Design Against Crime European Exchange Tool

Guidance for designing against crime across Europe

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The University of Salford

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1.0 Design Against Crime

1.1 The value of design in crime prevention

Designers have particular skills that make them well-suited to addressing problems of crime, anti-social behaviour and insecurity. According to Pease (2001), a UK criminologist:

Designers are trained to anticipate many things: the needs and desires of users, environmental impacts, ergonomics and so on. It is they who are best placed to anticipate the crime consequences of products and services, and to gain the upper hand in the technological race against crime.

(pp27)

The aim of Design Against Crime (DAC) is to out-think the offender and develop design solutions that 'short-circuit' potential offenders' behaviour. This should be achieved, without:

- Reducing the design's value to legitimate users
- Increasing fear of crime
- Creating social problems
- Causing the seriousness of the crime to escalate

DAC originated as a research programme funded by the UK's Home Office, Design Council and Department of Trade and Industry. It ran from 1999 to 2002, and aimed to embed crime prevention within design education, training and professional practice.

1.2 Situational Crime Prevention and CPTED

DAC draws on a branch of criminology developed by Ron Clarke, called "Situational Crime Prevention". This is an approach aims to reduce the likelihood of occurrence by intervening in the immediate causes of crime—i.e. causes close to the crime event, such as the availability of resources, access to the place of crime, etc. DAC also draws on theories or approaches developed in the United States, including:

- Defensible Space Developed by the architect Oscar Newman (1973)
- Crime Prevention Through Environmental Design (CPTED) Developed by C Ray Jeffrey (1971)

CPTED principles help to reduce the likelihood of crimes associated with residential areas—including burglary, vehicle crime and robbery—as well as alleviate fear of crime in public spaces.

- Provide defensible space Architectural and environmental measures used to encourage communities to protect public and private spaces (Oscar Newman, 1973).
- Enhance territoriality Environments divided into small zones over which residents can exercise control. Clear separation between public and private space encourages residents to defend 'their' space.
- Increase surveillance Careful design of windows and building layout enables residents to survey public areas
- Improve image Good design and management are used to encourage people to care for environment and reduce fear of crime in public places.

These approaches are based the theory that opportunity is major component of all crime. As Francis Bacon (1561 – 1626) said "Opportunity makes a thief". This is the idea that:

No crime can occur without the physical opportunities to carry it out.

(Felson & Clarke, 1998)

1.3 Design-led crime prevention works

- Incorporating CPTED principles into the design and management of the build environment can reduce crime. Evaluations show that burglary and vehicle crime are significantly reduced in neighborhoods and dwellings that have achieved the Secured By Design accreditation in the UK (Armitage, 2000; Brown, 1999; Pascoe, 1999) and Police Label Secured Housing in the Netherlands (www.politiekeurmerk.nl).
- Research confirms the value of individual CPTED principles in reducing crime, including minimising access (Brantingham and Brantingham, 1975; Greenberg and Rohe, 1984; Wiles and Costello, 2000), providing in-curtilage parking (Town et al, 2003), maximizing surveillance (Brown and Bentley, 1993), enhancing territoriality (Brown and Altman, 1983; Brown and Bentley, 1993) and increasing physical security (Brown and Altman, 1983)
- A significant decrease in car crime and burglary is evident across many European countries, and the authors of the International Crime Victimisation Survey attribute this to better vehicle and house security (Van Dijk et al, 2007).

1.4 Design Against Crime at Salford

The University of Salford has been working on DAC since 1999, funded initially by the UK's DAC programme and later was by the European Commission's funding programmes—Hippokrates, 2001, 2002 and AGIS 2003, 2006. In 2004, the Design Against Crime Solution Centre was established. This is a unique partnership between the University of Salford, Greater Manchester Police, Greater Manchester Against Crime (UK) and DSP-groep (Netherlands). By supporting the development, promotion and evaluation of Greater Manchester Police's Architectural Liaison Unit, Salford has been at the forefront of efforts to develop a new fee-paying service.

DAC at the University of Salford is human-centred and context-driven—like good design. Salford works with project partners across Europe to understand different EU contexts. Resources and activities are tailored to designers' needs.

1.5 The AGIS 2006 project

Since October 2006, Salford has been running a two-year research project—*DAC Xchange*—funded by the European Commission's AGIS 2006 programme. The aim of the project was

to establish how CPTED information and best practice should be adapted, shared and effectively applied in different European contexts.

The project was conducted in collaboration with our partners:

- Mike Hodge, Greater Manchester Police (UK)
- Professor Mike Press, University of Dundee (UK)
- Professor Rachel Cooper, University of Lancaster (UK)
- Paul van Soomeren, Myrthe Schillings, Nicole Smits and Tobias Woldendorp, DSP-groep (Netherlands)
- Armando Jongejan, Politie Noord-Holland Noord (Netherlands)
- Professor Schubert and Dr Katja Veil, *University of Applied Sciences Cologne (Germany)*
- Dr Günter Stummvoll, Institute for the Sociology of Law and Criminology (Austria)
- Elzbieta Budakowska, *University of Warsaw (Poland)*
- Basil Zotos and Jaki Zotos, Architects Design & Planning Unit (Greece)
- Thomas Gilly, ERCES (France)

The project involved the following activities:

- Researching established CPTED schemes (the UK's Secured By Design Scheme and the Dutch Police Label Secure Housing
- Conducting research to determine the extent of problems related to crime and fear of crime in the UK, Netherlands, France, Germany, Austria, Poland and Greece
- Conducting research to identify factors that would support or constrain the application of CPTED
 principles. This considered a range of contextual factors—including the design professions, planning
 procedures, police structures and attitudes to crime prevention and urban development.
- Conducting a literature review and empirical research into fear of crime
- Identifying different approaches to addressing DAC and determining how these might be applied in different European contexts
- Developing procedures for addressing fear of crime and insecurity in Europe.

We also benefited from research undertaken in collaboration with other Salford DAC projects:

- An Evaluation of the GMP ALO Service Dr Rachel Armitage and Leane Monchuck, University of Huddersfield (UK)
- City Centre Crime Melissa Marselle, University of Salford (UK).

1.6 This guidance

This guidance—a key output of the AGIS 2006 project—aims to help local authorities, planners, police, academics, design professionals and developers identify methods of addressing crime prevention through design and planning, tailoring the approach to the European context. Guidance on addressing fear of crime and insecurity is also provided. The guidance is divided into the following sections:

- Design-led Crime Prevention Approaches
- Advice for European countries
- Further information and references

2.0 Design-led Crime Prevention Approaches

There are five main approaches to addressing problems of crime and insecurity within urban development that have been shown to work in Europe. These involve:

1. One-off development projects focussed on addressing crime

A client states that crime and/or insecurity must be addressed by the developer/architect within a specific building development project.

2. Accreditation scheme for building developments

An organisation with relevant expertise and authority provides the opportunity for developments that meet crime prevention criteria to be accredited (i.e. officially recognised). The developer, architect or owner applies for accreditation.

3. Crime prevention incorporated into the building control process

A process is established to ensure that development designs are checked by a design-led crime prevention expert prior to approval for construction being granted by the local authority planning department. Approval for construction may be delayed or withheld for development designs that do *not* conform to crime prevention criteria, and are thus judged vulnerable to crime.

4. Crime prevention integrated within design development process

A service is established that enables developers/architects to consult with design-led crime prevention experts during the early stages of the design development process. The need to consult with crime prevention experts regarding the proposed building development's crime risk and security is stipulated by the local authority planning department. The plans are checked by design-led crime prevention experts prior to approval for construction being given. Where crime prevention advice is acted upon, developers/architects can be fairly confident that approval for construction will not be delayed due to concerns about crime and security.

Approaches one to four are presented sequentially, as this represents how design-led crime evolved in Europe—particularly in the UK. The advantage of following the same process of development is that it enables expertise and resources to be built up gradually. However, it may be possible to advance more quickly or to even jump to a more advanced approach by drawing experience and resources gained in other countries.

5. Embedding crime prevention into design education, training and practice

A programme, project or activity is established to enable crime prevention to be explored by individuals involved in design education, training and practice. Activities might include teaching modules for children, design projects for student designers, design competitions, professional development events and the publication of case studies, articles and guidance material.

The first four approaches are illustrated in figure 1, below.



Figure 1. The main four approaches for addressing crime and insecurity within urban development

2.1 One-off development projects focussed on addressing crime

European countries without a tradition in design-led crime prevention should start by addressing crime and security within a building development project. This involves a client stating that crime and/or insecurity must be addressed by the developer/architect when constructing a new building development or whilst renovating an existing building. If this is successful, then the requirement to address crime and insecurity might be stipulated in selection criteria for developers/architects involved in future building development projects.

2.1.1 Must haves

There are certain requirements—or *must haves*—for establishing a building development project that addresses crime and insecurity. A team of people must have the authority to ask that a specific issue be addressed within a development project, and consider crime prevention a valuable objective. Public or private sector clients and/or developers generally have such authority, and may specify that the architect incorporate crime prevention into the design and construction of a building. Social Registered Landlords (i.e. housing associations and local authorities) are often committed to social issues), and may therefore be interested in crime prevention.

The requirement to address crime and/or insecurity may not be supported by legislation, and could therefore be challenged by a developer. In practice, developers/architects are unlikely to challenge such requirements, for fear of alienating potential clients and generating negative publicity. However, it is wise to ensure that developers/architects understand the need to address crime and/or insecurity.

Developers and architects will need detailed briefing documents, explaining the security objectives of the project and access to appropriate guidelines. The architect/developer should be made aware of how performance will be evaluated in relation to crime prevention.

MUST HAVES CHECKLIST – Addressing crime and insecurity within a building development project					
Contextual factors	Recognised need to address crime and/or insecurity				
	Team of people with the authority and willingness to address crime and/or insecurity with a development project				
Resources	Selection criteria for architects and developers, briefing documents, guidance materials				

2.1.2 Could haves

There are opportunities to adapt or improve a building development project that addresses crime prevention—*could haves*. The developer/architect will ideally have access to advice from a design-led crime prevention advisor. In the UK and Netherlands, advice has traditionally been provided by Architectural Liaison Officers employed by the police (see www.securedbydesign.com). However, professionals able to advise on design-led crime prevention may also be employed consultancies, universities, security firms and local authorities. Some building development projects may be expected to address a range of social objectives, such as environmental issues and gender equality. Attempting to achieve multiple objectives will require trade-offs, and the architect will need access to advice from a design-led crime prevention expert—this person should have a background in design and crime prevention, and be willing to adapt good practice to the context. Building development projects that incorporate crime prevention are often run by Registered Social Landlords, in collaboration with architects and developers committed to social issues. They are often high-profile projects, attracting grant monies for delivery and/or for an independent evaluation.

If the first building development project is successful, the requirement to address crime and/or insecurity could be incorporated into section criteria for developers and architects working on future development projects. If this criteria was adopted by a group of clients (e.g. all Social Registered Landlords), the geographical scope and impact of individual building development projects would be far greater. The new step might be to establish an accreditation scheme to allow building development projects that meet crime prevention criteria to be officially recognised.

2.1.3 How to establish a one-off development project that addresses crime

Initiation and set up of building development project

A working group should be established to identify the budget, resources and timescales required to establish a building development projects that address crime and/or insecurity. Research should be undertaken to identify crime risk and to establish the value of a design-led crime prevention—research is necessary even if commitment to crime prevention already exists. The research should investigate:

- The nature of the problems types/levels of crime and anti-social behaviour, feelings of insecurity and changes over time (i.e. crime trends)
- The causes of the problem
- The modus operandi (MO) of criminals
- The costs and benefits of design-led crime prevention solutions

Primary research may not be required as data is often available from secondary sources. For example, information about crime nationally is available from the International Crime Victimisation Survey) and European surveys (e.g. Eurobarometer). In addition, many cities undertake local surveys that cover a range of quality of life issues, including fear of crime, anti-social behaviour and the quality of the environment. It will need to be established whether fear of crime is linked to environmental factors (e.g. poor environmental quality, young people hanging around or the presence of drug-users) or social factors (e.g. fear of foreigners). This will determine whether fear might usefully be tackled within a building development project or whether some other form of intervention would be more appropriate.

Researchers in criminology may have published studies of the *modus operandi* of criminals. *Modus operandi* research examines factors motivating potential criminals and affecting target selection, as well as methods used to commit crimes. Some details of *modus operandi* are usually available from police records. The findings can be used to identify changes to the environment that might deter potential offenders from committing crime and/or reduce the likelihood of success. It is important that this relates to a specific type of crime and to the country in question. There are significant differences between types of offender and European environments—*modus operandi* may therefore vary significantly between European countries.

The working group should determine the focus and scope of the building development project, based on the findings of the research and the organisation's own priorities. It may be deemed desirable to address other social issues alongside crime prevention.

Development of building project

Information will need to be prepared for architects and developers. The working group will need to produce approach briefing documents, guidance materials and selection criteria for developers and architects. These documents may draw on CPTED principles developed in other countries (e.g. the UK or Netherlands), but should be adapted to the local or national context. The publication of guidance materials will help ensure fairness in relation to recruitment of developers/architects, provide criteria against which the project can be evaluated and provide a basis for future building development projects.

Once the materials have been produced, steps can be taken to recruit a developer/architect and provide the necessary briefing and guidance for incorporating crime prevention into the design, construction and management of the building development. The developer/architect will have to ensure that crime and/insecurity are addressed within the design process. Guidance for design professionals is available from Wootton and Davey's (2005) *DAC Evaluation Framework*. Ideally, the developer/architect will have access to a design-centred crime prevention expert to help incorporate the crime prevention principles into the design, construction and management of the development.

Use and performance

Once completed, the crime prevention elements of the building development will need to be managed, maintained and evaluated. The results should be used to strengthen relationships with funding bodies, customers and users. Where appropriate, publicity for building development projects should be sought—this should acknowledge all those involved to encourage ongoing commitment to crime prevention.

Learning and business strategy

The results of the evaluation should be used to determine future steps in relation to design-led crime prevention. For example, crime prevention might be incorporated into selection criteria for developers and architects working of future building development projects. This will require that commitment to crime prevention is covered in the organisations' strategy documents. In addition, building projects that conform to crime prevention criteria might be formally recognised by setting up an accreditation scheme—see next section for guidance.

