

## SEVENTH FRAMEWORK PROGRAMME

**SECURITY**, Collaborative Project

Grant Agreement no. 285222

**Best Practice Enhancers for Security in Urban Regions**



### D1.3: Views on urban security from stakeholders and EU research landscapes

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## EXECUTIVE SUMMARY

### Objectives

The purpose of D1.3 is to identify core problems regarding urban security and established best practices for enhancing urban security.

Existing data, information, security indicators, ideas, decision making models and technology that are being used across Europe for enhancing urban security are presented.

### Description of the work

This report brings together and presents an overview of the vast array of information that has been collated as part of the case studies consultations (WP5).

Supplementary to the original BESECURE case study work, information from additional stakeholder consultation session in Dublin, Ireland has been included in this report.

Furthermore, research carried out on in WP1, WP2, WP3 on aspects such as decision making processes and technology that are being used across Europe for enhancing urban security has been assimilated to this report

### Results and conclusions

This report presents the core problems of security identified by stakeholders interviewed as part of the BESECURE research. The problems can be broadly grouped according to five main security issues: Organised Crime, Anti-Social Behaviour, Public Disorder, Property Crime and Violent Crime.

A wide range of practices are in place across Europe to tackle these issues of security, which can be incorporated to the BESECURE toolbox.

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## 1. Introduction

### 1.1. Purpose and outline of BESECURE project

The project BESECURE (Best practice Enhancers SECurty in Urban REgions) is working towards a better understanding of urban security through the examination of different European urban areas. By examining eight urban areas throughout Europe, BESECURE is building a comprehensive and pragmatic knowledge base to support policy making on urban security challenges by sharing best practices that are in use throughout Europe, and by providing visualisation and assessment tools and guidelines to help local policy makers to assess the impact of their practices, and improve their decision making.

### 1.2. Purpose and outline of Work Package 1

The BESECURE project is broken down into a series of inter-linked work packages that provide a platform for ensuring optimal delivery of the project. These work packages guide the project's evolution and are designed to insure an integrative, holistic and effective approach to urban security. Work Package 1 sets the contextual background to the project and provides a theoretical underpinning to ensure that the project advances beyond the current state of the art. This section provides knowledge and understanding of what Work Package 1 seeks to achieve in the context of the BESECURE project.

Structurally, Work Package 1 (herein WP1) provides the basis for the project and focuses on the establishment of a common framework of reference and a review of the current state of the art for urban security and safety. The objectives of WP1 are designed to set this context.

The objectives of WP1 are:

- To identify the legal, political and societal boundary conditions for the BESECURE security enhancement process, and for methods and policies that can be employed by stakeholders and decision-makers;
- To define core terms and terminology used throughout the project taking the respective 'state of the art' of multiple disciplines into account;
- To identify (neighbouring) discipline-specific historic and modern schools of thought in the urban security domain source for information, publications, persons and institutions (research landscape);
- To give an initial overview of literature on key topics, e.g. urban safety, urban crime, best practices, cause-consequences, urban security assessment processes and models;
- To document the initial stakeholders' needs, sources of information, employed processes, models and data; and,
- To develop an appropriate urban zone typing system.

In order to fulfill these objectives, a series of work package tasks are carried out. A key component of these tasks is to develop deliverables which are used as communication documents with internally and externally linked partners as well as to provide a platform for the project to develop. A schematic diagram illustrating how the WP1 tasks correspond with the WP1 deliverables is presented in Figure 1.

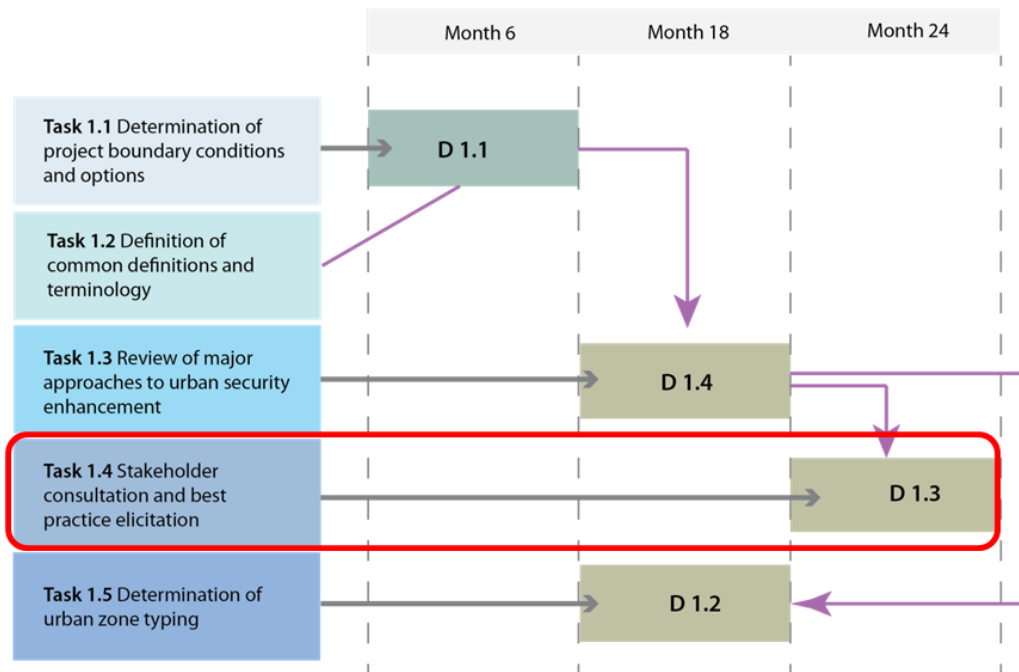


Figure 1: Work Package 1, tasks and deliverables by 6 month periods

### 1.3. Purpose and outline of D1.3

This report brings together a vast array of information that has been collated as part of the case studies consultations (WP5). Supplementary to the BESECURE case study, additional stakeholder consultation has been undertaken in Dublin, Ireland. Furthermore, research carried out on in WP1, WP2, WP3 on aspects such as decision making processes and technology that are being used across Europe for enhancing urban security has been assimilated to this report, as outlined in Table 1.

Table 1: Inputs from other work packages

<b>Best practices for urban security enhancement</b>	Best practices for addressing the challenge of urban security are presented. This is informed by the case study research (WP5).
<b>Existing data</b>	Data collated as part of WP2 in collaboration with the case study leads of WP5 is presented.
<b>Security indicators</b>	Work carried out as part of WP2, particularly D2.2 informs this section.
<b>Decision making models</b>	The research carried out in WP3 informs this section.
<b>Technology</b>	Research undertaken in WP3 and WP7 informs this section.
<b>Other information and ideas for the enhancement of urban security</b>	Best practices identified as part of literature reviews (WP1).

Additional research has been undertaken on aspects such as decision making models and technology (e.g. GIS mapping of spatial data) to supplement that already carried out as part of WP1, WP2 and WP3.

