.theguardian.com/cities/2014/jun/30/manchester-design-out-crime-moss-side-wythenshawe-estates>

Van Dijk, J. (2012) "The International Crime Victims Survey. The Latest Results and Prospects", *Criminology in Europe. Newsletter of the European Society of Criminology*, Vol. 11, pp.24-33. Download from:<http://escnewsletter.org/node/108>.

Van Dijk, J., van Kesteren, J. and Smit, P (2007) *Criminal Victimization in International Perspective. Key findings from the 2004 – 2005 ICVS and EU ICS*. WODC: Den Haag, Netherlands.

Vollaard, B. and J.C. van Ours (2011), Does Regulation of Built-in Security Reduce Crime? Evidence from a Natural Experiment. *The Economic Journal*, 121: 485–504.

Wootton, A.B. and Davey, A. B. (2016) "The value of Design Research in Improving Crime Prevention Policy and Practice, Refereed Conference Proceedings from the 11th International Conference of the European Academy of Design, Paris Descartes University, Institute of Psychology, Boulogne Billancourt, France, 22-24 April 2015. Edited by Louise Valentine, Brigitte Borja de Mozota, Julien Nelson. ISBN 978-1-84387-393-8. (Accepted 11th March 2015, to be published May 2016). The URL that will host the proceedings online is: <http://www.europeanacademydesign.co.uk/>

Wootton, A.B., Marselle, M., Davey, C.L., Armitage, R. and Monchuk, L. (2009) *National Police Crime Prevention Service. Implementation Planning Research Project*. DAC Solution Centre: Salford, UK. Available from: www.npcps.org

Wootton, A.B., Armitage, R. and Monchuck (2007) "Greater Manchester Police, Architectural Liaison Service Evaluation, Work Package 3 Report, Improvement & Development Recommendations". Confidential Report prepared by the Design Against Crime Solution Centre, University of Salford: Salford, UK.

Type of article	Reference to GMP's Design for Security	Reference
Refereed conference proceedings	Outlines development of Design for Security, and value of design research in developing and improving the service.	Wootton, A.B. and Davey, A. B. (2016) "The value of Design Research in Improving Crime Prevention Policy and Practice, Proceedings from 11th International Conference of the European Academy of Design, Paris Descartes University, France, 22-24 April 2015. Edited by Louise Valentine, Brigitte Borja de Mozota, Julien Nelson. ISBN 978-1-84387-393-8. (Accepted 11. 03.2015). EAD, Track 17, Design in Government: The Value of Design to Policy Making and Policy

		Implementation: https://ead.yasar.edu.tr/wp-content/uploads/2017/02/EAD11_Davey-and-Wootton_The-value-of-design-research-in-improving-crime-prevention-policy-and-practice-FINAL.pdf
Chapter in book (German)	In German, detailed account of Design for Security service	Wootton, A.B. and Davey, A. B. (2015) "Design for Security in Greater Manchester: Entwicklung eines Dienstes zur Integration von Kriminalitätsprävention in Urban Design und Stadtplanung". DIFU publication. Berlin, Germany. www.difu.de/publikationen/2015/sicherheit-in-der-stadt.html
Refereed journal article	Design for Security example of leading practice in UK. Other examples from Germany and Netherlands.	Davey, CL and Wootton, A. B. (to be published May 2016), 'Integrating crime prevention into urban design and planning', Journal of Place Management and Development.
Book chapter in Design Against Crime	Examples of approaches across Europe, including Design for Security	Davey, C.L. and Wootton, A.B. (submitted) "Chapter 8 – Crime Prevention in European Urban Design and Planning, in "Design Against Crime Book".
Journal paper	Crime Impact Statement – comparison of GMP and NSW Australia	Monchuck and Clancy (2011)

Table 1: Articles on Design for Security

Appendix 2

Key contacts for further information

Dr Caroline L. Davey – c.davey@salford.ac.uk

Andrew B. Wootton – a.wootton@salford.ac.uk

Design Against Crime Solution Centre

University of Salford

New Adelphi Building

The Crescent

Salford, M5 4WT

United Kingdom

T: +44 (0)161 2952693

F: +44 (0)161 2955678

www.designagainstcrime.org.uk