PHASE	ACTIVITIES	
Phase 0 Initiation	 Need to address crime or insecurity recognised Commitment to addressing crime or insecurity explored by project champion(s) Individuals and organisations that might support the project identified 	

Phase 1 Set up of building

project

development

Project structure and process

- ✓ Working group established
- √ Timescales, budget and resources identified

Crime risk identification

- ✓ Research undertaken to establish types/levels of crime, feelings of insecurity and modus operandi of criminals
- ✓ Design-led crime prevention experts consulted (e.g. police Architectural Liaison Officers, criminologists, etc.) regarding the potential for design and planning to reduce crime and/or fear of crime
- ✓ Relevance of existing guidance and examples of DAC development projects to the current context identified—both the national and local context should be considered

Project objectives

- ✓ The focus of the scheme identified—i.e. crime prevention and/or increasing feelings
 of security
- ✓ The scope of the scheme identified (e.g. housing, commercial buildings and/or public areas)
- ✓ Decision taken about whether to incorporate security into wider agenda (e.g. fire safety, gender equality, sustainability, quality of life or social responsibility)

Phase 2

Building development

Briefing and guidance

- ✓ Criteria developed for selection of developers/architects—ability to address crime and insecurity one of the criteria
- ✓ Briefing documents developed for architects/developers
- ✓ Design-led crime prevention expert identified to help developers/architects
- ✓ Guidance material for architects/developers tailored to the current context—both the national and local context should be taken into account

Response to the brief

- ✓ Crime prevention discussed with developers/architects interested in working on the development project
- ✓ Developer/architect selected according to ability to meet criteria—ability meet crime prevention treated as a key criterion

Research and consultation

- ✓ Relevant stakeholders and their relative importance to the project identified by design team—support for activities undertaken by design team available from Wootton and Davey's DAC Evaluation Framework
- ✓ Information on requirements and constraints gathered by design team from identified stakeholders and sources of information
- ✓ Trade-offs identified and resolved by design team—with help from design-led crime prevention expert, where appropriate.

Concept generation and design

✓ Crime prevention ideas that address identified causal factors and crime risks/ scenarios identified by design team—this activity may be supported by Wootton and Davey's Crime LifeCycle Guide

Feasibility testing and concept selection

- ✓ The business case for design concepts established by the design team
- ✓ Crime prevention appropriately prioritized

Phase 2 Building development

(continued)

Detailed design & testing

- ✓ Crime prevention incorporated into the detailed design by design team
- ✓ Test design solutions with relevant stakeholders
- ✓ Compliance with relevant CPTED guidance and criteria checked by design team
- ✓ Longer-term issues relating to the implementation and use of the design considered by design team—including management and maintenance and potential changes over time

Launch/handover

- ✓ Crime prevention elements of development project clearly communicated to the client, managers, maintenance staff and users
- ✓ Launch event and communication strategy developed for building project, where appropriate

Phase 3

Use and performance

Management and maintenance

- ✓ Development project managed and maintained appropriately, including the crime prevention elements
- ✓ Any management and maintenance problems or shortfall that relate to crime identified, causes established and resolved, if possible

Ongoing evaluation

✓ Building development evaluated

Client/customer relationship

- ✓ Use development project to improve relationship with funders, clients/customers and users
- ✓ Publicise successes and benefits for users

Phase 4 Learning and business strategy

- ✓ Review impact of building development project on future activities
- ✓ Review business case for addressing crime prevention within building development projects
- ✓ Decide whether to address crime prevention within future building development projects
- ✓ Decide whether to incorporate crime prevention into selection criteria for developers and architects interested in working on development projects
- Ensure that commitment to crime prevention is outlined in the organisation's strategy documents, if incorporated into selection criteria for architects and developers
- ✓ Decide whether to establish an accreditation scheme to enable developments that comply with crime prevention criteria to be accredited

2.1.4 Good practice example – Leitstelle, Vienna (Austria)

Insecurity is routinely addressed within building development projects in Austria's capital city. In Vienna, design-led crime prevention is dealt with by a city council office—the "Leitstelle fuer Alltags— und Frauengerechtes Planen und Bauen". It became responsible for the promotion and co-ordination of women's affaires—and became known as the "Frauen Büro". The Leitstelle ensures that new housing projects meet the requirements (and particularly women's) for a feeling of safety in public and semi-public space. The Leitstelle believes that design and the development of public space can reduce the likelihood of 'anxiety zones' being created, and offers an alternative to traditional calls for more surveillance or police. To help achieve this objective, the Leistelle has produced guidelines for a safe city, which define the requirements for public space, stating that:

- A person should be easily able to find their way around due to clearly organised paths, signage, etc
- A place should be recognisable and offer a good overview of the area, due to clear land uses, good lighting, etc.
- Visibility should be good both outside and within the building (e.g. in stairwells)
- Lighting should enable people to see and be seen, and not cast dark shadows

- Safe and, if possible, direct access to local facilities should be provided
- A vibrant atmosphere should be created through the development of attractive environments and local facilities
- The presence of 'capable guardians' (e.g. taxi drivers, newspaper sellers, etc.) may be used to enhance safety
- Residents should feel responsible for their neighbourhood, which should be of a manageable proportion, have a clear identity and offer opportunities to socialise with neighbours
- The design should help reduce the potential for conflict by clearly defining public and private space
- Maintenance should be easy to carry out, as well-maintained areas reduce feelings of insecurity (Stummvoll, 2004).

The requirements are similar to CPTED principles documented in design/CPTED guidance in relation to the design and management of public space.

Feelings of security are addressed alongside other key issues. The Leitstelle believes that design and planning should support women's everyday lives—which are often different from those of men. Dwellings should facilitate the co-existence of work and family life and enable parents to keep an eye on children playing in the house or outside. Dwellings should be modifiable and adaptable to changing family configurations and stages in the life cycle. This can be realised through the construction of rooms that can be joined or separated, as required. The building and surrounding area should provide opportunities for informal contact with neighbours and access to play areas appropriate to different age groups and genders, areas for hobbies, etc., as well as access to heathcare, education and transport (Stummvoll, 2004).

The Leistelle initially ran a high-profile pilot building project, where the development was designed by female architects, thus helping to increase the representation of women within the design and construction industries. The pilot building project was considered successful, and the requirement for feelings of insecurity to be addressed within building projects was incorporated into selection criteria for developers and architects. The Leistelle has since supported a range of building developments, including flats for people on different incomes, play grounds aimed specifically at girls and assisted living for older people—primarily women.

2.1.5 Cooling crime hotspots by design (Manchester)

The *City Centre Crime* project conducted in Manchester's city centre, UK, demonstrated the value of design thinking and practice in addressing crime and anti-social behaviour. *City Centre Crime* developed an innovative methodology combining crime mapping and ethnography to examine the relationship between design, use of the urban environment and misuse by potential offenders. Information about the local and the wider context was collected from interviews with stakeholder groups, data held by the police, observation of user (and misuser) behaviour and reviews of policy documents, published research, etc. The findings helped to re-evaluate problems in terms of their nature and geographical location, and to develop innovative design and management solutions, where appropriate. However, it was noted that the organisation of a city makes the application of crime prevention theory and design solutions difficult. For example, "Broken Windows" theory suggests that bus shelters should be repaired immediately, if vandalised, and/or action taken to prevent breakage. However, Manchester City Council's decision to subcontract the management of bus shelters to a private firm means that they cannot control the design, management and maintenance of bus shelters. Further information about this project is available from Melissa Marselle and Andrew Wootton at the Design Against Crime Solution Centre.

2.2 Accreditation scheme for building developments

European countries with some experience of design-led crime prevention may decide to establish an accreditation scheme to *officially* recognise building developments that conform to crime prevention criteria. Such a scheme must be established and run by an organisation with the necessary expertise and authority. Responsibility for applying for accreditation for a building development usually rests with the developer or architect. Accreditation may be sought for business or social reasons, including:

- The need to meet the requirements of the client—the client may be interested in crime prevention and may even stipulate that the building development should achieve an award or accreditation
- The belief that accreditation will increase the attractiveness of the property to potential buyers
- The anticipation that accredited properties will be entitled to lower home insurance costs
- The company's commitment to social responsibility
- The hope that the building development project may attract media interest and thus help improve the reputation and profile of the organisations involved
- The hope that developments that are bought for investment may retain their value—crime often brings down the value of properties. Crimes in the "Criminal Damage" category have a significant impact on prices of properties—research has show that lower levels of criminal damage add one per cent to the price of properties in the London area. The author of the study suggests that vandalism, graffiti and other forms of criminal damage may be considered as signs of community instability or neighbourhood deterioration, and may foster fear of crime and insecurity (Gibbons, 2004).

On building completion, the development is examined by a design-led crime prevention expert authorised to undertake such assessments, and a certificate awarded if it meets the criteria.

An accreditation scheme may be run as a pilot project in one or more geographical regions. If it proves successful and appropriate resources are available, it may be rolled out nationally. The scheme may focus initially on one type of development (e.g. domestic dwellings), covering other types of building development as new criteria are established and resources increased.

2.2.1 Must have

Accreditation schemes officially recognise building development that conform to crime prevention criteria and this has practical and legal implications. An accreditation scheme must be established and delivered by an organisation by an organisation committed to crime prevention that is trusted and respected by the general public. The organisation must also have the ability to:

- Access data on crime and insecurity—this should include data relevant to a proposed building development
- Provide an independent assessment of building developments against crime prevention—this necessitates being free from accusations of corruption
- **Prioritise appropriately crime prevention criteria**—avoiding the tendency to allow commercial considerations to override social objectives.

If no organisation meets these criteria, it is better *not* to attempt to establish an accreditation scheme as the award will have no value. In the UK and Netherlands, accreditation schemes were established and managed by the national police forces. Local authorities strongly committed to social objectives may also be in a position to establish and run such a scheme. The certificate or award must only be available for developments that meet the specified criteria and for applicants who have completed the necessary procedures. To prevent it being used outside of this context, it must be legally protected. For example, the name of the scheme should be trademarked, the logos copyrighted—the name and logos are licensed for use in relation to building developments that meet the crime prevention criteria.

Setting up an accreditation scheme requires that crime prevention criteria are specified and that developments can be assessed against these criteria. A list of requirements and/or checklists is generally produced, based on CPTED principles. Evidence-based crime prevention criteria are more likely to achieve

the desired objectives and are less likely to be challenged by applicants. CPTED principles are supported by research evidence and have been shown to work in existing accreditation schemes.

Design-led crime prevention experts are required to assess development projects and provide design and security advice to architects and developers, if consulted. Staff with a background in crime prevention (and ideally also design) must be recruited, provided with the necessary training and given experience in assessing development plans. Knowledge should extend beyond target hardening, covering the full range of possibilities for using design and planning to address crime and related social issues. The employment structure should ensure that delivery personnel can dedicate sufficient time and resources to the role, provide a quality service and be able to develop their knowledge and skills in the field of design-led crime prevention. This may be easier if delivery personnel are employed and managed by a single organisation committed to crime prevention, such as the police.

Detailed guidance on designing against crime is required for architects and developers. This might draw on standard CPTED principles, but should be adapted to the national and/or local context, as appropriate. In addition, materials must be developed to enable the accreditation scheme to be publicised amongst the various stakeholder groups, including clients, architects, developers, planners and property buyers/owners. Publicity materials are likely to include printed brochures and a website. Such materials must emphasise the business and social case for gaining accreditation for development projects.

Sufficient funding is required to establish the necessary resources for an accreditation scheme.

MUST HAVES CHECKLIST – Addressing crime and insecurity within a building development project

Contextual factors

- ✓ Recognised need to address crime and/or insecurity
- ✓ Data on crime that is reliable and valid
- ✓ Factors motivating developers and architects to apply for accreditation of building developments
- ✓ An organisation willing to establish and manage the scheme that is committed to crime prevention and trusted by the general public—e.g. police or local authority

& resources

- Organisational structures ✓ A management structure that enables design-led crime prevention experts to provide a quality service and develop their knowledge and skills
 - ✓ A website, brochures, guidance materials, criteria for assessing building. developments
 - ✓ Design-led crime prevention experts trained to assess building developments
 - ✓ Access to crime data relevant to a specific building development
 - ✓ Sufficient funding and resources to establish and run the accreditation scheme

2.2.2 Could have

There are opportunities to adapt or improve an accreditation scheme for building developments—could haves. A group of clients (e.g. all Registered Social Landlords) might be persuaded to stipulate the need for building developments to achieve the accreditation in their section criteria and briefing documents for developers and architects. This would involve negotiations with individual organisations and their governing bodies. Approval by a governing body could significantly increase the numbers of applications for the accreditation, and thus improve the effectiveness of the scheme.

Products that meet technical standards may be accredited and promoted through the scheme. This might be operated as a fee-paying service that generates income for the accreditation scheme and encourages interest in security amongst product suppliers and manufacturers.

2.2.3 How to set up an accreditation scheme for building developments

Initiation and scheme set up

Running building development projects that address crime prevention issues should lay the foundations for establishing an accreditation scheme—identifying individuals committed to crime prevention, researching crime risk conducted and developing guidance material. Setting up an accreditation scheme requires additional steps to be taken—in particular, crime prevention criteria are established, staff recruited to assess for building development projects and the use of the award redistricted to accredited building developments via trade marking and licensing.

A working group should be established, and tasked with determining the level of commitment required in terms of time, resources and funding—this will clearly depend on the geographical scope of the scheme. If a national scheme is planned, the process of piloting and rolling out the accreditation scheme should be clearly identified. Existing accreditation schemes (e.g. the UK's Secured By Design) have focused on the security of residential dwellings, and later expanded to cover commercial developments.

Research into crime risk should be undertaken—or updated—and the findings used to help determine the focus, scope and appropriateness of an accreditation scheme. The findings can also be used to prepare a business case, and an application for funding for an accreditation scheme. The sources and level of funding required will determine whether one application can be made or several applications—i.e. for the research activity, pilot study and full scheme.

Scheme development

The owner of the scheme should possess necessary expertise and authority. Police ownership may be appropriate in countries where the police are committed to crime prevention and are trusted by the general public. Ownership by the police will also make establishing a national scheme easier—police forces over the whole country and are often controlled centrally. A local authority committed to social issues might be appropriate, especially if the scheme will be restricted to a particular city or region.

Step should be taken to ensure that the accreditation scheme is official—i.e. the name trade-marked, the logo copyrighted and use of the accreditation/logo restricted via a licensing agreement. Lawyers should be consulted regarding liability in the event that accredited building developments are the target of criminals.

Restricting use of the Secured By Design award

The title "Secured by Design" and the related logos are registered as UK Trademarks owned by the Association of Chief Police Officers (ACPO) Crime Prevention Initiatives Limited. The Secured By Design name and logo may be used to promote accredited building developments—accreditation is valid for five years. Secured by Design does not guarantee that a particular area will be crime-proof but indicates that the site has been subject to a design process and improved level of security which, in the experience of the police service and other agencies, have been shown to significantly reduce the risks of crime and the fear of crime (SBD website, May 2007). In addition, manufactures can become 'licensed companies'. The licensed company is able to utilise the Secured by Design logo and, on those products which meet the technical standard, the title 'Police Preferred Specification'— in accordance with the terms of the license agreement.

A design-led crime prevention expert will need to be identified to help train delivery personnel and provide developers/architects with advice during the early stages of the scheme. A training programme will need to be established, if one does not exist already. Delivery personnel will should then be recruited, trained and given experience in assessing development plans. Support staff may also be required. Staff numbers will clearly depend on the scope of the scheme. Staff will require office space, ICT systems and office equipment—photocopiers, fax machines, etc.