This information has been reviewed to identify the core problems regarding urban security, both in general terms and also in relation to the use of data, indicators, decision making models and technology by policy makers. In addition, an overview of established best practices for urban security is presented, again both in general terms and specific to the use of data, indicators, decision making models and technology by policy makers.

The information contained in this report is presented in such a way that it can be easily transferred to the eGuide of the BESECURE platform, as an educational resource for end users. An explanation for how the BESECURE platform and its constituent parts such as the eGuide, the process support system and the intervention support environment/urban data playground utilise data and technology to make best practices more accessible to policy makers and to facilitate a more informed understanding of urban security is set out.

This report will also be valuable to WP3 and WP4 in the ongoing development of the BESECURE tools. Stakeholder views and observations from EU research landscapes are essential to informing the development of tools which are valuable to policy makers, and which seek to address perceived gaps in knowledge and understanding of urban security.

## 2. Stakeholder Consultation – Problems and Practices

### 2.1. Introduction

This section documents observations from case study stakeholders on ‘core’ problems regarding urban security and best practices to address these problems. Information on problems and practices has been recorded by the WP5 case study leads based on the findings of their discussions with stakeholders in the eight case study areas. In addition, the findings of a series of supplementary interviews carried out with stakeholders in Dublin are also presented. The findings of the stakeholder consultation sessions have been instrumental in guiding the development of the BESECURE platform and its constituent parts: the inspirational platform, the urban data platform and the policy support platform.

### 2.2. Types of stakeholders

BESECURE stakeholders are professionals who are involved in policy formulation or policy implementation in areas related to (either directly or indirectly) urban security. These people may be decision makers with the power to increase security in urban areas either at a policy level or at an operational level. However, stakeholders can also be people who can influence/advise decision makers on urban security. For the purposes of clarity, and to identify which stakeholders form the target audience for BESECURE, they have been categorised into the following groups:

- Public bodies and political representatives responsible for the management of urban areas in general (e.g. mayors, councillors, councils, regional government; strategic and operational);
- Researchers in the domain of security policy and urban zones and educational institutes;
- Police Services;
- Housing authorities and Private Landlords;
- Community groups, business groups and other agencies/organisations active in the community.
- A wide range of stakeholders have now been interviewed. A comprehensive list of stakeholders for each group engaged with to date as part of the case study research is provided below.

**Table 2: BESECURE Stakeholders: Public Bodies**

<b>Public bodies responsible for the management of urban areas in general (e.g. councils, regional government; strategic and operational)</b>	
Belfast:	<ul style="list-style-type: none"> <li>• Belfast City Council (BCC): Representatives from two departments of Belfast City Council have been presented to and interviewed. These are the Development Team and the Community Safety Management Team.</li> <li>• Association of City Centre Management/Purple Flag (Belfast);</li> <li>• Belfast Chamber of Commerce; and,</li> <li>• Belfast Healthy City.</li> </ul>
London:	<ul style="list-style-type: none"> <li>• Greater London Authority (Tower Hamlets)</li> <li>• London Mayor’s Office for Policing and Crime (Tower Hamlets)</li> </ul>

Public bodies responsible for the management of urban areas in general (e.g. councils, regional government; strategic and operational)
<ul style="list-style-type: none"> <li>Lewisham Council</li> <li>Tower Hamlets/ Head of Regeneration;</li> <li>UK Government Cabinet member for Community Safety (Lewisham);</li> <li>London Fire Brigade.</li> </ul>
<p>Freiburg:</p> <ul style="list-style-type: none"> <li>Municipal crime prevention council officer(municipal crime prevention board);</li> <li>Freiburg City borough manager;</li> <li>Municipal statistical office, head of office;</li> <li>FreieWähler Freiburg, voter's association [electable non-party political organization], city council faction;</li> <li>The mayor of the village of Kirchbach (Freiburg).</li> </ul>
<p>Naples:</p> <ul style="list-style-type: none"> <li>Institutional subjects involved in urban planning and management of the City of Naples;</li> <li>Major delegates for urban planning and security;</li> <li>City Council members, Directors and officers;</li> <li>Members of the regional government of Campania;</li> <li>Municipal delegates for security;</li> <li>Institutional subjects involved in security management at local and central level;</li> <li>Ministry of Internal Affairs (Head of the Data Management Office, Head of the Cabinet, Delegate for "feminicide" issues, Department for Organised Crime, Prefecture of Naples, Questura of Naples);</li> <li>Ministry of Justice (General Prosecutor of Naples, judges involved in Department Anti-Mafia);</li> <li>Civil protection agencies.</li> </ul>
<p>The Hague:</p> <ul style="list-style-type: none"> <li>Municipality and city officials with responsibility for management of urban areas.</li> </ul>
<p>Poznan:</p> <ul style="list-style-type: none"> <li>The Crisis Management and Security Department of the Poznan City Hall</li> <li>The Crisis Management and Security Department of the Wielkopolska Voivodeship Office (Regional Government).</li> </ul>

**Table 3: BESECURE Stakeholders: Researchers and Educational Institutes**

Researchers in the domain of security policy and urban zones and educational institutes
<ul style="list-style-type: none"> <li>Institute for Conflict Research (ICR) – Northern Ireland: The Director of ICR has been interviewed.</li> </ul>
<ul style="list-style-type: none"> <li>The Max-Planck-Institute on regional crime analysis &amp; research (Freiburg).</li> </ul>
<ul style="list-style-type: none"> <li>Expert from Platform31 (a public research and consulting institute - The Hague).</li> </ul>
<ul style="list-style-type: none"> <li>Scholars in the field of urban security (Naples) including representatives of the Department of Architecture of the University Federico II of Naples</li> <li>Director and President of the Pol.i.s. Foundation(Naples)</li> </ul>

**Table 4: BESECURE Stakeholders: Police**

<b>Police services</b>
<ul style="list-style-type: none"> <li>Police Service of Northern Ireland (PSNI): Representatives from the Crime Prevention Team and Belfast Policy and Community Partnership have been interviewed.</li> </ul>
<ul style="list-style-type: none"> <li>London Metropolitan Police.</li> </ul>
<ul style="list-style-type: none"> <li>Inspectorate Police Officer, Chief Superintendent and Borough Commander for Lewisham. Sergeants of Brockley and New Cross Wards (Lewisham);</li> </ul>
<ul style="list-style-type: none"> <li>Freiburg's police force - Detective Chief Superintendent for Weingarten, Detective constable for Weingarten, Detective Chief Superintendent for Narcotics, Detective Chief Superintendent for Gewa City;</li> <li>Officer from Freiburg police department, crime statistics (rank/position unknown);</li> <li>Officer from Freiburg police department SG FESSt, unknown rank/position.</li> </ul>
<ul style="list-style-type: none"> <li>The Hague police</li> <li>Probation officers in The Hague</li> </ul>
<ul style="list-style-type: none"> <li>Local Police offices, Carabinieri, city police (Naples)</li> </ul>
<ul style="list-style-type: none"> <li>Representatives of the Crisis Management and Security Department of the Wielkopolska Voivodeship in relation to data gathering</li> <li>Workshops with [REDACTED]</li> <li>Workshops with [REDACTED], the deputy chief director of the Crisis Management and Security Department of the Wielkopolska Voivodeship.</li> </ul>
<ul style="list-style-type: none"> <li>Police Department of Reggio Calabria;</li> <li>Principal Private Secretary of Police.</li> </ul>