A persuasive case for accreditation of building developments will need to be made, otherwise developers, architects and clients will not apply. Major clients should be contacted and asked to support the scheme—some might even stipulate that accreditation should be achieved for particular developments. Insurance

companies should be contacted—they might publicise the benefits of accreditation and/or offer lower insurance premiums to accredited building developments. Appropriate information sources for architects, developers and planners will need to be produced, including a website, brochures, guidance material, criteria for accreditation of developments, application forms, certificates and a statement regarding liability. These documents should clearly explain the benefits of accreditation, the process of applying for accreditation, and the sources of advice and guidance available.

When everything is in place, the pilot scheme can be launched. A high-profile event should be organised and a press release prepared. Support should be obtained from key stakeholders committed to design-led crime prevention—including architects, developers and clients willing to apply for accreditation during the early stages of the scheme. Support from major clients committed to social issues, such as housing associations and local authorities will ensure interest from developers focused on commercial interests.

Use and performance of pilot accreditation scheme

Building developments should be accredited by design-led crime prevention experts. In the early stages, the accreditation of building developments should be widely published in trade journals and local newspapers—this will encourage others to apply. The quality of the scheme and its effectiveness should be evaluated, and improvements made, where necessary.

Scheme roll out

If judged successful, a further pilot scheme may be established or the full scheme launched. In the Netherlands, two pilot schemes were run prior to the establishment of a national accreditation scheme—and the process took around three years. The full accreditation scheme should be launched in a high profile event that includes developers, architects and clients from the pilot project. Expansion of the scheme will require the recruitment and training of new delivery personnel.

Use and performance

Building dwellings should be accredited and the process and results evaluated. On-going publicity will be required to maintain interest in the accreditation scheme and attract further applicants.

Learning and business strategy

The value of the scheme to key stakeholders should be evaluated—the organisation which owns the scheme, crime prevention agencies and the development industry. If judged successful, then opportunities might be explored to expand or improve the scheme.

PHASE	ACTIVITIES		
Phase 0 Initiation	✓ Potential value of establishing an accreditation scheme for building developments recognised		
	✓ Individuals and organisations identified that might support the accreditation scheme		
Phase 1	Working group structure and process		
Scheme set up	✓ Working group established		
	✓ Timescales, budget, resources and sources of funding identified for scheme—this should cover scheme set up, roll out, ongoing delivery and development		
	Crime risk identification		
	✓ Research undertaken to establish types/levels of crime, feelings of insecurity and Modus Operandi of criminals—this may simply involve updating research when running building development projects		
	✓ Design-led crime prevention experts consulted (e.g. design-led crime prevention experts, criminologists, etc.) regarding the potential for design and planning to reduce crime and/or fear of crime		
	✓ Relevance of existing accreditation schemes, guidance, examples of DAC building development projects relevant to the current context identified—both the national and local context should be considered		

Phase 1

Scheme objectives

(continued)

- Scheme set up ✓ The focus of the accreditation scheme identified—i.e. crime prevention and/or increasing feelings of security
 - ✓ The scope of the scheme identified (e.g. housing, commercial buildings and/or public areas)
 - ✓ Decision taken about whether to incorporate security into wider agenda (e.g. fire safety, gender equality, sustainability, quality of life or social responsibility)
 - ▼ The geographical scope of the scheme identified
 - ✓ A process identified for piloting, rolling out and delivering the scheme

Securing resources and funding

- ✓ Apply for additional resources and funding for research into crime risk, if necessary.
- ✓ Apply for additional resources and funding for establishing and running the accreditation scheme, as and when appropriate

Phase 2

Scheme structure and processes

Scheme development

- ✓ Ownership of accreditation scheme established
- ✓ Mechanisms for management and delivery of accreditation scheme identified
- ✓ Steps taken to ensure that the accreditation is official—e.g. the name of the scheme trademarked and the ability to license the name to third parties established
- ✓ Lawyers consulted regarding liability

Staffing and resources

- ✓ Staffing requirements identified
- ✓ Appropriate resources identified to meet staffing needs—including ICT, office space, office equipment, etc.
- ✓ Design-led crime prevention experts identified to help train delivery personnel and provide developers/architects with advice during the early stages of the schemehelp may come from experts involved in supporting building development projects that address crime and insecurity
- ✓ Training scheme for delivery personnel identified or established
- ✓ Delivery personnel recruited, trained and given experience in assessing development
- ✓ Support staff recruited

Promotion and guidance

- ✓ A business and social case made to persuade different stakeholders to apply for or stipulate the need for accreditation
- ✓ Opportunities to improve the attractiveness of the scheme identified and researched and pursued (e.g. lower insurance premiums for accredited dwellings negotiated with insurance companies)
- ✓ Publicity materials (e.g. brochures and websites) developed to promote pilot accreditation scheme and present business case
- ✓ Guidance material for architects/developers tailored to the current context—both the national and local context should be taken into account
- ✓ Criteria for assessing building developments established
- ✓ Application forms for accreditation produced
- ✓ Certificates produced that can awarded to successful applicants
- ✓ A statement prepared explaining liability
- ✓ A website established to promote the scheme, enable applicants to download. relevant forms and guidance and contact design-led crime prevention experts

Phase 2

Launch

Scheme development

(continued)

- ✓ Launch event and communication strategy developed for pilot accreditation scheme
- ✓ A group of developers, architects and clients who are interested in building development. A list of those willing to support the accreditation scheme during its early stages prepared
- ✓ Press release prepared

Phase 3

Management of pilot scheme

Use and performance of pilot scheme

✓ Dwellings and developments accredited in pilot area

Evaluation of pilot scheme

- ✓ Evaluate the pilot accreditation scheme in terms of quality of service
- ✓ Evaluate the impact accreditation on crime risk for building developments, if time allows

Client/customer relationship

✓ Publicise successes and benefits for key stakeholders

Phase 4 Scheme roll out

- ✓ More delivery personnel recruited, trained and given opportunities to assess development plans
- ✓ Launch event organised to promote the full scheme
- ✓ Press releases prepared

Phase 5

Management of full scheme

Use and performance

✓ Dwellings and developments accredited

Ongoing evaluation of scheme

- ✓ Evaluate the pilot accreditation scheme in terms of quality of service
- ✓ Evaluate the impact accreditation on crime risk for building developments

Client/customer relationship

✓ Publicise successes and benefits for key stakeholders

Phase 6 Learning and

- ✓ Identify methods of increasing the impact of the scheme
- Learning and business strategy
- ✓ Identify opportunities to expand the scheme (e.g. to cover other types of building)
- ✓ Review business case for using the scheme to encourage organisations to address crime prevention within building development projects
- ✓ Review impact of accreditation scheme on future business activities
- ✓ Decide whether to incorporate crime prevention into the development control process

2.2.5 Good practice example – The UK's Secured By Design Accreditation Scheme

Secured by Design is a police initiative to encourage the UK building industry to adopt crime prevention measures within the design of the built environment. It was officially established in 1989, and became a UK-wide scheme in 1992. Secured By Design is owned by the Association of Chief Police Officers (ACPO), and is supported by two government departments: The Home Office Crime Reduction Community Safety Group and the Planning Section of the Department of Communities and Local Government (DCLG). It is managed by ACPO Crime Prevention Initiatives Limited—a not for profit company wholly owned by ACPO. ACPO is funded by a combination of a Home Office grant, contributions from each of the 44 Police Authorities, membership subscriptions and by the proceeds of its annual exhibition. ACPO CPI is funded through partnership with companies whose products meet technical standards identified by ACPO CPI.

Guidance is based on the principles of Crime Prevention Through Environmental Design (CPTED), Defensible Space (Newman, 1973) and Situational Crime Prevention. It states that developments should:

- Be of a high environmental quality, and free from factors that increase fear of crime, such as heavy security or vandalism
- Be clearly understood by users
- Promote a sense of ownership by ensuring that there is a clear separation between private and public space
- Enable natural surveillance to ensure that potential criminals risk being seen, but without infringing privacy
- Have good lighting
- Have carefully designed access routes and footpaths that are safe, well-used and do not facilitate criminal activity
- Have well-designed and managed open space to ensure that is used for legitimate purposes, and does not invite crime nor disturb local residents
- Provide for their long-term management in terms of rubbish removal, grass cutting, etc.

Secured by Design also promotes "good design", arguing that designs should be attractive, well-used, and avoid promoting fear of crime (SBD Website, SBD Principles, June 2004).

Criteria have been developed for different types of development—including new and refurbished homes, car parks, schools, licensed premises and railways. Architects and developers are sent guidance material relevant to the development.

Secured By Design is delivered by police **Architectural Liaison Officers**—sometimes called *Crime Prevention Design Advisors*. The majority of Architectural Liaison Officers are serving police officers trained in the principles of Crime Prevention Through Environmental Design (CPTED). Training is currently provided by the Home Office Crime Reduction College.

Architectural Liaison Officers from the local area provide guidance on how to incorporate CPTED principles into the scheme. The architect or developer must submit a form explaining how the Secured By Design criteria have been met—this can be downloaded from the website. The development must be approved by an Architectural Liaison Officer, who reviews the form and development plans, and visits the development once completed.

Secured By Design accreditation is awarded to developments that meet the necessary criteria. The award may be used by the developer and client for marketing or promotion purposes, and there are a number of high-profile developments that have achieved Secured By Design—e.g. Mosscare Housing, Northmoor and Parrs Wood School. Secured by Design status does not guarantee that a particular area will be crime-proof, only that the risk of crime has been reduced.

The client may in some cases specify achieving Secured By Design as a planning condition (see DAC case study on Mosscare Housing, UK). There is currently no charge to organisations or individuals that receive advice from Architectural Liaison Officers or apply for Secured By Design.

Organisations interested in supplying security products or services may apply to ACPO CPI Ltd for accreditation. Companies appearing on the website hold Secured by Design Licences and produce one or more products which meet technical standards endorsed by ACPO CPI Ltd. The Secured by Design logo and the title "Police Preferred Specification" may be used in respect of products which meet these standards. Products include: anti-climbing devises, shutters/grilles, doors and windows.

Evaluations show that on both new build and refurbished housing estates, the incidence of recorded crime and perceived incivilities is lower and quality of life higher in houses awarded Secured By Design (Armitage, 2000; Pascoe, 1999). Research by the University of Huddersfield shows that residents living on Secured by Design developments are half as likely to be burgled, two and a half times less likely to suffer vehicle crime and suffer 25 per cent less criminal damage (Armitage, 2000). The Association of British

Insurers report supports case for Secured By Design, comparing the modest of cost of improving security in new homes with the cost of burglary to victims and the national economy. It states that the security upgrade can be achieved for as little as £480 and an average cost across a range of home types of £630, whereas the average cost of burglary is £3,300. According to the report, this equates to a net saving to the national economy of £215m in the first year and £3.2bn over 20 years.

There are a number of contextual factors that have enabled the scheme to be successfully implemented. The UK Government is concerned about high levels of crime—England and Wales is in the "high band" for crime (International Crime Victimisation Survey, 2000, 2006) and crime is an important political issue. Being employed by the police means that Architectural Liaison Officers have access to crime data, experience and authority on the issue of crime prevention and operate across the country.

2.2.6 Good practice example – The Netherlands' Police Label Secure Housing Accreditation Scheme

Police Label Secure Housing—Politiekeurmerk Veilig Wonen®—was inspired by the UK's Secured By Scheme. It was drawn up by police forces, government ministries (Ministry of Interior and Ministry of Justice), a consultancy with expertise in CPTED (DSP-groep) and a public housing organisation. Ownership was then transferred to the police and a research & development organisation, called SEV, which is part of the Ministry of Housing and Environment. The scheme started in one police region—Hollands Midden—in 1994, was implemented in Noord-Holland Nord in 1995 and went nationwide in 1996. It comprises two Labels: new housing; and existing housing/neighbourhoods. The objective of the Label is to reduce crime—mainly burglary, car related crime, theft, vandalism, nuisance and fear of crime—through environmental design, architectural design, and target hardening.

Police Label Secure Housing is based on the UK Secured By Design scheme, but differs in terms of:

- 1. Underlying theory which is Alexander's Pattern Language and research into the Modus Operandi of criminals—especially burglars
- 2. Scope of the requirements which cover the neighbourhood, as well as the dwelling
- 3. Integration with other requirements fire prevention is covered alongside crime prevention.

Police Label Secure Housing lays down requirements in terms of:

- Urban planning and design size of the district, density, height and scale, access to the district by car and bicycle, etc.
- Public areas public lighting, parking/private garages, playing facilities, tunnels and subways, bus stops, alleyways and neighbourhood management
- Layout back yards, paths at the back of the property, etc
- Buildings estates, semi-detached houses, layout of single-family terraced houses, inner grounds, enclosed squares, etc.
- Dwellings orientation of living rooms, low roofs, main entrance, target hardening, etc.

Police Label Secure Housing encourages the development of low-rise flats and the compartmentalisation of buildings, which should have a clear identity. Parking should ensure that the car is in view of the owner, and is usually on or near the property. Public space should be well-lit, and vegetation well-maintained to avoid creating dark shadows or spaces. Play areas should be provided that allow parents to keep an eye on their children. Access routes should be safe and controlled. In contrast to the UK's Secured By Design, Police Label Secure Housing does allow alleyways, although these are sometimes gated (NB: alleyways are often used by bike owners and parents with young children). New developments have to be capable of passing a burglar resistance test, where doors are able to withstand an attack for three minutes. Windows should be secure and enable 'eyes on the street' (Davey, 2002).

The scheme was delivered by specially trained police officers—Architectural Liaison Officers (ALOs). The ALOs assess dwellings and neighbourhoods to determine whether they meet the necessary requirements. The requirements are laid down in two handbooks, each detailing about 50 requirements. In new

developments, accreditation is offered to the whole estate/neighbourhood. In existing housing, accreditation can be awarded to the house, block/street or neighbourhood. When all three certificates have been gained, then Police Label Secure Housing is awarded to the neighbourhood.

The Dutch Label is considered a success. More than 400,000 dwellings have attained the 'Secured Dwelling' (new and existing) Certificate. Evaluations show that the risk of dwellings being burgled has dropped to a minimum in new estates and by 80 per cent in existing dwellings/neighbourhoods. Insurance companies offer a rebate of between 10 and 30 per cent for accredited dwellings. Furthermore, burglary has declined significantly, and the International Crime Victimisation Survey (2006) reports that the Netherlands now has a below average level of burglary.

There are a number of contextual factors that have enabled the scheme to be successfully implemented. The Dutch Government was concerned about high levels of crime—crime rose significantly in the 1970s and the Netherlands was in the "high band" for crime (International Victimisation Survey, 2000). Steps have also been taken to integrate crime and fire prevention into regulations. The burglary resistance standards became part of Dutch building regulations in 1999 (NEN 5087 and NEN 5096, class 2) and smoke detectors in 2001. A number of requirements for Police Label Secure Housing were incorporated into the Dutch planning policy guidelines in 2004.

2.3 Crime prevention incorporated into the development control process

European countries with experience in running an accreditation scheme for building developments may decide to incorporate crime prevention into the development control process. This involves establishing a process to ensure that plans submitted to the local authority planning department are checked by a design-led crime prevention expert prior to approval for construction being granted. The local authority planning department informs the applicant whether approval for building construction is granted or whether changes to the development plan are required. Approval for construction may be withheld for development plans that are judged not to conform to crime prevention criteria, and are not subsequently revised. The possibility of delays in obtaining approval for construction motivates architects and developers to consider crime prevention within their building development projects—delays can be costly to developers and result in architects having to wait longer for their fees to be paid. If the requirement to conform to crime prevention criteria is applied to sufficient building development plans, then the impact on crime will be significant.

It is easier to establish a process for checking plans in countries where an accreditation scheme for building developments has been established—as crime prevention standards have been tried and tested, guidance materials developed and staff trained in design-led crime prevention. If no accreditation scheme exists, the process should draw on the principles, standards and guidance materials developed for established accreditation schemes in other countries.

2.3.1 Must haves

A building control process that is transparent and free from corruption is essential for checking that development plan conform to crime prevention criteria. The local authority responsible for granting planning permission must be willing to ask for crime and related issues to be considered by architects and developers. Crime prevention will need to be incorporated into local and/or national planning policies and procedures. This involves stating that building development plans will be checked by design-led crime prevention experts during the building control process and ensuring that sufficient staff are available to check plans, when appropriate.

There must be a strong case for addressing crime and related social issues, and this must be clearly communicated to organisations seeking planning permission. Crime prevention must be covered in local authority strategy documents—as this makes it difficult for developers or architects to challenge the requirement for building plans to be checked. It will clearly be easier for local authorities to address crime prevention through the planning process if supported by legislation. However, legislation is often implemented after the event—i.e. once checking plans has become common practice amongst one or more local authorities. Local authorities willing to take the lead on this issue are therefore required.

Sufficient funding will be required to set up the building control process—the amount of funding will depend on whether an accreditation scheme already exists.

MUST HAVES CHECKLIST – Incorporating crime prevention into the development control process ✓ Recognised need to address crime and/or insecurity Contextual factors ✓ Data on crime that is reliable and valid ✓ A development control process that is transparent and free from corruption ✓ A local authority planning department committed to crime prevention and willing to lead on this issue ✓ A management structure that enables design-led crime prevention experts Organisational structures & resources to provide a quality service and develop their knowledge and skills ✓ Procedures for addressing crime prevention within the building control process ✓ A website, brochures, guidance materials, criteria for assessing building developments ✓ Design-led crime prevention experts trained to assess building developments. The number required will depend on the scope of the checking process ✓ Sufficient funding and resources to establish and run the process for checking development plans and proposals

2.3.2 Could have

There is likely to be uncertainly about the security of new design and planning approaches, and about the application of crime prevention principles to specific contexts. Crime prevention experts with experience in design could therefore be recruited to give advice in cases of uncertainty or disagreement.

Information and Communication Technology (ICT) is useful for increasing the efficiency of the checking process.

2.3.3 How to incorporate crime prevention within the development control process

Initiation and process set up

The feasibility of incorporating crime prevention within the development process will need to be determined. This will involve reviewing the planning system and holding meetings with key stakeholders—including the local authority planning department, government bodies responsible for planning, security and the environment. Obtaining commitment from the local authority planning authority is essential, if the new process is to be established.

A working group should be established, and charged with identifying timescales, budgets and resources for establishing a building control process that incorporates crime prevention. Research should be conducted—or updated—regarding crime and related issues, offender *modus operand*i, the potential value of design-led crime prevention and relevant guidance materials. Planning experts should be formally consulted about incorporated crime prevention into the building control process, and examples of process collected, where possible. The objectives and scope of the building control process should be defined. Funding may be required for the research, and/or for further activities. The scope of the scheme and the sources of funding available will largely determine when applications for funding should be made.

Process development

Ownership of the building control process should be established, and mechanisms for delivery and management identified. If an accreditation scheme already exists, the relationship between the building

control process and an accreditation scheme will need to be established. Lawyers will need to be consulted regarding liability and enforceability of the process.

New staff may need to be recruited, trained and managed. This will clearly depend on the geographical scope of the process, the numbers of building development projects and the policy of the local authority planning office—some will want to check all plans, others only a percentage (e.g. large developments). Where appropriate, existing staff will need to be made aware of the new process, given training and experience in assessing development plans and provided. Staff will need to be provided with necessary office space, ICT systems, office equipment and administrative support.

Establishing a process to check building development plans requires crime prevention standards to be established for building developments. The standards must be proven to reduce crime and/or feelings of insecurity. CPTED principles and criteria used for existing accreditation schemes tend to be used.

Crime prevention as standard

In Manchester, Greater Manchester Police's Architectural Liaison Unit checks that development plans are "to the standard of Secured by Design"—i.e. to the standard of the accreditation scheme. However, being checked by crime prevention expert does not infer that the building development is Secured By Design—an application must currently still be made.

The crime prevention standards must be made clear to all concerned—design-led crime prevention experts, developers, architects and planners. The organisation checking the plans will need to develop a website, promotional literature, guidance material and assessment criteria. The local authority planning department will need to cover crime prevention in its strategy documents, process for applying for planning approval and application form.

When everything is ready, a high profile event can be organised to launch the new process. Support for the new process should be gained from key stakeholders—clients, architects, developers and government departments. Press releases should be prepared.

Use and performance of pilot process

The process of incorporating crime prevention into the building control process should be piloted first in one region. An evaluation should be conducted to help identify the benefits of the process and decide whether the process should be rolled out.

Process roll out

The process may be piloted in another region or rolled out nationally. This will involve more delivery staff being recruited, trained in assessing plans and supported to provide a quality service. A launch event will need to be organised and publicity gained for the new process.

Use and performance

The full process of checking building development plans should be managed and evaluated. The impact on crime levels will be able to be established over the longer term. The results can be used to determine whether the process should be improved and/or expanded. The possibility for integrating crime prevention into the design and development process should be considered, as this offers a number of benefits—e.g. it is easier for architects to address crime issues during the early stages of the design process and reduces the likelihood of delays.

PHASE ACTIVITIES

Phase 0 Initiation

- ✓ Review planning system to determine ability to address crime prevention
- ✓ Meetings with local authorities' planning departments to determine interest in addressing crime prevention through building control process
- ✓ Meetings with Government bodies involved in planning, security and the environment to determine interest in addressing crime prevention through the building control process
- ✓ Establishing a process for checking building development plans in terms of crime prevention considered feasible and desirable by local authority planning department and other key stakeholders
- ✓ Individuals and organisations identified that might support the process

Phase 1

Working group structure and process

Process set up

- ✓ Working group established
- ✓ Timescales, budget, resources and sources of funding identified for building control process—this should cover process set up, roll out, ongoing delivery and development

Crime risk identification

- ✓ Research undertaken to establish types/levels of crime, feelings of insecurity and Modus Operandi of criminals—this may simply involve updating research when running building development projects
- ✓ Design-led crime prevention experts consulted (e.g. design-led crime prevention experts, criminologists, etc.) regarding the potential for design and planning to reduce crime and/or fear of crime
- ✓ Planning experts consulted regarding the feasibility of addressing crime prevention within the building control process
- ✓ Processes, guidance, examples of DAC building development projects relevant to the current context identified—both the national and local context should be considered

Process objectives

- √ The focus of the building control process identified—i.e. crime prevention and/or increasing feelings of security
- ✓ The scope of the building control process identified (e.g. housing, commercial buildings and/or public areas)
- ✓ Decision taken about whether to incorporate security into wider agenda (e.g. fire safety)
- √ The geographical scope of the building control process identified
- ✓ A process identified for piloting, rolling out and delivering the scheme

Securing resources and funding

- ✓ Apply for additional resources and funding for research into crime risk, if necessary.
- ✓ Apply for additional resources and funding for setting up and managing the building control process, as and when appropriate

Phase 2

Scheme structure and processes

Process development

- ✓ Ownership of building control process established
- ✓ Mechanisms for management and delivery of building control process identified
- ✓ Relationship between building control process and accreditation scheme established, if appropriate.
- ✓ Lawyers consulted regarding liability and enforceability

Phase 2

Process development

(continued)

Staffing and resources

- √ Staffing requirements identified
- ✓ Appropriate resources identified to meet staffing needs—including ICT, office space, office equipment, etc.
- ✓ Design-led crime prevention experts identified to help train delivery personnel help may come from experts involved in an accreditation scheme
- ✓ Training scheme for delivery personnel identified or established
- ✓ Delivery personnel recruited, trained and given experience in assessing development plans
- ✓ Support staff recruited

Promotion, guidance and application process

- ✓ Publicity materials (e.g. brochures) developed to communicate the process and explain the reasons for checking vulnerability to crime
- ✓ A website established by the organisation assessing development plans to explain the process, provide contact details for design-led crime prevention experts and to enable applicants to download relevant forms and guidance
- ✓ Guidance material for architects/developers tailored to the current context—both the national and local context taken into account
- ✓ Criteria for assessing building developments established
- ✓ Crime prevention included on local authority planning department website
- ✓ Crime prevention covered when applying for approval for construction from the local authority planning department
- ✓ Planning approval application form updated to include crime prevention

Launch

- ✓ Launch event and communication strategy developed for new development control process
- ✓ Identification of a group of developers, architects and clients willing to support the introduction of a new building control process
- ✓ Press release prepared

Phase 3

Management of pilot process

Use and performance of pilot process

✓ Design-led crime prevention experts assess vulnerability to crime and design changes recommend, where judged vulnerable to crime

Evaluation of pilot scheme

- ✓ Evaluate the process in terms of quality of service
- ✓ Evaluate the impact of the process on crime risk for building developments, if time allows

Client/customer relationship

✓ Publicise benefits of new process for key stakeholders

Phase 4 Process roll out

- ✓ More delivery personnel recruited, trained and given opportunities to assess development plans
- ✓ Launch event organised to promote the new process
- ✓ Press releases prepared

Phase 5 Use and performance

Management of process

✓ Building developments plans checked

Ongoing evaluation of scheme

- ✓ Evaluate the building control process in terms of quality of service
- ✓ Evaluate the impact of the process on crime risk for building developments

Client/customer relationship

✓ Publicise benefits for key stakeholders

Phase 6 Learning and business strategy

- ✓ Identify methods of increasing the impact of the process
- ✓ Identify opportunities to expand the scheme (e.g. to cover risk to terrorist attack)
- ✓ Review business case for using the process to address crime prevention within building development projects
- ✓ Review impact of process on future activities
- ✓ Decide whether to integrate crime prevention into the design and development process

2.3.3 Good Practice Example – The UK's Architectural Liaison Service

The development of the Secured By Design accreditation resulted in the recruitment and training of Architectural Liaison Officers in police forces across the UK. The Architectural Liaison Officers were initially responsible for ensuring that applications for the Secured By Design award meet the criteria. However, the UK Government is committed to using the planning process to design out crime, and police Architectural Liaison Officers are considered to have an important role to play in this process (ODPM, 2004).

In the UK, planning permission is required for anything that amounts to a 'development'—building in, on, over or under land, or making a material change to the use of a building or land. Developers and architects submit applications for planning to the local authority planning department, once the detailed drawings are completed and all necessary reports completed. The planning department submits the development plans to the Architectural Liaison Unit in the region—most of the 44 police forces employ one or more Architectural Liaison Officer(s). The Architectural Liaison Officer makes a judgement about the proposed development's vulnerability to crime by:

- Examining the area in terms of crime risk this involves gaining data on recorded crime in the area from police data bases and possibly visiting the site of the proposed development
- Reviewing development plans submitted to the local authority planning department in terms of vulnerability to crime – this involves highlighting factors that increase crime risk, such as alleyways, housing layouts that permit access to the back of the property, etc.
- Recommending changes to reduce the crime risk, where appropriate.

Plans judged by the Architectural Liaison Officer as vulnerable to crime are referred back to the local authority. The local authority informs the developer/architect that changes need to be made, and can choose to deny planning permission, if plans are not revised. The percentages and types of plans submitted to the Architectural Liaison Unit in the area depends on the policy of the local authority.

The developer or architect may go on to apply for Secured By Design accreditation for the development. However, he or she must submit a form explaining how the criteria have been met, and the development be approved by an Architectural Liaison Officer. In other words, the fact that a development has been checked by an Architectural Liaison Officer during the planning process does not automatically infer Secured By Design status.

The UK Government commitment to using the planning process to design out crime is communicated and enforced through national legislation (e.g. Crime and Disorder Act 1998), planning procedures (Planning Policy Statement 1 and Planning Policy Guidance Note 3 – Housing), policy documents regarding issues

such as sustainability and guidance materials (e.g. Safer Places, Office of the Deputy Prime Minister, 2004).

Being employed by the police means that Architectural Liaison Officers have access to recorded crime data, experience and authority on the issue of crime prevention and operate across the country. There are nevertheless variations across the UK in the percentage of plans submitted to an Architectural Liaison Unit, as local authorities operate different policies and police forces commit different levels of resources to the architectural liaison officer role.

2.4 Crime prevention integrated within design development process

Checking plans submitted to the local authority planning office encourages developers and architects to address crime issues. However, any changes to designs have to be made after detailed designs have already been produced. This is problematic for architects and developers because it delays the development process and may cause conflict between developers/architects and design-led crime prevention experts. It is therefore better to encourage developers and architects to consult with design-led crime prevention experts during the early stages of the design process. This involves establishing a service that enables developers/architects to consult with design-led crime prevention experts during the early stages of the design and development process.

The need to consult with crime prevention experts regarding the proposed building development's crime risk and security is stipulated by the local authority planning department. The plans are still checked by the crime prevention experts prior to approval for construction being given—as in the approach 3. However, developers/architects can be fairly confident that approval for construction will not be delayed due to concerns about crime and security, where crime prevention advice has been taken into account.

2.4.1 Must haves

Integrating crime prevention into the design and development process encourages contact between the design-led crime prevention experts and architects/developers. Consequently, design-led crime prevention must have the skills, equipment and resources to be able to communicate effectively with developers and architects face-to-face and by email, letter, telephone and fax—a background in the design industry will be important. They should be able to respond promptly to any inquiries and to visit the site of proposed building developments, and this may require that they are dedicated to the role—i.e. not expected to undertake other duties.

Design-led crime prevention experts must have access to crime data relevant to a specific building development and to be to tailor advice to the specific context. Crime data and recommendations will need to be clearly communicated to architects and developers—a written report is appropriate for this. This report—sometimes called a *Crime Impact Statement*—should be in an accessible and professional format—this is especially important where a fee-paying service is being provided. However, the written reports should not substitute for face-to-face contact—vital for communicating information about CPTED principles, tailoring advice to the specific context, helping architects and developers identify sources of conflict and make trade-offs.

To help assess building development plans, crime prevention experts must have the ability to store all job documents digitally, including design drawings, and be able to provide information and assessment electronically. An e-planning capability will clearly require a formal, documented protocol for data storage and retrieval across region.