**Table 5: BESECURE Stakeholders: Housing Authorities, Private and Social Landlords**

<b>Housing authorities, private and social landlords</b>
<ul style="list-style-type: none"> <li>Housing corporations in The Hague</li> </ul>
<ul style="list-style-type: none"> <li>Poplar HARCA'S – Poplar Housing and Regeneration Community Association - Anti Social Behaviour team (Tower Hamlets)</li> <li>Newlon Housing Trust (London)</li> </ul>

**Table 6: Community and Business Groups**

<b>Community groups, business groups and other agencies/organisations active in the community</b>
<ul style="list-style-type: none"> <li>Tower Hamlets Safer Neighbourhood</li> <li>Community Safety and Crime and Charity (Tower Hamlets)</li> </ul>
<ul style="list-style-type: none"> <li>Belfast City Centre Management</li> </ul>

<ul style="list-style-type: none"> <li>• Pubs Ulster</li> </ul>
<ul style="list-style-type: none"> <li>• Station Manager of the Community Improvement Partnership from Glasgow Housing Association</li> </ul>
<ul style="list-style-type: none"> <li>• Youth workers in The Hague</li> <li>• Street coaches in The Hague</li> </ul>
<ul style="list-style-type: none"> <li>• Freiburg Drug counselling service (Arbeiterwohlfahrt), psychologist and head of service</li> </ul>
<ul style="list-style-type: none"> <li>• Local social and economic groups in Naples including retailers and artisan associations, professional associations in the field; activists for civil rights</li> <li>• NGOs involved in managing projects on issues related to the case study</li> <li>• Volunteers operating in the area; social workers involved in the management of seized assets of the Camorra clans</li> <li>• The Local Support Group of the URBACT project operating in the study area.</li> </ul>

### 2.3. Core problem areas

Through ongoing consultation with stakeholders in their study areas, the case study leads have identified the core problems or issues which are of most concern to the security of the urban area under study. These security problems, set out in Table 7, have formed the focus of the stakeholder interaction sessions, and have been at the centre of ongoing discussions with stakeholders.

**Table 7: Core Security Issues**

Case Study Area	Core problems (security issues)
<b>Belfast</b>	<ul style="list-style-type: none"> <li>• Public disorder – episodes of rioting and other public order offences</li> <li>• Anti-social behaviour</li> <li>• Motor vehicle crime</li> <li>• Drugs</li> <li>• Residential Burglary</li> </ul>
<b>Tower Hamlets</b>	<ul style="list-style-type: none"> <li>• Anti-Social Behaviour</li> <li>• Disturbances caused by youth (gangs)</li> <li>• Fire safety (arson, hoarding and dumping creating a fire risk)</li> </ul>
<b>Lewisham</b>	<ul style="list-style-type: none"> <li>• Anti-social behaviour</li> <li>• Burglary</li> <li>• Gang crime: weapons, violence, drug crime</li> </ul>
<b>Freiburg</b>	<ul style="list-style-type: none"> <li>• Violent crime at night</li> <li>• Drug crime</li> <li>• General: fear of crime, graffiti, petty crime, neighbourhood conflicts and ASB</li> </ul>

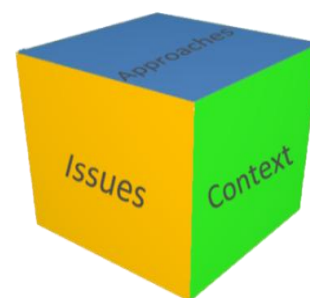
Case Study Area	Core problems (security issues)
The Hague	<ul style="list-style-type: none"> <li>• Nuisance of youth groups</li> <li>• Deprivation</li> <li>• Burglary</li> </ul>
Poznan	<ul style="list-style-type: none"> <li>• Nuisance</li> <li>• Violent crime</li> <li>• Security at large scale events</li> </ul>
Arghillá	<ul style="list-style-type: none"> <li>• Organised crime</li> <li>• Micro-criminality caused by ROM community</li> <li>• Urban decay</li> </ul>
Naples	<ul style="list-style-type: none"> <li>• Organised crime including crime relating to illegal drugs trafficking, racketeering phenomena, riots, motor vehicle theft, homicides and territorial control provided by these organisations</li> <li>• Property crime</li> <li>• Predatory and Violent crime</li> <li>• Decay and vandalism</li> <li>• Anti-social behaviour</li> </ul>

## 2.4. Established best practices

In this section, we present a selection of best practices that address the core problem (issues) highlighted by case study stakeholders. In the collation of information on best practices, case study leads used a form called a Case File. Case Files are entered onto the BESECURE knowledge repository, from which the end user 'searches' for urban security best practices will be retrieved.

Case files are structured to encompass the three elements of the BESECURE 'cube' which capture information on:

- **Issues:** A security problem or challenge
- **Approaches:** Policies and practices to address the security issue
- **Context:** Information on the specific characteristics of the urban zone that the issue occurs in or that the approach is applied to.



The **approaches** page of the case file is used to capture information on best practices (henceforth referred to as approaches) for urban security enhancement. A series of questions/queries on approaches to address urban security issues are set out in the case file. These queries are raised by the case study lead at stakeholder interaction sessions. The queries include the following:

- Aim/objectives of approach (e.g. to achieve a 20% reduction in the number of incidents occurring);
- Timeframe of approach (e.g. quick wins, long term etc.);
- Description of approach (details/mechanisms of the approach);
- Key words/tags to summarise the approach;

- Rationale for intervention. Please provide some background information on the motivation/trigger for the approach:
  - Why was it necessary?
  - On the basis of what information/evidence was it decided to implement this particular approach?
  - Nature of intervention;
  - Indirect effects/side effects of approach?
  - What other issues does the approach address other than the one(s) detailed in this case file?
  - Are there any unintended consequences of this approach?
  - Who initiated and who is driving the intervention?
  - Who is the intervention target? Who is directly affected by the intervention?
  - Other groups/persons that are involved?
  - Other groups/persons that are indirectly affected?
- Geographical applicability (where has the approach been applied?)
- Implementation/evaluation
  - Qualitative description of results
  - Perceived success of the approach.
  - Requirements for the approach:
  - Financial resources required to design and implement the approach
  - Technical/infrastructural requirements
  - Organisational requirements including human resources
  - Legal implications

For a complete list of approaches recorded as part of the case study research please refer to Appendix 2. As an example, a complete case file prepared by CNR in consultation with stakeholders in the Naples case study area, is presented in Appendix 3.