Commitment from the local authority planning department will be essential, if the new service is to be established. Developers and architects need to be made aware from the outset that they must act on specific information about crime risk in the area, and that this information can be obtained from local design-centred crime prevention experts. Thus, crime prevention must be integrated into the planning process—i.e. covered in local authority strategy documents, on lists of requirements for planning approval and on application forms.

Developers and architects are unlikely to challenge a new process that is supported by local authority strategy and policy documents, and where prompt, professional advice makes it fairly easy to comply with crime prevention standards within the necessary timescales—especially if they can then be fairly confident that planning approval will not be delayed due to concerns about crime and security.

Ensuring cooperation in Manchester

In Greater Manchester, UK, developers are required by the local planning department to ensure that plans are to the standard of Secured By Design—the UK police accreditation scheme. They are advised to consult with Greater Manchester Police's Architectural Liaison Officers during the early stages of the design process. This requirement was set in January 2007, and has not been challenged to date (May 2008). The Local Authority has ensured that the importance of addressing crime is emphasised within development plans, and developers accept this.

MUST HAVES CHECKLIST – Incorporating crime prevention into the design and development process

Contextual factors

- ✓ Recognised need to address crime and/or insecurity
- ✓ A development control process that is transparent and free from corruption
- ✓ A local authority planning department committed to crime prevention and willing to lead on this issue

Organisational structures & resources

- ✓ A service for advising architects and developers involved in the design and development of building projects
- ✓ A management structure that enables design-led crime prevention experts to provide a quality service and develop their knowledge and skills
- ✓ Design-led crime prevention experts able to provide a prompt and professional service—being dedicated to the role will help
- ✓ Access to crime data relevant to a specific building development, the ability to tailor advice to the context and to present the information in a clear and professional manner—a Crime Impact Statement may be used for this purpose
- ✓ ICT systems to support delivery of the service
- ✓ Procedures for addressing crime prevention within the building control process—e.g. crime prevention covered on local authority planning departments website, in strategy documents, in checklists for planning approval and on application forms.
- ✓ A website, brochures, guidance materials and validated criteria for assessing building development projects
- Design-led crime prevention experts trained to assess building developments—the numbers will depend on the scope of the checking process
- ✓ Design-led crime prevention experts with the knowledge and skills to communicate effectively with architects and developers—a background in design or the development industry might help
- ✓ Sufficient funding and resources to establish and run the design-led crime prevention service

2.4.2 Could have

The employment of a Crime Analyst would ensure that crime information is available promptly and is relevant to the needs of architects and developers. Crime data is sometimes incomplete, difficult to access and communicated inappropriately—even amongst police forces with the best Information Communication Technology systems. A Crime Analyst would have time to review and improve the quality of the crime data, and to produce information for reports, thus enabling design-led crime prevention experts to spend more time communicating directly with architects and developers.

This might be a fee-paying service, as long a the quality of the service remains high.

2.4.3 How to integrate crime prevention into the design development process

Initiation and service set up

Meetings should be held with key stakeholders to determine interest in developing a design-led crime prevention service—including local authorities and government bodies responsible for design, planning and security. Opportunities should be identified to integrate crime prevention into the design and development process. If the new service is to be established, commitment from the local authority planning department must be obtained. With this support, the new service can be implemented within a particular region. Other local authorities and government departments are likely to show more interest once the service has proven successful.

A working group should be established, and charged with identify timescales, budgets, resources and sources of funding for a new service. Research should be undertaken into crime risk and the feasibility of integrating crime prevention into design and development—this may simply involve updating research conducted previously. Based on the findings, the objectives and scope of the crime prevention service should be decided. A process for piloting and rolling out the new service should be outlined. The level of funding required will clearly depend on the level and scope of existing design-led crime prevention activities.

Service development

The structure of the service will need to be identified—including ownership, mechanisms for delivery and management and relationship to the building control process and, if appropriate, accreditation schemes. Lawyers should be consulted regarding enforceability and liability issues. For an income generating services, the levels of fees and methods of payment will need to be decided upon.

Design-led crime prevention experts with a background in design and development should be identified to support recruitment and training of design-led crime prevention advisors and support staff. The skills and resources of an existing design-led crime prevention service will need to be reviewed. Where required, additional training should be provided and new staff recruited. Selection criteria must be established, and a background in design and development might be included as "desirable".

Staff will require office space, equipment and Information and Communication Technology (ICT), including:

- Computer systems to enable all job documents to be stored digitally, including design drawings
- Computer systems to enable the electronic assessment of planning applications
- A photocopier able to photocopy large documents

Documents that will have to be prepared by the design-led crime prevention service, including:

- A formal, documented protocol for data storage and retrieval across region
- A format for a document detailing crime risk in the area and recommendations. This may be referred to as a Crime Impact Statement.
- A process for providing design-led crime prevention advice to architects and developers.

The local authority will need to ensure that its commitment to crime prevention is clearly communicated through the strategy and policy documents. Websites, brochures and lists of requirements for planning approval will all need to be revised and updated. A checklist of requirements for applying for planning permission should include the need to consult with design-led crime prevention experts and to obtain a report on crime risk. Details of any charges for the design-led crime prevention service should be provided. When everything is in place, a formal launch event can be held and appropriate media coverage sought.

Use and performance of pilot service

The service should be run in a pilot area initially. An independent evaluation should be used to identify opportunities for improvement. For example, it may be considered necessary to recruit a Crime Data Analyst to support the design-led crime prevention advisors and to improve the quality of the crime information provided for architects and developers. The benefits of the new service should be publicised, where possible.

Service roll out

Decisions should be take about whether to extend the pilot service to cover different types/sizes of development, a broader geographical area, etc. Any extension to the service will increases the workload for existing staff. Thus, steps will need to be taken that the quality of the service is maintained—e.g. new staff recruited and trained, and new offices established. A formal launch event may be appropriate.

Use and performance

The extended service should be provided and evaluated. The ongoing professional development of staff should be considered a priority.

PHASE ACTIVITIES Phase 0 ✓ Review planning system to determine ability to provide new design-led crime Initiation prevention service ✓ Meetings with local authorities' planning departments to determine interest in establishing a design-led crime prevention service ✓ Meetings with Government bodies involved in planning, security and the environment to determine interest in proposals for a new design-led crime prevention service ✓ Local authority planning department and other key stakeholders committed to establishing a new design-led crime prevention service ✓ Individuals and organisations identified that might support the service Phase 1 Working group structure and process Service set up ✓ Working group established ✓ Timescales, budget, resources and sources of funding identified for the crime prevention service—this should cover service set up, roll out, ongoing delivery and development Crime risk identification ✓ Research undertaken to establish types/levels of crime, feelings of insecurity and

running building development projects

reduce crime and/or fear of crime

Modus Operandi of criminals—this may simply involve updating research when

✓ Design-led crime prevention experts consulted (e.g. design-led crime prevention experts, criminologists, etc.) regarding the potential for design and planning to

Phase 1 Service set up

Crime risk identification (continued)

(continued)

- ✓ Design-led crime prevention experts consulted (e.g. design-led crime prevention experts, criminologists, etc.) regarding the potential for design and planning to reduce crime and/or fear of crime
- ✓ Planning experts consulted regarding the feasibility of setting up a new design-led crime prevention services
- ✓ Processes, guidance, examples of DAC building development projects relevant to the current context identified—both the national and local context should be considered

Service objectives

- ✓ The focus of the design-led crime prevention service identified—i.e. crime prevention and/or increasing feelings of security
- ✓ The scope of the design-led crime prevention service identified (e.g. housing, commercial buildings and/or public areas)
- ✓ Decision taken about whether to incorporate security into wider agenda (e.g. fire safety)
- √ The geographical scope of the design-led crime prevention service identified
- ✓ A process identified for piloting, rolling out and delivering the service.

Securing resources and funding

- ✓ Apply for additional resources and funding for research into crime risk, if necessary.
- ✓ Apply for additional resources and funding for setting up and managing the designled crime prevention service, as and when appropriate

Phase 2 Service

development

Service structure and processes

- ✓ Ownership of design-led service established
- ✓ Mechanisms for management and delivery of service identified
- ✓ Relationship between design-led crime prevention service, building control process and accreditation scheme established, if appropriate.
- ✓ Lawyers consulted regarding liability and enforceability
- ✓ Level of fees and methods of payment identified

Staffing and resources

- ✓ Staffing requirements identified
- ✓ Appropriate resources identified to meet staffing needs—including ICT, office space, office equipment, etc.
- ✓ ICT systems established to store all job documents digitally, including design drawings, and be able to provide information and assessment electronically.
- ✓ A formal, documented protocol for data storage and retrieval across region developed
- ✓ Design-led crime prevention experts identified to help train delivery personnel—help may come from experts involved in checking or accreditation of building development plans
- ✓ Training scheme for delivery personnel identified or established
- ✓ Selection criteria established for the recruitment of design-led crime prevention experts—a background in the development industry might be "desirable"
- ✓ Delivery personnel recruited, trained and given experience providing advice to architects and developers
- ✓ Support staff recruited
- ✓ Processes established for providing design-led crime prevention advice and for checking building development plans. Response times identified.

Phase 2 Service development

(continued)

Promotion, guidance and application process

- ✓ Publicity materials (e.g. brochures) developed to communicate the process, explain the reasons for checking vulnerability to crime and provide details of advice available—response times included
- ✓ A website established by the organisation providing the service and assessing development plans to explain the process, provide contact details for design-led crime prevention experts and to enable applicants to download relevant forms and guidance
- ✓ Guidance material for architects/developers tailored to the current context—both the national and local context taken into account
- ✓ Criteria for assessing building developments established
- ✓ Crime prevention included on local authority planning department website
- ✓ Crime prevention covered when applying for approval for construction from the local authority planning department
- ✓ Planning approval application form updated to include crime prevention

Launch

- ✓ Launch event and communication strategy developed for new service
- ✓ Identification of a group of developers, architects, clients and planning departments willing to support the introduction of a new service
- ✓ Press release prepared

Phase 3

Management of pilot process

Use and performance of pilot service

✓ Design-led crime prevention experts assess vulnerability to crime and design changes recommend, where judged vulnerable to crime

Evaluation of pilot scheme

- ✓ Evaluate the process in terms of quality of service.
- ✓ Evaluate the impact of the process on crime risk for building developments, if time allows

Client/customer relationship

✓ Publicise benefits of new process for key stakeholders

Phase 4 Service roll out

- ✓ More delivery personnel recruited, trained and given opportunities to provide advice and assess development plans
- ✓ Links to accreditation scheme formalised
- ✓ Launch event organised to promote the new service
- ✓ Press releases prepared

Phase 5 Use and

performance

Management of process

- √ Advice given and building developments plans checked
- ✓ Ongoing evaluation of scheme
- ✓ Evaluate quality of service
- ✓ Evaluate the impact of the service on crime risk for building developments

Client/customer relationship

- ✓ Steps taken to ensure the quality of the service (e.g. regular review of the quality of service, better training for design-led crime prevention experts, etc)
- ✓ Publicise benefits for key stakeholders

Phase 6 Learning and business strategy

- ✓ Identify methods of increasing the impact of the process
- ✓ Identify opportunities to expand the scheme (e.g. to cover risk to terrorist attack)
- ✓ Review business case for using the process to address crime prevention within building development projects
- ✓ Review impact of process on future activities
- ✓ Decide whether to integrate crime prevention into the design and development process

2.4.4 Good practice example – Greater Manchester Police's Architectural Liaison Service

Greater Manchester Police recently implemented a service-oriented model integrated within the design and planning process, paid for by developers, and delivered by professionals with a development industry background—the six Architectural Liaison Officers and the Head of the Architectural Liaison Unit have all previously worked in architecture, planning or surveying.

The local authority planning office informs all those seeking planning permission for future developments that they will require a report to be completed by Greater Manchester Police's Architectural Liaison Officers. This report is called a "Crime Impact Statement", and it:

- Identifies the crime issues, patterns and risks for the location and type of development
- Provides recommendations for designing against crime.

The requirement for a Crime Impact Statement is listed within the local validation checklist—which all developers and architects consult when applying planning permission, and cannot therefore be overlooked. This new requirement fits easily into the existing process because developers and architects have to obtain reports relating to other issues (e.g. ground conditions). Importantly, the requirement for a Crime Impact Statement can be linked back to principles contained within the relevant local and national planning policy and guidance, the most relevant being the Guide to Development in Manchester – Supplementary Planning Document and Guidance (Adopted April 2007). The local authority and police also attempt to ensure that developers understand the reasons for designing against crime.

Having been promoted by the local authority planning office, the majority of developers and architects contact the Architectural Liaison Unit during the early stages of the design and planning process. The Architectural Liaison Officer visits the site, reviews the crime data and meets with the client to discuss how CPTED principles might be applied in practice. The Crime Impact Statement essentially confirms information communicated face-to-face. The Crime Impact Statement is prepared free of charge for publically-funded or community developments. The fee is £15 for each dwelling in a residential development comprising 50 or less; and £20 per square metre for non-residential developments of less than 5,000 square metres. Fees were introduced due to insufficient funding through police budgets (Figures for January 2007).

The Architectural Liaison Officers review all plans submitted to Greater Manchester City Council for developments above a certain size—currently 20 dwellings.

A evaluation of the new service conducted by the University of Salford and University of Huddersfield (Armitage, Monchuck and Wootton, 2008) found that architects and developers welcome direct contact with an Architectural Liaison Officer, and commented on the benefits of communicating with someone with a background in the development industry. Advice is given at the pre-planning stage—when it can be easily incorporated into concept designs and layouts of the proposed development. Because of this early contact with Architectural Liaison Officers, the architects and developers can be fairly certain their plans will be approved at the detailed planning stage, as long as they have followed the advice given.

There are a number of factors that have enabled Greater Manchester Police to successfully implement the new model. The Architectural Liaison Unit has the full support of senior management within Greater Manchester Police, close links with the Association of Chief Police Officers (ACPO) Crime Prevention Initiatives and a partnership arrangement with the University of Salford—the Design Against Crime

Solution Centre. In addition, Manchester City Council's Planning Department has been willing to take the lead in terms of addressing crime prevention through the planning process, and has experience in tackling crime and terrorist issues.

2.5. Embedding crime prevention into design education, training and practice

European countries committed to design-led crime prevention will need to ensure that crime prevention is embedded into design education, training and practice. This involves establishing a programme, project or activity to enable crime prevention to be explored by individuals involved in design education, training and practice. Activities might include teaching modules for children, design projects for student designers, design competitions, professional development events and the publication of case studies, articles and guidance material. The scale and scope of the activities will clearly depend on the level of commitment to design-led crime prevention.

2.5.1 Must haves

Embedding crime prevention into design education, training and practice requires interest and commitment from organisations with relevant contacts and expertise—including schools and universities, professional bodies. Larger programmes of activity will also require funding. This might come from grant bodies, government departments or the European Commission.

2.5.2 How to embed crime prevention into design education, training and practice

A project or programme proposal should be written, and sources of funding explored. It may be possible to run singles activities, such as a seminar, using internal resources and in collaboration with partner organisations (e.g. professional bodies).

2.5.3 Good practice example - Design Against Crime

In 1999, a national programme of research and policy initiatives emerged, with the aim of embedding crime prevention within design through education and professional practice. The programme was entitled Design Against Crime (DAC). Initiated by the UK Home Office, Design Council and Department of Trade & Industry, a major investigation of best practice was conducted [and new design concepts developed. Universities involved included the University of Cambridge, Central St. Martins College of Art & Design, Sheffield Hallam University and the University of Salford.

As part of the Design Against Crime programme, the Design Policy Partnership—a multi-disciplinary team of researchers at the University of Salford and Sheffield Hallam University—conducted research into design-led crime prevention, developing case studies and professional development materials. The Partnership also ran a national design competition for student designers and developed educational materials for school children that integrate with the National Curriculum. These outputs from the project are available from the website (www.designagainstcrime.org).

3.0 Advice for European countries

This section details developments within particular European countries and provides specific recommendations for improving or extending design-led crime prevention. It covers Greece, Germany, Austria, Netherlands and UK.

3.1 Greece

This sub-section provides advice for Greece on promoting design-led crime prevention. The recommendations are likely to be of interest to European countries with high levels of fear of crime—but relatively lower levels of crime.

3.1.1 Crime and insecurity

The Hellenic Police (under the Ministry of Public Order) is the main source of crime data. Greece participated for the first time in the EU International Crime Survey (ICS) 2005. Based on the ten 'common' crimes used in the EU ICS (2005), Greeks are less likely to have been the victim of crime in 2004 than the average European citizen—12.3 per cent were the victim of crime compared to an average of 14.9 per cent. Greece is rated as a relatively low crime country within Europe—ranking 13 out of the 18 countries surveyed. However, levels of some crimes are above average. In particular, levels of robbery and personal theft—including pickpocketing—are higher than the European average. Greece ranked 6 out of the 18 European countries in terms of burglary (EU ICS, 2005). Risk of bicycle theft is a above average, despite low levels of bicycle ownership in Greece.

Furthermore, police figures show increases in certain types of crime over the last few years. Theft and burglary (excluding theft of vehicles) has shown an upward trend since 2005, increasing 6 per cent in 2005 and 11 per cent in 2006. Theft and burglary became a significant problem for Greece between 1995 and 1998, when levels increased by 44 per cent between and special efforts by the police were introduced to temper the increase. While car theft has shown a slight decline, theft of motorbikes has increased over the last five years, accounting for 60 per cent of all vehicle thefts. This is partly due to the high level of motorcycle ownership in Greece, with 32 per cent owning a motorbike, compared to 20 per cent in Europe. Levels of robbery increased 23.5 per cent between 2002 and 2006, with 8 out of 10 robberies taking place in Athens. Burglary and robbery have also become a problem in relation to commercial properties, with petrol stations, banks and supermarkets being targeted.

The feelings of unsafety on the streets stem from social and environmental factors, such as:

- The urban environment 38 per cent of Greeks live in Athens, and that crime and fear of crime tend to be higher in cities
- Adverse neighbourhood characteristics The attributes found to lie in the core of unsafe environment perception are: unsupervised youth (35%), littering (31%), graffiti (29%) and drunkenness (21%). Overall adverse neighbourhood characteristics are more frequent than high perception of criminality in the area. Of all 16 EU cities, residents of Athens report the highest level of confrontation with adverse neighbourhood characteristics, as well as being the most likely to believe that both property crimes and violent crimes occur in their area (EU ICS, 2005)
- Confrontation with drug-related problems (Eurobarometer 2007) 28 per cent of Greeks have been exposed to drug-related problems (EU ICS, 2005). Its geographical location makes Greece vulnerable to drug traffickers, many who are from Albania and Turkey.
- Negative attitudes towards immigrants immigrants are sometimes blamed for particular types of crime and their involvement in crime is supported to some extent by police recorded crime figures. For example, in terms of robbery, approximately 35 per cent of offenders were non-Greeks.
- Lack of trust in the police Greece has one of the least favourable scores in terms of satisfaction with the police—ranking alongside Poland and Estonia. In particular, 26 per cent of those who did not report a burglary to the police said it was due to fear or dislike of the police, compared to an average of 5 per cent in Europe. Of those who reported being victim of a 'property' or 'contact' related crimes,

only 28 per cent were satisfied with the outcome—compared to 55 per cent on average in Europe. Only one in two Greeks think the police are doing a good job—compared to two out of three on average throughout Europe.

3.1.2 Design-led crime prevention approaches

The problem of insecurity and confrontation with drug-related problems might usefully be tackled by design-centred crime prevention approaches, but Greece has no history of involvement in CPTED, and has not contributed to the development of the European Standard, ENV 14383-2.

An accreditation scheme for building developments might be established to help reduce risk of burglary, vehicle crime and robbery, reduce fear of crime and improve the quality of the environment.

However, a scheme run by the police would be unlikely to be successful in Greece. The Hellenic Police Service is mainly geared towards apprehension and conviction. Central government has directed the police force to focus more on prevention and community support. However, the police has a poor record of collaboration with other stakeholders, and initiatives and organisations to deal with crime at a neighbourhood level (e.g. "Safe Cities", Crime Prevention Councils and "Operation POLIS") have not been successful (Zotos, 2007).

A building development project or accreditation scheme run by a local authorities planning department might also be difficult due to heavy bureaucracy, lack of appropriate infrastructure and conflicts over power-sharing, authority and responsibilities amongst governmental departments (Zotos, 2007)—governmental versus municipalities. Trust in public officials is also likely to be low due to corruption. The annual Corruption Perceptions Index of Transparency International shows Greece to be the most corrupt European country over the last ten years—surpassed in 2007 only by newcomers Poland, Bulgaria and Romania. The EU ICS 2005 found that 13.5 per cent reported incidents of public officials expecting bribes, compared to an average of only 1.4 per cent in Europe.

There are signs of potential interest in preventative approaches to security, however, specifically in relation to fear of crime/insecurity, commercial and domestic burglary and terrorism. Citizens and businesses are increasingly employing security personnel and using security devices, such as alarms, secure doors and windows and CCTV. Large-scale complexes—comprising shops, restaurants, cafes, cinemas, offices etc—have been constructed in Athens and other major cities. This has created a need for overall security management of these developments, and is currently handled by a private security firms employed on a contract-basis (Zotos, 2007).

Interest in addressing security issues has increased since the Olympic Games in Athens in 2004. The Center for Security Studies (KE.ME.A.), under the Ministry of Public Order, was set up "to make the best out of the knowledge and experience acquired from planning and implementing the security measures of the Athens 2004 Olympic Games" (Centre for Security Studies, Ministry of Public Order Website, www.ydt.gr), and the Greeks have since been consulted by the Chinese regarding security for the 2008 Olympics (Zotos, 2007). Terrorist issues have concerned Greece for some time. Considerable effort was directed at catching the "17 November" terrorist group active in Greece since 1984 and finally apprehended in 2002, following pressure and assistance from the USA and the UK. Other major, international events that have required special consideration of security issues include the EU Presidency in 2003 and the European Super-League final in Athens in 2007.

Some companies and organisations—including those involved with security— have sought to differentiate themselves on 'quality' by obtaining the ISO 9001 accreditation. In the building industry, companies such as those selling doors and windows have found this a marketing 'plus' (Zotos, 2007). Over the last seven to eight years, development projects relating to private houses, apartment blocks, institutions and private companies—especially those with international operations—have utilised their own building/security guidelines. Developers are likely to be interested in security if able to charge a premium on developments.

While there are no official directives by the Technical Chamber of Greece or the Greek Architectural Association on crime prevention or other social issues, a small number of architects and designers are socially aware and may apply standards and directives used by professionals in other countries. This

obviously depends on the designer's education/background and the client's brief. Design professionals would most likely welcome guidelines, project checklists and directives for crime prevention from an official body (government or professional), provided the business benefits were clear and the guidance would enhance their work—rather than hinder it (Zotos, 2007).

Planners are less likely to be concerned with crime prevention since planning is currently focused on development control and extension schemes for towns and cities (Zotos, 2007). However, some sustainability/safety issues are checked by the planning office including: Number of storeys; Architectural appearance (aesthetics); resistance to earthquake calculations; natural lighting efficiency of the rooms/ internal spaces; and calculations/materials for heat insulation efficiency. Thus, insecurity, crime prevention and/or terrorism could be addressed within the planning process—but would probably require external pressure (e.g. from the EU).

3.1.3 Recommendations for Greece

Promoting design-led crime prevention might involve the following:

- Organising a series of seminars on the topics of insecurity, regeneration, the security of commercial buildings and developments and designing against terrorism. This should be publicised amongst architects and other design professionals, planners, developers, personnel involved in the security of the Olympics, security personnel and staff from police and local authorities involved in crime prevention initiatives.
- Adapting guidance material to the Greek context and disseminating this amongst architects, design
 professionals, etc. (e.g. Wootton and Davey's (2005) DAC Evaluation Framework—perhaps an
 abridged version & the guidance of designing against fear of crime and insecurity contained in this
 document).
- Developing case studies relevant to the Greek context and disseminating these amongst architects, designers, developers, etc. Relevant DAC case studies include Designing Against Terrorism, Tesco and the Big Issue—deals with drug-using).
- Holding a design competition for student and/or professional designers.

The aim would be to convince major developers and design professionals of the business benefits of designing against crime. Material in English should be acceptable, as Greeks are aware of the need for English in professional and business life, and there is generally a good level of language competence. The Greeks might draw on the experiences of the UK's **Design Against Crime** programme, funding by the Home Office, Design Council and Department of Trade & Industry. However, care should be taken with the use of the word 'crime' as it may seem too strong in certain contexts (the word "crime" tends to reserved for the more serious crimes, such as murder, serious assault, etc). More commonly used Greek terms include 'protection' (for people and buildings), 'addressing security and safety issues' or 'counteracting anti-social behaviour'.

3.2 Germany

This sub-section provides advice for Germany on promoting design-led crime prevention. The recommendations are likely to be of interest to European countries with medium levels of fear of crime, and relatively low levels of crime, but problems within certain locations.

3.2.1 Crime and insecurity in Germany

Crime statistics for Germany are available as follows:

- National figures from police records (Federal Criminal Police Office—Bundeskriminalamt, BKA, www.bka.de)
- European from police records (EuroStat)
- International International Crime Victimisation Survey (ICVS, 2004/5)—statistics for Germany available for the first time

Fear of crime is measured using public opinion surveys and the ICVS—which uses the standard questions (Fear of being alone after dark, etc.)

Germany experiences crime levels just under the mean when compared to other industrialised countries (ICVS, 2004/5; van Dijk et al, 2007). In relation to crime issues traditionally addressed through environmental design (e.g. burglary and robbery), levels of victimisation are low:

- Below average rate of sexual assault against women (0.4; average 0.6)
- Low risk of robbery (0.4; average 1.0)
- Below average risk of pick pocketing (1.4; average 1.7)
- Low risk of burglary with entry (0.9; average 1.8)
- Low risk of theft of car (0.2; average 0.8)
- Low risk of theft from car (2.0; average 3.6)
- Above average risk of bicycle theft (3.4; average 2.9)

There are regional differences. Crime levels are higher in Northern German compared to Southern Germany—which is more wealthy—and in some parts of former Eastern Germany (Oberwittler and Hoefer, 2005). In addition, crime and anti-social behaviour are problems within some deprived neighbourhoods—especially those with high-rise dwellings developed in the 1960s and 1970s (Pfeiffer and Behrmann, undated; Schubert and Schnittger, 2005).

Compared to other European countries, Germans are in the middle regarding fear of crime. Fear intensified after reunification in 1989, peaking in 1994, but has since declined (Oberwittler and Hoefer, 2005).

3.2.2 Design-led crime prevention approaches

Crime Prevention occupies a prominent position in terms of policy, practical law enforcement and attitudes to actual and potential offenders. Since the 1980s, new "practice-oriented" crime prevention has operated. In the 1990s, the first committees were established dedicated to crime prevention (crime prevention councils). Crime prevention draws on model projects from abroad—problem-oriented policing and community policing—and adopts a partnership approach. In Germany, this is known as "citizen-friendly policing" ("bürgernahePolizeiarbeit").

In terms of the federal states (Länder) and in particular at the level of local authorities or municipalities, there exists two forms of organisation (EUCPN, Undated):

- Crime Prevention Councils In eight states (Hesse, Brandenburg, Rhineland-Palatinate, Saxony-Anhalt, North-Rhine-Westfalia, Mecklenburg-Western Pomerania, Lower Saxony and Schleswig-Holstein)
- Inter-ministerial working groups or other state bodies (e.g. Bremen, Hamburg, Berlin: Commission against Violence).

Since 1997, applied crime prevention activities have been supported by organisations such as the Federal Criminal Investigation office and its various groups (http://www.bka.de)

Germany has no equivalent to the UK's national accreditation scheme—Secured By Design. It is nevertheless recognised that environmental design contributes to social problems such as crime and antisocial behaviour (Pfeiffer and Behrmann, undated Schubert and Schnittger, 2005). Most federal states have produced their own design guidelines for architects, planners and local authorities. These draw on CPTED principles and Oscar Newman's Defensible Space originating from the United States. The guidelines might usefully be adapted to the German context—which differs significantly from the UK and United States. Research is currently being conducted by the University of Applied Sciences, Cologne and Max Plank Institute into crime and the German cultural context.

In the federal state of Lower Saxony, significant progress has been made in design-led crime prevention. Several documents have been produced on the design and planning of residential areas. These summarise approaches from across the world, provide guidance and are illustrated with case studies (e.g. Schubert & Schnittger, 2002. First Edition). A network of police, planners, developers, design professionals and academics committed to design-led crime prevention has been established—"Safety Partnership in City Planning". Three pilot development projects to address crime prevention haven been run (2002/3), and the activities fully documented (Pfeiffer and Behrmann, undated).

The police has traditionally provided security advice on individual dwellings, but not major projects/ developments. The pilot projects led to the police meeting with planners several times per year to outline crime issues. Training provided in planning and crime prevention is being provided for the police. Furthermore, an architect has been recruited by the *Landeskriminalamt Niedersachsen* (Lower Saxony Federal Bureau of Investigation)—so that the police can better communicate and engage design professionals. The *Landeskriminalamt Niedersachsen* is interested in methods developed to understand crime and antisocial behaviour, as well as user behaviour, within particular locations within Manchester, UK (Marselle and Wootton, 2008). It is also interested in steps taken to address fear of crime and insecurity in Austria (Stummvoll, 2004).

3.2.3 Recommendations for Germany

A national accreditation scheme would be difficult to establish in Germany due to the federal structure and it is questionable whether architects and developers would be sufficiently motivated to apply for the award. Further progress in design-led crime prevention might be made by running more one-off building development projects in federal states across Germany—these would probably focus on areas with social problems.