The case files were developed in macro-enabled Excel sheets to facilitate tailored and conditional results based on options selected. For example, on the context page of the case files, the primary land use of the area under study is requested. The user can select from a drop down menu of eight land uses and based on the land use selection a series of domain descriptors (institutional, economic, societal and urban environments) are generated. The complex functionality of the case file format does not lend itself well for transfer to a word document. Therefore, a summary of some of the approaches extracted from case files collated as part of the case study research are presented over pages 13-18.

As many of the key problems identified as part of the stakeholder consultation sessions are of a similar nature, five general crime issues have become apparent, within which the core security problems are grouped (see Table 8). Security problems associated with each of the five key issues are grouped together as a sub-category of the issue type.

**Table 8: Core security problems identified by stakeholders**

Issue	Core security problems
<b>Organised Crime</b>	Drug traffic, illegal traffic of vehicles (stolen goods), trafficking, prostitution, weapon trafficking, predatory crime, racketing, street crime, illegal unauthorised building, extortion, money laundering, usury, fraud.
<b>Anti-social behaviour (ASB)</b>	Nightlife and alcohol-related nuisance, violent confrontations (fights), drug related nuisance, gang related activity, vandalism, pet nuisance, troubled

	families, intimidating behaviour.
<b>Public disorder</b>	Riots (religious conflicts), violent confrontations, large scale events, alcohol related nuisance.
<b>Violent Crime</b>	Alcohol-related nuisance, violent confrontations (fights), nightlife, drug related nuisance.
<b>Property Crime</b>	Burglaries, motor vehicle thefts, armed robberies.

### 2.4.1. Issue: Organised Crime

Issue	Core security problems
<b>Organised Crime</b>	Drug traffic, illegal traffic of vehicles (stolen goods), trafficking, prostitution, weapon trafficking, predatory crime, racketing, street crime, illegal unauthorised building, extortion, money laundering, usury, fraud.

#### Social activities for children during the summer time (Reggio di Calabria, Italy)

This project focuses on providing children with alternative educational stimuli during the summer months. The aim of the project is to provide young people with play and creative activities in order to improve the interpersonal skills and establish positive relations with others. The provision of such opportunities is intended to reduce the chances of youths becoming involved in organised crime activities.



#### The Aracne project (Naples, Italy)

The Aracne project has been developed as an innovative procedure for managing the resources of the General Office of Prevention of the Police Headquarters of Naples. Aracne is essentially an operational protocol for territorial control which is supported by a forecasting ICT tool. It is a control strategy, integrated in the short-long term and developed in order to limit the phenomenon of predatory crimes (motor vehicle thefts, robberies, thefts) by anticipating and mapping the trends of illegal behaviours. The project and related tools has been designed and is managed by the General Office of Prevention of Police Headquarters of Naples. One of the aims of the project is the protection of women in clubbing/nightlife districts. By using the ICT tool (XLAW), it is possible to identify trends in crime activities on the streets. The statistical approach adopted allows the police to intervene at a time and place where the recurrence of criminal activities gives rise to social alarm. This tool guides the deployment of the police



forces and ensures continuity of service even during the switch over period of police shifts. XLAW is based on the statistical interpretation of crime trends along the last ten years and compares it with the current map of crimes.

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### **The PON project: a framework project on security issues in the EU-Objective Regions (Naples, Italy)**

The EU-funded National Operative Security Program for the development (PON) aims to improve security conditions in the EU-Objective Regions (Calabria, Campania, Puglia and Sicilia). The main aim of the PON in Naples is to spread better conditions of security, justice and legality for citizens and enterprises, with a focus on crime phenomena related to Mafia organisations and their impact in limiting economic development. Some projects under the programme are designed to enhance a command-and-control approach based on ITC systems, enlargement of CCTV-controlled areas etc. with others dedicated to improving the awareness of the civil society about the pervasion and the hidden effects of the organised crime and its illegal activities and to enhance education processes dedicated to young people in areas controlled by the crime organisations.

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### **The PIPPI Project. Social Policy for childhood and youth (Reggio di Calabria, Italy)**

The approach aims to guide families with children to avoid phenomena such as estrangement, school dropout and to assist territorial social services in their daily tasks and activities in these fields. P.I.P.P.I. seeks to build an alliance between people who care about the growth of child to help parents to continue to live with their children. P.I.P.P.I creates a space for meeting and collaboration between parents, relatives and people close to the family, social workers, psychologists, educators and teachers who accompany daily parents and their children. The approach is successful on the long term. Generally, the approach reduces the risk of possible involvement in organised crime or violent action.



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### **Pol.i.s. Foundation, the branch of the Government of the Region of Campania dedicated to the victims of the crime (Naples, Italy)**

One of the aims of Pol.is Foundation (Regional Law no 11/2004) is to intervene in supporting the innocent victims of crime organisations, in order to limit social and personal troubles. In doing so, the Foundation intervenes to improve awareness about the Camorra (mafia) and its impacts on everyday life, and also work to promote the commitments of the public sector in fighting against the Camorra. In dealing with victims of crime, the foundation takes care of them, offers psychological, legal and tax support, preserves the memory of innocent victims of crime, updates the innocent victims list, facilitates the procedure for accessing to grants and support.

### 2.4.2. Issue: Anti-social behaviour (ASB)

Issue	Core security problems
<b>Anti-social behaviour (ASB)</b>	Nightlife and alcohol-related nuisance, violent confrontations (fights), drug related nuisance, gang related activity, vandalism, pet nuisance, troubled families, intimidating behaviour.

#### Family Intervention Project (FIP)/Poplar HARCA Intervention Project (PHFIP) (Tower Hamlets, London, UK)

The aim of the FIP is to get children back into school, reduce youth crime and antisocial behaviour, and put adults on a path back to work (thereby reducing dependence on public service supports). The Family Intervention Project (FIP) model is based on a holistic 'whole family' approach which considers the needs of every family member and provides an assertive, tenacious community outreach service. FIP families sign up to a contract which identifies sanctions and rewards. The model embraces the Think Family initiative with an emphasis on helping FIP families work towards utilising educational, training and work opportunities to the best of their ability. The principles of the FIP intervention model are:



- The highest level of coordination between adult and children's services.
- Looking at the whole family – services working with both adults and children take into account family circumstances and responsibilities. For example, an alcohol treatment service combines treatment with parenting classes while supervised childcare is provided for the children.
- Providing support tailored to need – working with families to agree a package of support best suited to their particular situation.
- Building on family strengths – practitioners work in partnerships with families recognising and promoting resilience and helping them to build up their capabilities.