In Lower Saxony, one-off development projects in other areas would enable the police to gain further experience and to increase capacity in terms of numbers of police trained in planning and crime prevention. The Landeskriminalamt Niedersachsen might recruit additional advisors with a background in design, as well as conduct research to identify methodologies and solutions that might usefully be applied in Germany.

Steps might also be taken to integrate crime prevention within the design and planning process in Lower Saxony—as significant progress has already been made in this state. There is commitment to design-led crime prevention amongst politicians, the police and planners in Lower Saxony. Federal states have the autonomy to establish planning practices and legislation, and to implement these via the municipalities—only the broad guidelines are set by the Federal Government (the Bund) (see http://grdc.bafg.de/servlet/is/13222/?lang=en). Nevertheless, the value of integrating crime prevention into building control or design development processes would need to be explored and a business case prepared. Any business case should address the wider issues of "quality of life" in Germany—as planners focus on the wider context, not just crime.

3.3 Austria

This sub-section provides advice for Austria on promoting on further improving its design-led crime prevention activities—building development projects that address feelings of insecurity are run in Vienna. The recommendations will be of interest to organisations committed to addressing issues of insecurity, and are likely to be relevant to European countries with relatively low levels of crime.

3.3.1 Crime and insecurity

Austria is a low crime country—burglary is less than 1 per cent (ICVS, 2006). The population of Austria generally feel safe, and neither violence nor property crime are considered problems in Vienna. Only six in ten respondents could mention one or more places in Vienna connected with insecurity. Generally speaking, "insecure places" in Vienna are those with a poor reputation or where visitors are confronted with marginalised groups, such as drug addicts, drunks, homeless people or foreigners. There is, however, a gender difference, with fear of crime higher amongst women (Stummvoll, 2008).

3.3.2 Design-led crime prevention approaches in Austria

In Austria, activities discussed under the banner of "crime prevention" are associated exclusively with the police. The police focus on law enforcement, and are reluctant to reorganise their structure to support pro-active crime prevention. This mitigates against the development of a police-led accreditation schemes or processes for checking development plans. In addition, there is no design-led crime prevention policy or programme supported by central government. Although crime prevention is confined to a number of local initiatives that are not linked together (Stummvoll, 2007), there are examples of good practice in parts of Austria.

In Vienna, design-led crime prevention is dealt with by a city council office—the "Leitstelle fuer Alltags—und Frauengerechtes Planen und Bauen". It became responsible for the promotion and co-ordination of women's affaires—and became known as the "Frauen Büro". The Leitstelle ensures that new housing projects meet the requirements (and particularly women's) for a feeling of safety in public and semi-public space. It is assumed that women have particular concerns about security and invasion of privacy—these concerns exist despite low levels of crime in Austria. In this sense, fear of crime is taken seriously for its own sake (Stummvoll, 2004)

The Leitstelle believes that design and the development of public space can reduce the likelihood of 'anxiety zones' being created, and offers an alternative to traditional calls for more surveillance or police. The guidelines for a safe city state that: a person should be easily able to find their way around due to clearly organised paths, signage, etc; a place should be recognisable and offer a good overview of the area, due to clear land uses, good lighting, etc. visibility should be good both outside and within the building (e.g. in stairwells); lighting should enable people to see and be seen, and not cast dark shadows; safe and, if possible, direct access to local facilities should be provided; a vibrant atmosphere should be created through the development of attractive environments and local facilities. The presence of 'capable guardians' (e.g. taxi drivers, newspaper sellers, etc.) may be used to enhance safety; residents should feel responsible for their neighbourhood, which should be of a manageable proportion, have a clear identity and offer opportunities to socialise with neighbours; the design should help reduce the potential for conflict by clearly defining public and private space; and maintenance should be easy to carry out, as well-maintained areas reduce feelings of insecurity (Stummvoll, 2004).

The Leitstelle also believe that design and planning should support women's everyday lives—which are often different from those of men. Dwellings should facilitate the co-existence of work and family life and enable parents to keep an eye on children playing in the house or outside. Dwellings should be modifiable and adaptable to changing family configurations and stages in the life cycle. This can be realised through the construction of rooms that can be joined or separated, as required. The building and surrounding area should provide opportunities for informal contact with neighbours and access to play areas appropriate to different age groups and genders, areas for hobbies, etc., as well as access to heathcare, education and transport (Stummvoll, 2004).

The requirement for gender-sensitive design was initially addressed by an ambitious, high-profile pilot project. Following the success of the project, the requirement was incorporated into standard design and planning conditions. Developers apply for projects under open competition, and the Leistelle and/or partner client selects the best architect(s). Developers who demonstrate the ability to meet the requirements of women and create user-friendly dwellings are entitled to a grant from the Leistelle. This encourages developers and architects to consult with the Leistelle during the early stages of the planning process. The Leistelle provides detailed briefing documents that outline the requirements and appropriate guidance material.

The Leistelle has supported a range of development projects including flats for people on different incomes, play grounds aimed specifically at girls and assisted living for older people—primarily women. Some of these developments have been designed by female architects, and have helped to support the increased representation of women within the design and construction industries.

The activities of the Leistelle show the value of addressing fear of crime/insecurity—rather than actual crime—within building development projects. The Leistelle addresses this issue as part of its own

commitment to meeting the needs of women in Vienna—rather than due to concerns about fear of crime amongst the general population. The Leistelle demonstrates the importance of incorporating crime prevention into the wider agenda—i.e. gender-sensitive and user-friendly design and planning.

3.3.3 Recommendations

Building development projects might be improved and extended through the following:

- Architects and developers working on building development projects supported by the Leistelle should be given access to data on crime, fear of crime and related social issues. Such information might be provided by the local authority and/or the police, and should be used to support the development of design solutions.
- Architects and developers might be given access to good practice case studies and further guidance on addressing fear of crime and insecurity—the guidance provided in this document might be translated into German.
- Design-led crime prevention experts identified to help architects and developers address issues of insecurity during the design and development process. Where none exist, professionals from the design and development might be recruited and sent on training courses in the UK or elsewhere.
- Building development projects supported by the Leistelle might be formally evaluated. This might involve using Wootton and Davey's (2005) DAC Evaluation Framework and/or collecting survey data on fear of crime and insecurity.
- The Leistelle might establish an accreditation scheme to formally recognise building development projects that successfully address fear of crime and insecurity
- The local authority planning department in Vienna might consider incorporating feelings of security into the building control process and/or integrating it into the design and development process
- Other local authorities might be persuaded to establish building development projects that address fear of crime and insecurity. The Leistelle might offer advice on establishing building development projects that address insecurity on a consultancy basis.

However, the federal structure and lack of interest in design-led crime prevention may make it difficult to establish a national design-led crime prevention initiative.

3.4 The Netherlands

This sub-section provides advice for the Netherlands on promoting further its design-led crime prevention activities—specially its accreditation scheme. The recommendations will be of interest to European countries considering implementing or revising an accreditation scheme.

3.4.1 Crime and insecurity

From 1945 to the 1960s, the Netherlands had one of the lowest crime rates in the world. From the 1960s onwards, crime rates increased. Between 1970 and 1995, the total number of crimes rose from less that 200,000 to 1.3 million. Much of the increase occurred between 1975 and 1985. The growth in instances of crime slowed a little after 1985. The spectacular increase between 1975 and 1985 resulted in the Netherlands moving into the "high crime band" of the International Crime Victimisation Survey, and witnessing a corresponding increase in fear of crime (van Soomeren and Woldendorp, 1997). In 1999, the Netherlands was one of the three countries most pressured by crime—like the UK—with above 24 per cent of householders the victims of one or more crimes (van Kersteren *et al*, 2000). The risk of crime was high in relation to:

- Vandalism of a vehicle 10 to 12 per cent per, although risk of theft of or from a vehicle is low.
- Theft of a bicycle around 8 per cent had a bicycle taken. Bicycle thefts are highest in countries like the Netherlands where more people own bicycles.
- **Pickpocketing** about 2 per cent were pickpocketed compared to Poland at 4 per cent. Risk of theft of personal property in general is lower than countries such as Sweden and Poland.

Levels of violence were lower than the UK in 1999, but were rapidly increasing—for example, there was a rise of 35 per cent for the period 1996 to 2000 compared to an average rise of 14 per cent for EU member states. Burglary was not in the high band—partly because 50 per cent of attempts failed—suggesting good home security of homes in the Netherlands (van Kersteren *et al*, 2000).

3.4.2 Design-led crime prevention

The Netherlands has a history of commitment to crime prevention in terms of its police and research, and has been at the forefront of efforts to address crime through design and planning.

There are two approaches within the Dutch accreditation scheme—Police Label Secure Housing. The details of this scheme are describe below.

Police Label Secure Housing accreditation scheme (1994 to 2004)

Police Label Secure Housing—Politiekeurmerk Veilig Wonen®—was drawn up by police forces, government ministries (Ministry of Interior and Ministry of Justice), a consultancy with expertise in CPTED (DSP-groep) and a public housing organisation. Ownership was then transferred to the police and a research & development organisation, called SEV, which is part of the Ministry of Housing and Environment. The scheme started in one police region—Hollands Midden—in 1994, was implemented in Noord-Holland Nord in 1995 and went nationwide in 1996. It comprises two Labels: new housing; and existing housing/neighbourhoods. The objective of the Label is to reduce crime—mainly burglary, car related crime, theft, vandalism, nuisance and fear of crime—through environmental design, architectural design, and target hardening.

Police Label Secure Housing is based on the UK Secured By Design scheme, but differs in terms of:

- The underlying theory which is Alexander's Pattern Language and research into the *modus* operandi (MO) of criminals—especially burglars
- The scale of the requirements which cover the neighbourhood, as well as the dwelling
- Integration with other requirements fire prevention is covered alongside crime prevention
- **Some specific design advice** –Police Label Secure Housing does allow alleyways, although these are sometimes gated (NB: alleyways are often used by bike owners and those with young children).

The scheme was delivered by specially trained police officers—Architectural Liaison Officers (ALOs). The ALOs assess dwellings and neighbourhoods to determine whether they meet the necessary requirements. The requirements are laid down in two handbooks, each detailing about 50 requirements. In new developments, accreditation is offered to the whole estate/neighbourhood. In existing housing, accreditation can be awarded to the house, block/street or neighbourhood. When all three certificates have been gained, then Police Label Secure Housing is awarded to the neighbourhood.

The process for achieving Police Label Secure Housing was as follows:

- Interest in Police Label Secure Housing may be initiated by a range of organisations, including owners, estate managers, future occupants, organisations representing particular groups (e.g. older people), insurance companies and the police. However, the person/organisation commissioning the building project must apply for the Label. The applicant for the Label is usually a speculative builder or housing association—around 40 per cent of housing stock is owned by housing associations. The applicant contacts the police Architectural Liaison Officers in his or her district. The applicant is allocated an Architectural Liaison Officer (or alternatively a building plan advisor) from the police or other professional body.
- The Architectural Liaison Officer completes a checklist to help establish which categories of requirements apply. The Label Committee or Regional Project Manager determines the lists of requirements, which are outlined in a document for the applicant. Certain categories of requirements will be omitted, if considered irrelevant (e.g. requirements governing lifts in a single family dwelling).

- During the course of the planning process, the applicant for police Label is helped by the Architectural Liaison Officer to incorporate the requirements into the design of the development. The Regional Label Committee may be consulted if the Architectural Liaison Officer and applicant disagree, or if there is uncertainty about the planning process.
- The planning process will result in the applicant, with the help of the Architectural Liaison Officer, completing a written document detailing the following: (i) how the requirements will be met and the specific measures that will be taken; (ii) who will be responsible for the measures that will be taken; and (iii) the timeframe within which these measures completed.
- The Regional Label Committee or Project Manager evaluates the application. If the full application is approved (i.e. for the dwelling, street/block and neighbourhood), the Regional Label Committee grants authorisation to carry the certificate 'applied for Label'. This authorisation is laid down in a contract detailing all agreements that have been made between the different parties. In the event of problems, further consultation takes place. Applicants who disagree with the judgement have the right to appeal to the 'Centre of Crime Prevention and Security' (Centrum voor Criminaliteitspreventie en Veiligheid) in Utrecht, the Netherlands.
- Once the development project is completed, an independent inspector/auditor from a Certifying Institute (CI) checks whether all measures have been adequately implemented. (Random checks are also carried out on the authority of the Service Centre to ensure quality). On the basis of the independent report, a Police Label Secured Housing certificate is granted by the Regional Label Committee to completed projects that meet the criteria. The certificate is valid for five years. Maintenance of the environment and the resistance of the dwellings is re-checked after five years.

The Dutch Label is considered a success. More than 400,000 dwellings have attained the 'Secured Dwelling' (new and existing) Certificate. Evaluations show that the risk of dwellings being burgled has dropped to a minimum in new estates and by 80 per cent in existing dwellings/neighbourhoods. Insurance companies offer a rebate of between 10 and 30 per cent for accredited dwellings. It should also be noted that levels of burglary have declined significantly in the Netherlands, according to the International Crime Victimisation Survey (2006).

There are a number of contextual factors that have enabled the scheme to be successfully implemented. The Dutch Government was concerned about high levels of crime—crime rose significantly in the 1970s and the Netherlands was in the "high band" for crime (International Victimisation Survey, 2000). Steps have also been taken to integrate crime and fire prevention into regulations. The burglary resistance standards became part of Dutch building regulations in 1999 (NEN 5087 and NEN 5096, class 2) and smoke detectors in 2001. A number of requirements for Police Label Secure Housing were incorporated into the Dutch planning policy guidelines in 2004.

Change of ownership and delivery of Police Label Secure Housing (2005 to date)

In January 2005, the Ministry of the Interior and the Dutch Police Force decided that the Label should be used directly by the local authorities—as they are responsible for the planning, design and management of public space and housing. Ownership and management of the Label was therefore transferred to the Dutch Centre of Crime Prevention and Safety (CCV)—an institute established by the ministries of the Interior and Justice, the association for local authorities and the insurance industry. The police participate in the CCV.

The CCV aims to promote the Label on the local level by trying to convince local authorities to take responsibility for the scheme. The CCV offers advice to the local authorities on how to implement the Label in their organisation. The local authorities decide whether to incorporate the requirements into their own development projects and/or to work with police ALOs. An ALO can work for the police, local government, a housing association or a PKVW certified consultancy company, such as a security firm.

The checks to determine whether the requirements have been met on specific projects are carried out by official Certifying Institutes (CIs). However, some police regions are continuing to employ police ALOs for

this type of work. Police Label Secure Housing is funded by the central Dutch government (the Ministries of Interior and Justice) and insurance companies.