These are intensely practical projects which focus on providing a structure for those living in chaotic circumstances – teaching parents basics such as how to get children up and fed in the morning, clearing up, preparing meals and bed time routines. Families are often learning these for the first time. Families report that their day to day skills such as cooking, hygiene and daily routines had often been taken for granted by other agencies. There is now compelling evidence endorsing the role and value of family interventions.

#### NiteZones (Belfast, UK)

Belfast NiteZones is an initiative of the Belfast Get Home Safe Partnership, to get people home safely. Eight key safety measures were introduced into the areas, which include an 1) emergency contact point to the police, 2) Belfast NiteZone signage, 3) Taxi Rank(s), 4) Taxi Marshal with Publink radio, 5) Two Street Pastors, the installation of safety lighting 6) above standard lighting levels, 7) CCTV to police and 8) additional litter bins. This initiative is the first in the UK to utilise all eight measures to achieve a complete solution in getting people home safe. The Belfast City Safe Officer, a Business Liaison Officer from BCCM, and a

Community Safety Business Liaison Officer from Police Service Northern Ireland (PSNI) delivered the initiative.

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### Youth and drug counselling (DROBS) and Contact Shop (Freiburg, Germany)

The DROBS programme was established to help drug dependent people to better cope with their situation and covered aspects such as harm reduction, assisting customers to build daily routines beyond their life in the drug scene, helping those within the drug scene to manage their life as much as possible and to literally survive. The services offered by DROBS include project related drug prevention, providing information, counselling and treatment, psychosocial services (such as assisted living), insolvency support.

The Contact Shop is an establishment where drug dependent people can meet, hang out, and find professional help. Their services include Needle Exchange, Safer Sex and basic medical care.

### 2.4.3. Issue: Public disorder

Issue	Core security problems
<b>Public disorder</b>	Riots (religious conflicts), violent confrontations, large scale events, alcohol related nuisance.

### The Inner East Outer West Project (Belfast, UK)

The aim of the project is to develop relationships across interfaces in Inner East and Outer West Belfast. Promote collaborative working relationships amongst community and voluntary groups across each interface and between areas, and with BCC's Youth Engagement Programmes as well as reducing violence at interface areas and increasing mobility amongst project participants.



The project will create opportunities for interaction and discussion of issues relating to conflict and division on a cross-interface basis and 'East meets West' of the city basis, including opportunities to visit each other's area. The programme has been initiated by the Belfast Interface Project as part of the Peace III programme. The intervention is targeting youth's on both side of the religious divide within interface areas across Belfast.

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### Public Order Policing- Operation Dulcet (Belfast, UK)

The Operation Dulcet team of the Police Service Northern Ireland (PSNI) are investigating a broad range of offences including serious rioting, hijacking of vehicles, attacks on politicians and their offices, threats made against politicians, un-notified processions and social media based offences. They are doing so through intelligence gathered during events, using

numerous sources for identifying individuals involved. These methods include, video footage captured by Tactical Support Group members, video footage from the PSNI Helicopter and CCTV units, social media video footage and content and other information channels such as Youtube, Twitter, Facebook, Crimestoppers etc. Since its introduction, there have been 243 arrests as part of investigation, with a total of 188 people charged. 113 people reported to the Public Prosecution Service.

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### **The Youth Engagement Project (Belfast, UK)**

The aims of the Youth Engagement Project is to engage with "hard to reach" young people involved in antisocial behaviour, or on the periphery of, local dissident/paramilitary/emerging gang culture to reduce incidents of violence and create alternative pathways to improve their life chances through the delivery of specific interventions. Including the delivery of focused and specific project of intervention and support to identified young people. The project will seek to address issues at interface areas in a more effective way including commissioning the community and voluntary sector to deliver projects that will address gaps in statutory service provision and will enable "on the ground" targeted support.



A number of key themes will be addressed as part of the youth engagement programme including:

- Crime and anti-social behaviour;
- Mental health issues including youth suicide;
- Relationship-building within and between local communities;
- Tolerance and respect issues amongst the young people regarding people from the other community and their culture and traditions; and,
- Trust and confidence issues amongst the young people regarding statutory agencies including Council, NIHE, BELB and PSNI.

The intervention has been initiated by the Belfast Interface Project as part of the Peace III programme. The intervention is targeting youth's on both side of the religious divide within interface areas across Belfast.

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### **Enhancing level of the security in the old town area (Poznan, Poland)**

The aim of this approach was to enhance citizen perception of safety and to help reduce incidents of public disorder at busy city centre areas. The approach involves the deployment of highly visible police patrols (on foot and by horse mounted patrol) at a number of strategically located stations, as well as monitoring of 65 CCTV cameras by 3 dedicated police officers.

#### 2.4.4. Issue: Violent Crime

Issue	Core security problems
<b>Violent Crime</b>	Alcohol-related nuisance, violent confrontations (fights), nightlife, drug related nuisance.

##### **House ban list of DEHOGA (German hotel and restaurant association) (Germany, Freiburg)**

To aim of the House Ban is to improve security and quality of stay for customers at the night time gastronomy in Freiburg. The means employed as part of this approach is to ban violent offenders from restaurants, bars, and discos in Freiburg by listing them. An individual ban list of DEHOGA (German hotel and restaurant association) started in 2006: where identification is possible, individuals who have provoked fights or behaved aggressively are put on a ban list. People on the list are prohibited to enter all 30 participating bar/restaurant/disco in Freiburg for two years (participating bars/discos see link under query M). Recidivists will be reported for trespassing. All participating gastronomies (are supposed to) hang a poster at the entrance with the motto "Hey! You're kicked out here you stay out everywhere else". However the list does not include photo identification of listed people and therefore the actual enforcement of the list is very ineffective. According to a rough guess of an interviewed stakeholder about 5 of 100 listed individuals have been identified when trying to enter a bar/disco. But as long as listed individuals do not come to notice again, it has been construed that the objectives of the approach have been reached. Police experts say the deterring effect of the measure is high (because young adults perceive it as a harsh punishment), however enforcing the ban list is almost impossible since there are no photo ID's on the list, and customers are asked for their names when entering a bar/disco. Therefore it depends on whether an offender is recognised coincidentally by staff. According to an evaluation of the DEHOGA (carried out at unknown time) there has been no single recidivist of the 83 listed individuals (76 male, 7 female).



In 2011 the regulations permitting the use of a ban list were renewed (in coordination with the police) and possession of drugs was put on the list of not tolerated behaviour. The main intention behind this was to exclude individuals in the possession of date-rape-drugs such as liquid ecstasy.

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##### **GEWA City (police division) (Germany, Freiburg)**

The aim of the GEWA City approach is to achieve a reduction of violent activity in the inner city at night time through police presence and quick police intervention. GEWA City (police division) involves an extra shift of 7 police officers who are located at a problem area at one night of the weekends (either Friday or Saturday) in order to prevent violence and to respond quickly in case fights break out. The unit patrol the inner city at night on weekends, equipped with bullet proof vests, baton and pepper spray. At about 3.00 a.m. a canine squad joins the patrol. They respond quickly to emergency calls and intervene effectively in large brawls.