3.4.3 Recommendations

Police Label Secure Housing is based on sound foundations and has successfully reduced levels of crime. However, it has undergone a number of changes that appear to be reducing its effectiveness—as least in the short to medium-term. Ownership changed from the Dutch police to the CCV on 1st January 2005—this decision was taken in 2004 by the Ministry of the Interior (Home Office) and the Chiefs of Police (Raad van Hoofdcommissarissen). The idea was that municipalities should take responsibility for implementing the label in their cities, towns and villages. However, the Dutch police was viewed as a neutral player by builders and project developers. Local authorities are responsible for urban development, housing policies and neighborhood maintenance, as well as for the police label—and are therefore not neutral. There are also significant differences between local authorities in terms of political affiliations, effectiveness and building capacity. The success of an accreditation scheme relies partly on uniformity and quality.

There are more than 450 municipalities responsible for the planning, building and redevelopment of new and existing housing and estates. Working on a local level therefore presents a big challenge for the Centre for Crime Prevention and Safety. The process for applying for the Label is therefore more complex and will vary across different regions. More worryingly, there is no driving force behind the Label—i.e. there is nothing to ensure that local authorities are committed to crime prevention and will be willing to apply for the Label. Experience in the UK suggest that some local authority planning departments may prioritise commercial considerations over crime prevention, resulting in Architectural Liaison Officers being excluded from certain development projects. The Dutch scheme is partly funded with public money and is therefore vulnerable to political changes and budgetary constraints—especially now that levels of burglary have decreased.

Architectural Liaison Officers are dispersed across different organisations, and their ongoing training, development and management may therefore prove difficult. It was anticipated that the type of employer may also affect an Architectural Liaison Officer's commitment to crime prevention. Indeed, the work of ALOs is increasingly been delegated to external consultancies, many of whom focus on security measures rather than wider design factors, such as building layout. However, the fact that requirements are laid down in handbooks does help to protect the implementation and quality of the scheme.

Steps could be taken to formally evaluate the accreditation and to improve mechanisms for its delivery and management:

- A process should be drawn up indicating how developers, architects and clients might go about applying for the accreditation. The process should be simplified, if it proves to complex.
- A business case for local authorities supporting the scheme should be developed. This should focus on the benefits of reducing crime—maintaining the value of investments, savings in terms of management and maintenance, reduced turnover of tenants, etc.
- A business case for architects and developers supporting the accreditation scheme should be made.
- Better methods of communicating the benefits of the accreditation scheme should be established (i.e.
 a better website, brochures, press articles, etc.). Greater use should be made of the Internet and media
 would allow documents to be updated more regularly, and give the ability to engage with current
 issues
- Opportunities for continuous professional development of Architectural Liaison Officers should be provided. This might include running professional development events, running an annual conference, providing guidance material and checking the quality of the service provided.
- The organisation governing the housing associations should be contacted, and asked whether they would consider specifying Police Label Secure Housing for building development projects supported by housing associations—housing associations own approximately 40 per cent of all housing stock in the

Netherlands. This would motivate a higher percentage of architects and developers to apply for the Label.

- Consider incorporating crime prevention into the building control process. This would ensure the
 developers and architects are motivated to design and construct buildings to the standard of Police
 Label Secure Housing. The existence of the accreditation scheme delivered by trained staff would lay
 the foundations for such a process.
- The general public should be made aware of the benefits of the accreditation scheme—reduced insurance premiums, lower risk of crime, maintenance of house values, etc. Purchases of properties can then put pressure on developers and architects to apply for the Label.
- The appropriateness of the new ownership structure should be reviewed, and changes made if problems cannot be resolved.
- Review the possibility of legislation requiring commitment to crime prevention amongst public bodies —legislation similar to the Crime and Disorder legislation in the UK.

3.5 The United Kingdom

This sub-section provides advice for the UK on further integrating crime prevention into design development. The recommendations will be of interest to European countries considering addressing crime prevention through the building control and/or design development process.

3.5.1 Crime and insecurity

Crime is a key issue in the UK. According to the Victimisation Survey, England and Wales fall into the highest band of victimisation—above 24 per cent of individuals were victims of one or more crimes in 1999—alongside the Netherlands and Sweden (van Kersteren *et al*, 2000). The risk of crime is high in relation to:

- Theft of a vehicle 2.6 per cent of owners experienced theft, followed by 1.9 per cent France
- Theft from a vehicle 8 per cent of owners experienced theft from a vehicle, only Poland was higher at 9 per cent
- Burglary 5 per cent experienced burglary, but around 50 per cent of attempts failed, suggesting that security is relatively good
- **Pickpocketing** 2 per cent were pick-pocketed compared to Poland at 4 per cent. Risk of theft of personal property in general is lower than countries such as Sweden and Poland
- Contact crime risk of robbery, assault with force and sexual assault against women is over 3 per cent and is more than double that of the US. Risk is related to general levels of offensive behaviour. Taking all assaults and threats together, Scotland, England and Wales had the highest levels—6 per cent.

3.5.2 Design-led crime prevention

The UK has undergone significant changes in terms of design-led crime prevention:

Secured By Design Accreditation scheme (1989 to date)

Secured by Design is a police initiative to encourage the UK building industry to adopt crime prevention measures within the design of the built environment. Officially established in 1989, it is owned by the Association of Chief Police Officers (ACPO), and supported by two government departments: The Home Office Crime Reduction Community Safety Group and the Planning Section of the Department of Communities and Local Government (DCLG). It is managed by ACPO Crime Prevention Initiatives Limited —a not for profit company wholly owned by ACPO. Funding for the scheme comes from police forces' own budgets (i.e. public funds).

Criteria have been developed for different types of development—including new and refurbished homes, car parks, schools, licensed premises and railways—based on the principles of Crime Prevention Through Environmental Design (CPTED), Defensible Space (Newman, 1973) and Situational Crime Prevention.

"Secured By Design" status may be awarded to developments that meet the necessary criteria. However, the architect or developer must submit a form explaining how the criteria have been met, and the development be approved. Secured by Design status does not guarantee that a particular area will be crime-proof, only that the risk of crime has been reduced.

Secured By Design is delivered by police Architectural Liaison Officers—sometimes called "crime prevention design advisors". The majority of Architectural Liaison Officers are serving police officers trained in the principles of Crime Prevention Through Environmental Design (CPTED). Each of the England and Wales 45 police forces employs one or more Architectural Liaison Officers.

There are a number of contextual factors that have enabled the accreditation scheme to be successfully implemented. The UK Government is concerned about high levels of crime—England and Wales are in the "high band" for crime (International Crime Victimisation Survey, 2000) and crime is an important political issue. In addition, the UK police are committed to crime prevention.

Using police Architectural Liaison Officers to check plans (1999 to date)

In the UK, planning permission is required for anything that amounts to a 'development'—building in, on, over or under land, or making a material change to the use of a building or land. It was recognized that police Architectural Liaison Officers could help address crime prevention through the building control process. Local authority planning departments submit development plans to the Architectural Liaison Unit in the region. Plans judged by the Architectural Liaison Officer as vulnerable to crime are referred back to the local authority—the local authority can choose to deny planning permission, if plans are not revised

Architectural Liaison Offices assess development plans and architectural designs in terms of vulnerability to crime and recommend changes, where necessary. This usually involves examining police data on the incidence of crime in the area, and may also involve a visit to the site of the proposed development.

The government is committed to using the planning process to design out crime. This is evidenced by national legislation (e.g. Crime and Disorder Act 1998), planning procedures (Planning Policy Statement 1 and Planning Policy Guidance Note 3 – Housing), policy documents regarding issues such as sustainability and guidance materials (e.g. Safer Places, Office of the Deputy Prime Minister, 2004).

Being employed by the police means that Architectural Liaison Officers usually have access to crime data, experience and authority on the issue of crime prevention and operate across the country. However, the percentage of plans submitted to an Architectural Liaison Unit varies across local authorities and many police Architectural Liaison Officers find it difficult to deliver a high quality service. Research conducted by the DAC Solution Centre (Wootton and Davey, 2007) show that this is due to:

- Lack of support from managers within the police force
- Being assigned non-ALO duties
- Inadequate training in ALO role
- Lack of experience/understanding of design development process.

Furthermore, face-to-face contact with architects and developers is often minimal—architects and developers learning of the results of an ALO's assessment from the planning office. The relationship is also fraught with conflict. Architects resent having to make changes during the late stages of the design and planning process, due to the often large amount of time and effort already invested and the cost of any delays. Some also disagree with the guidance and solutions being promoted by police ALOs, arguing that it undermines the value of the development in other respects (e.g. parking facilities and fences damage aesthetics, lack of access to the back of the property is inconvenient for home owners and culs de sac conflict with the principles of New Urbanism). It may be that Architectural Liaison Officers without a background in design or planning find it difficult to negotiate or to find a constructive way forward.

A new model in Manchester (January 2007 to date)

Greater Manchester Police recently implemented a service-oriented model integrated within the design and planning process, paid for by developers, and delivered by professionals with a development industry

background—the six ALOs and the Head of the Architectural Liaison Unit have all previously worked in architecture, planning or surveying. As part of this service, the Architectural Liaison Officer prepares a **Crime Impact Statement** (CIS) for each development. This is a formal document that:

- Identifies the crime issues, patterns and risks for the location and type of development
- Provides recommendations for designing against crime.

Manchester City Council's planning department ensures that the requirement to produce a Crime Impact Statement is clearly referred to within their local validation checklist—which developers consult when applying for outline planning. Importantly, this requirement can be linked back to principles contained within the relevant local and national planning policy and guidance, the most relevant being the Guide to Development in Manchester – Supplementary Planning Document and Guidance (Adopted April 2007). The local authority and police also attempt to ensure that developers understand the reasons for designing against crime.

Developers contact the Architectural Liaison Unit during the early stages of the design and planning process. The ALO visits the site, reviews the crime data and meets with the client to discuss designing against crime. The Crime Impact Statement confirms previous discussions and advice. The Crime Impact Statement is prepared free of charge for publicly funded or community developments. The fee is £15 for each dwelling in a residential development comprising 50 or less; and £20 per square metre for non-residential developments of less than 5,000 square metres. Fees were introduced due to insufficient funding through police budgets (Figures for January 2007).

Architects and developers welcome direct contact with the ALO, and find it easier negotiate and apply advice provided by ALOs with a background in the development industry. Advice is given at the preplanning stage—when it can be easily incorporated into concept designs and layouts of the proposed development. Because of this early contact with ALOs, the architects and developers can also be fairly certain their plans will be approved at the detailed planning stage, as long as they have followed the advice.

There are a number of factors that have enabled Greater Manchester Police to successfully implement the new model. The Architectural Liaison Unit has the full support of senior management within Greater Manchester Police, close links with ACPO Crime Prevention Initiatives and a partnership arrangement with the University of Salford—the Design Against Crime Solution Centre. In addition, Manchester City Council Planning Department has been willing to take the lead in terms of addressing crime prevention through the planning process, and has experience in tackling crime and terrorist issues.

3.4.3 Recommendations

Greater Manchester Police Architectural Liaison Unit

GMP Architectural Liaison Officers have a heavy workload and have had to recruit new staff to maintain the quality of the service. The service would benefit from the employment of a Crime Analyst to improve the quality of the crime data and relieve some of the workload from the Architectural Liaison Officers.

The impact of the advice on crime should be evaluated over the longer term.

The National scheme

A business plan was prepared that made the case for extending the service nationally and for establishing a new management structure to support the service. This was approved by the ACPO for further development in November 2008, and the DAC Solution Centre is supporting this work.

4.0 Further Information

4.1 DAC projects

Secured By Design case studies have been published:

Social housing developed by Mosscare Ltd (UK) – This case concerns social housing developed by a housing association in an area of Manchester previously dominated by gang violence, drug abuse and burglary. It shows how the Secured By Design Scheme can be used to ensure that houses are protected by secure locks etc. and prevent criminals from accessing the rear areas of the property. The property layout can also be used to generate a sense of ownership and community spirit, especially when local people are involved in the design process itself. Secured By Design has reduced crime and its associated problems (e.g. void/empty and vandalised properties), transforming the area into one of demand for properties.

Full DAC case study available from www.designagainstcrime.org

Housing by Royds Community Association (UK) – This case focuses upon the regeneration of an area of West Yorkshire, which experienced one of the highest levels of burglary in the UK. Royds Community Association, an Architectural Liaison Officer, the architect, and local residents worked together to reduce crime and regenerate the housing estates. The scheme implemented the principles of Secured by Design relating to layout, defensible space, access opportunities and natural surveillance – along with an innovative engineered approach to physical security. Deep-rooted social issues were addressed by employing local people in the building of facilities such as a healthy living centre, a community centre and a play area for children. As a result of consultation with residents, facilities were located appropriately and owned by local people. Innovative approaches to consultation had to be employed, as high levels of crime led to residents being fearful of leaving their homes unoccupied. This case illustrates how residents can lead a programme of regeneration by being members of the board of directors. The Architectural Liaison Officer, Stephen Town, reports that forcible entries to refurbished houses have been eradicated.

Full DAC case study available from www.designagainstcrime.org

Parrs Wood School (UK) – This case concerns a firm of architects who worked closely with the headmaster in the design of a school in Didsbury, Manchester. Whilst the school's headmaster was primarily concerned with promoting learning, the school also had to be designed to resist criminal damage, protect pupils from unwanted intruders and deter bullying. Pupil security was achieved by having a single point of entry and a central reception, around which pupils and teachers were forced to flow as they passed to the different curriculum centres. The offices occupied by heads of department were strategically placed, overlooking potential trouble spots, such as stairs. Carpeted corridors are lined with lockers and flooded with light from high windows in the core of the building. This pleasant environment generates respect from pupils, who are expected to care for their new building by, for example, picking up litter and creating artwork. The new school attracted considerable publicity for its stylist and innovative design, which deters crime without creating a 'fortress' style building. It is featured in the ODPM (2004) guidance for planners, architects and developers, "Safer Places".

Full DAC case study available from www.designagainstcrime.org

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4.2 Accreditation schemes

4.2.1 Secured By Design

Further information about Secured By Design is available from www.securedbydesign.com

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4.2.2 Police Label Secure Housing

Police Label Secure Housing case studies

Police Label Secure Housing – The original case study on the Dutch Accreditation scheme was produced as part of the University of Salford's **Secure Urban Environments** project, funded by the European Commission Hippokrates, 2001 programme. To receive a copy, please Dr Caroline Davey at **c.davey@salford.ac.uk**

Further information on SEV is available from www.sev.nl

Further information on the CCV is available from www.hetccv.nl

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Websites

Further information about the *Safety Partnership in City Planning* in the region of Lower Saxony (Sicherheitspartnerschaft im Städtebau in Niedersachsen) is available in German at: www.ms.niedersachsen.de/master/C47443968 N47445318 L20 D0 I674.html

A map of German states and Lower Saxony is available at:

www.ms.niedersachsen.de/master/C47443968 N47445318 L20 D0 I674.html.

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Design Against Crime is an international programme of research and policy initiatives that aims to embed crime prevention within design through education and professional practice. The programme is directed by the Design Against Crime Solution Centre—a multi-disciplinary team of researchers at the University of Salford.

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