They also enforced the alcohol prohibition in the public space in this area. If necessary the task force can give violent offenders curfews/dismissals to stay in that area, undertake alcohol tests, and arrest offenders.

### **PRÄRIE - Freiburg Model for establishing a municipal alcohol policy (Germany, Freiburg)**

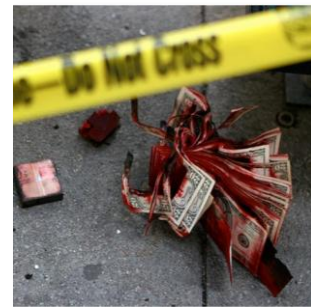
The aim of PRÄRIE is to prevent alcohol abuse and alcohol related violence. 'Prärie' is a holistic approach to establish a communal alcohol policy. It has ten components (1) scouting drug counselling (2) Group session 'risk checks', drug counselling and a women's-room to check for individual alcohol abuse risk. (3) Establishing a network of 'round tables' to establish a local alcohol policy in certain districts (4) Annual symposium (as time of report: 2008, 2009, 2010 have been taken place). (5) Recruitment and training of volunteer peer counsellors (6) Street drug counselling in area by Regio-PSB (protestant mission) and other institutions (7) developing alternatives to alcohol: cocktail bar, codex of gastronomy. (8) Initiation of projects with youth's participation (9) public relations (10) evaluation.

### **2.4.5. Issue: Property Crime**

Issue	Core security problems
Property Crime	Burglaries, motor vehicle thefts, armed robberies.

### **Stop and Search (Lewisham, London)**

Stop and Search is a police practice used to fight crime. It targets individuals suspected of criminal behaviour including possession of a weapon or drugs. Stop and Search aims to remove these items from the street, make arrests and reduce crime more widely. Police Officers, uniformed or plain-clothed, on presentation of their police badge, and Community Police Support Officers in uniform, can stop any person or vehicle on the grounds of alleged or suspected involvement in criminal behaviour. The process involves the questioning and search of the suspect. The police officers are expected to explain why an individual has been stopped and to provide a receipt detailing when the stop and search took place. Suspects are not expected to give their name and are entitled to know the name and ID number of the police officer and which station they work at. Police officers record the ethnicity, age and the date and time that the stop and search took place. Stop and searches carried out under section 60 of the 1984 Public Order Act must be authorised by a senior police officer and do not require grounds of suspicion. These are conducted at times when there is reasonable belief that serious violence is about to take place in a certain area. These powers are intended to prevent large-scale violence at events like football matches. This approach is viewed by the police force as 'necessary' and proactive and preventative while those subject to this practice consider it repressive and a violation of their human rights, often feeling that they are being discriminated against because of their race, what they are wearing or where they live or congregate.



## Operation Bumblebee (Lewisham, London)

Operation Bumblebee is a high-profile anti-burglary strategy. An integral part of the strategy is the media campaigning that accompanies the traditional forms of policing on the street and intelligence-led targeted operations. The 'Bumblebee' brand is well-established and is an example of how the Met is engaging in conventional marketing approaches in order to spread their crime prevention messages. In 2009, the Met re-launched its 'Bumblebee' brand with the tagline 'To stop a burglar you need to think like one'.

The Operation involves:

- Specific targeted media campaigns
- Information sources – leaflets, flyers, surgeries, street briefings, a website
- Specialist 'Area Bumblebee Teams'
- Intelligence-led operations and raids
- Predictive policing

An evaluation of the 2009-2010 campaign revealed that radio campaigns were the most effective and the website recorded notable increase in visits (26%), when the campaign was running. While Operations and campaigns have evidenced a decline in burglaries, Operation Bumblebee does not appear to have a sustainable effect as levels of burglaries fluctuate, as the case of Lewisham illustrates.

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## Operation Fiddich (Lewisham, London)

Operation Fiddich focused on reducing residential burglary, serious youth violence and robbery in Lewisham, targeting those most prolific offenders and the areas of the borough where these crimes are most prevalent. This Operation ran from 1st June 2010 to 9th July 2010.

A range of tactics were deployed within Operation Fiddich. These included:

- Warrants on known offenders executed swiftly and those most prolific burglars and robbery perpetrators arrested.
- Drug warrants effectively executed across the borough.
- High visibility patrolling in the key hotspots in the borough.
- Police Dogs deployed with local teams for the duration of the six weeks.
- ANPR (automatic number plate recognition) camera team working with local SNT Teams, Territorial Support Group (TSG) and Traffic Team.
- Liaison with CCTV Control Room on operations.
- Specific Police Traffic Teams postings in Downham, Newcross, Brockley and Sydenham.

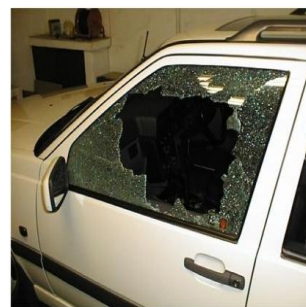


Robbery figures showed a reduction of -44.7% (week ending 4th July) and -67.6% (week ending 11th July) when compared with the same time period in 2009.

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## The Mammoth approach (The Hague, The Netherlands)

The Mammoth approach combines a repressive approach towards 60 key-members of a criminal youth group with measures that are aimed at improving the liveability in the neighbourhood (giving control back to the community). The crimes committed by members of the group vary (but include intimidation and domestic burglaries).



The Mammoth approach consists of several combined measures and efforts designed to target specific people (leaders/members of the youth group). Police and municipality collect facts and observe/track the behaviour of (notorious) group members in order to build enough charges so that they can be arrested and taken out of the neighbourhood. At the same time the group members are discussed as cases in "het veiligheidshuis" (which is a collaboration between all kinds of organisations including municipality, public prosecution, welfare agencies, youth workers, police etc. in which individual people are openly discussed on a case-by-case basis, aimed at sharing information on the basis of trust to be able to make a suited plan/approach for each case). When the group members have been arrested and sentenced, youth workers and others work with the youth while they are in jail.

There is also a programme to get them rehabilitated when they get out, which aims at finding housing, education or jobs (give them day-filling activities) and also, in some cases, there will be specific mandatory conditions that are enforced, such as prohibited entry in the old neighbourhood or special supervision. Aftercare is also provided for members of the group and their families. The neighbourhood aftercare consists of a package of several combined measures to give the control over the neighbourhood back to the residents and to improve the social cohesion and liveability of the area. Included are 'Social Sofa's', deployment of youth workers, street sports, mobile camera surveillance, providing residents with packages to protect their own houses against burglaries, physical improvement of the neighbourhood through plants, lighting, cleaning, etc., and many more initiatives.

## 2.5. Stakeholder consultation in Dublin

In addition to the core BESECURE stakeholder interactions sessions taking place in the eight case study areas, for the specific purpose of WP1 Task 1.4, a series of interviews were carried out with stakeholders in Dublin, Ireland (conducted by FAC – WP1 lead). The purpose of these interviews was to provide further information on security issues facing policy makers in order to supplement the findings emerging from the case study research. The stakeholders interviewed as categorised according to the stakeholder groups set out in Section 2.2 are provided in the tables below.

**Table 9: Consultation with stakeholders in Dublin: Researchers**

Researchers in the domain of security policy and urban zones and educational institutes	
	<ul style="list-style-type: none"> <li>Politician, Architect and former Minister of State for Horticulture, Sustainable Travel, Planning and Heritage</li> </ul>
	<ul style="list-style-type: none"> <li>The President of the European Council of Spatial Planners</li> </ul>

**Table 10: Consultation with stakeholders in Dublin: Public bodies**

Public bodies and political representatives responsible for the management of urban areas in general (e.g. mayors, councillors, councils, regional government; strategic and operational)
<ul style="list-style-type: none"> <li>An urban planner working in the public sector</li> </ul>
<ul style="list-style-type: none"> <li>A Special Advisor to the Minister of State for Housing and Planning in Ireland</li> </ul>

**Table 11: Consultation with stakeholders in Dublin: Police**

Police Services
<ul style="list-style-type: none"> <li>Former Detective Garda – Special Detective Unit (SDU) and Garda National Immigration Bureau.</li> </ul>

Four out of the five stakeholders interviewed as part of the Dublin research are involved in or have a background in the built environment profession, specifically in the areas of urban planning, design and/or architecture. As such, these are policy makers with a distinct perspective on approaches to enhance urban security. All four of these stakeholders indicated that issues of security are not a direct focus of their day to day professional activities, but that security is an indirect consideration that routinely arises as an element of broader policy initiatives on improving quality of life, and designing and planning for more successful places.

The security issues of most concern to these built environment stakeholders are set out below, and are of a similar nature to the core security issues identified as part of the wider case study research:

**Table 12: Core security problems identified by Dublin stakeholders**

Issue	Core security problems
<b>Anti-social behaviour (ASB)</b>	Vandalism and other types of anti-social behaviour
<b>Property Crime</b>	Burglary

The approaches referred to during the interview sessions with these stakeholders primarily focused on urban design solutions and on collaboration with communities. Approaches which were highlighted during these interview sessions as representing ‘best practice’ for the integration or mainstreaming of security considerations into the disciplines of planning and design in Ireland, are set out below:

**Dublin City Business Improvement District (BID).** Within the central business district of the city businesses pay an extra tax for this organisation to ‘keep an eye’ on things. The BID monitors and responds to issues such as graffiti, litter and other minor incidences of anti-social behaviour. It was developed in partnership with Dublin City Council and Dublin City Business Association.

The **Design Manual for Urban Roads and Streets (2014)** prepared by the Department of Transport, Tourism and Sport and the Department of Environment, Community and Local Government. The manual recognises that safe, attractive and vibrant streets have a direct

bearing on broad societal issues, including crime and security. Well-designed streets with active frontages and that allow for increased local movement/permeability are beneficial to security as they increase levels of passive surveillance. Advice is also provided on quality of lighting and the important role it can play in the perception of security. However, the placing of street lights requires careful consideration to ensure they are not placed in too close proximity to properties where they may compromise security.

**Sustainable Residential Development in Urban Areas – Guidelines for Planning Authorities (2009)** published by the Department of Environment, Heritage and Local Government sets out a series of recommendations for security by design including recommendations on passive surveillance of streets and roads by residents, clear demarcation between private and public/communal spaces through appropriate boundary treatment and clear/direct routes for pedestrians and cyclists. Design specifications are also set out for pedestrian paths so that they are less likely to give rise to anti-social behaviour.

**County Development Plan – Policies on Crime.** Where a high crime rate is apparent for particular local authority area, the County Development Plan or Local Area Plan may include a crime policy. This may often involve a community collaborative element and may also include guidance on physical security measures such as lighting and surveillance.

An interview session also took place with a Former Detective Garda of the Special Detective Unit (SDU) and Garda National Immigration Bureau. The security issues highlighted as being of most concern to this former police detective are presented in the table below:

**Table 13: Core security problems identified by Dublin stakeholder (police)**

Issue	Core security problems
<b>Organised Crime</b>	Gun crime, fraud, international terrorism, and international crime gangs operating in Dublin carrying out a wide range of crimes including fraud, robbery and ATM theft.

Approaches highlighted by this stakeholder as important in tackling organised crime are presented below:

**Legislation on human trafficking.** Recently introduced laws on human trafficking and police training on the enforcement of these laws.

**Regional task forces.** A taskforce from Dublin and Cork police force were sent to work with Limerick gangs because of police resource issues in the area and the fact that local police were known to the gangs and often they even knew where they lived and engaged in local intimidation. This was organised by the Department of Justice.

**Criminal Assets Bureau (CAB).** Following the influx of heroin in Ireland, criminal gangs had more and more resources. The death of Crime Journalist, Veronica Guerin was a catalyst in the mid-1990s for addressing this issue and for the introduction of CAB. Ireland was one of the first countries to establish an assets bureau, the UK followed suit shortly afterwards. With the CAB and supporting legislation, the onus of proof of ownership of assets was put on the individual, rather than the state (prior to this, the state had to prove where and how assets were acquired), now the individual had to prove it. This made it significantly harder for criminal gangs to operate in Ireland, and as result many criminal gangs relocated to mainland Europe after this.

### 3. The role and value of data in enhancing urban security

#### 3.1. Existing data

The BESECURE platform is designed to enhance the effectiveness and efficiency of security decision making in the urban environment. In order to do so, it requires high quality, holistic and timely data that can be analysed and presented to inform the development of urban security policy. In the context of BESECURE, this data is collected through the case study analysis in WP5, managed and analysed in WP2 and 3 and then visualised to the end user through the platform developed in WP4. Deliverable 2.2 demonstrated the role of data in the BESECURE project and provided a comprehensive understanding of the data requirements for enhancing urban security. In that document, a listing of the data available to each case study for the purposes of the project is illustrated and is based on the domains set out in Deliverable 1.1 of WP1. Whilst not every case study area collects data in the same format and spatio-temporal approach, a consistent meta-data capture was conducted for the purposes of identifying the utility and consistency of the data. The data available for the purposes of the BESECURE project is presented in Appendix 4.

The data capture of the project is based on both quantitative and qualitative information, with both typologies having differing functions within the project. In relation to the quantitative information, the primary functions of these data are to provide a baseline position to the analysts informing the decision making process. Indeed, they are also designed to act as a planning and organisational mechanism to facilitate resource allocation and management through 'what if' type scenarios. They will also act as a strong communicative tool designed to motivate the thought process of the end user, as well as those that decisions may impact upon. Where possible, the data captured have been through open source/data channels, which has reduced the length of time required to collect the information as the information is publically accessible. This information has been the best available and consists, in the majority, of census related data and other official datasets (such as crime etc.). The methodology employed within the functionality of the platform developed in WP4 also allows for data collected through a public organisation (such as local government, fire and rescue service, police) to be massaged into the platform, analysed and then visualised for developing the knowledge and understanding of issues pertinent in urban areas. Where complementarity and consistency did not exist in datasets cross-jurisdictionally, private data sources were used to augment and ensure that the BESECURE data platform was interoperable and relevant outside the case study areas. In the case of BESECURE, Experian data was used to fill any gaps in the public data offering from case study areas and to build up a comprehensive picture for the decision making environment.

In addition, BESECURE will utilise social survey information on security available at national and EU levels. We will identify and exploit existing and emerging secondary sources which gather robust data on societal attitudes, opinions and beliefs on crime and security. The European Social Survey is undertaken every two years and gathers a wide array of crime and security relevant data. A concurrent FP7 Project we are linked to, FIDUCIA, is working to interpret this data source in a way which will shed new light on key issues of interest to BESECURE, such as fear of crime and public trust in law enforcement and the justice system. BESECURE has established a working relationship with FIDUCIA and will seek to utilise its emerging findings and to augment them with additional interrogation and analysis of the ESS Dataset. This data will facilitate the 'context setting' activities necessary to help compare BESECURE case study areas as Police statistics do not contain rounded contextual information. Social media will be investigated in terms of its ability to provide rich, time critical data on attitudes and activities, notably in younger and more affluent population

segments. The ability of enterprise level platforms to harness and interpret this data is rapidly increasing. There is merit in seeking to estimate levels of individual sense of security utilising a similar approach. Monitoring social media for the emergence of self-organising anti-social activity has become a security concern thrown into sharp relief in the 'Arab spring' and 2012 UK riots. This is a data-rich sector, which is likely to be a key source for BESECURE users.

The qualitative information collected within BESECURE was also primarily facilitated through WP5. Indeed, the primary objectives of the utilisation of the qualitative data were also to go towards the development of a strong evidence base from which decisions could be understood and ultimately made. The qualitative components were designed to further the understanding of issues in the case study area, thus gaining knowledge of the approaches that have been taken to mitigate against the urban security issues. The qualitative data capture for the BESECURE project was split in to three parts. These three parts consisted of desk based qualitative research, development of case study information for understanding urban issues and approaches in each BESECURE study area and also the capture of practices through a best practice template. The desk based qualitative data centres upon a review of the current literature base on mechanisms employed to enhance security in urban areas globally. Initial results from this exercise highlight a distinct lack of content on mechanisms employed to enhance urban security policy.

The qualitative data captured through the case files and completed for each of the case study areas of the BESECURE project were utilised to gauge understanding on two main themes. First, the case files sought to develop knowledge of the issues and approaches prevalent in the case study area and the policies and practices that were adopted for enhancing the security and feelings of security in each respective area. The second theme, focused on the support of end users in each of the respective case study areas required in order to improve policy and decision making as a whole. The template for capturing best practice approaches for dealing with urban security issues, in part, provides a synopsis of interventions in both the case study area, and wider a field. This content capture provides a basis to understand what has, or has not worked in countering urban security challenges across Europe. Data focusing on what was done in the specific area, where was the intervention employed, how was it implemented, who were involved and targeted, as well as data on associated costs and evaluation were captured to provide a catalogue of good practice approaches that could be utilised by decision makers going forward in their intervention selection.

### **3.2. How data is being used in BESECURE**

The current approach of the BESECURE project is threefold. In this regard, three outputs which will facilitate a life cycle approach of adopting and implementing interventions are developed. These outputs focus on the development of understanding which essentially helps the end user understand what potential problems may exist in their study area. This can be captured through two mechanisms. Either through the quantitative data capture (involving crime and other socio-economic and physical variables) or through the qualitative case file form. In the case of the quantitative data, the end user can easily upload their data into the urban data platform and analyse the information to understand where potential hotspots or problems may exist. They can also use this understanding to then identify whether interventions that they might make are being located in the most appropriate areas. The process and a detailed scenario are presented later in this deliverable. The end user can then associate this information through the policy support platform (also discussed in later sections) and then realise potential options of what may or may not work as an intervention through the inspirational platform (discussed in later sections).

### 3.3. Other potential data considerations for enhancing urban security

As well as the data mentioned previously, there is the potential to explore the role that other comparable European datasets may have post-BESECURE project. In this regard, an analysis of the different alternative European funded datasets has been carried out and presented in the tables below.

Table 14: ESPON Database

ESPON 2013 Database (DB)	
Description	<p>The ESPON Database provides comparable indicators covering all regions of Europe. It supports better understanding of past and future trends in different types of European territories and makes possible to benchmark your region and city in the European context.</p> <p>It provides access to regional, local, urban, neighbourhood, world, grid and historical data. Users can focus their search using the categories “Theme”, “Policy”, “Project” and “Keyword”.</p> <p>For a deeper understanding of the preparation of the data, technical reports are provided by ESPON. The Database provides all the information a policy maker needs for evidence-informed decision-making.</p>
Benefits	<p>Supports informed decision making by helping policy makers to understanding past and future trends which are important to the area they are responsible for. You can enter the database portal as a policy maker, a scientist, or both, which will lead you to a portal that is adapted to your needs.</p> <p>Datasets for a wide range of themes are provided, some of which may prove a useful information source for BESECURE domain descriptors, as follows:</p> <ul style="list-style-type: none"> <li>• Economy, finance and trade</li> <li>• Population and living conditions</li> <li>• Labour market</li> <li>• Educations</li> <li>• Health and safety</li> <li>• Information society</li> <li>• Agriculture and fisheries</li> <li>• Transport and accessibility</li> <li>• Environment and energy</li> <li>• Science and technology</li> <li>• Governance</li> <li>• Territorial structure</li> </ul> <p>Up to date data (for 2013) and projection data up to 2050 is available for some datasets including demographics.</p>
Challenges	<p>ESPON does not collate information on crime rates and does not include ‘security indicators’ as an explicit indicator category.</p> <p>ESPON data is generally available at NUTS 2 (threshold: 800,000 to 3 million inhabitants) and NUTS 3 levels (threshold: 150,000 to 800,000 inhabitants). This places a restriction on the application of ESPON data in the BESECURE project, as the preferred scale for BESECURE data is at neighbourhood district level. The availability of recent datasets (post 2012) for the various themes is sparse. The Hyper Atlas does not collate data on crime statistics.</p>
Application within BESECURE	<p>ESPON tools are specifically targeted to the use of policy makers and practitioners at all administrative levels, aligning with the BESECURE vision to assist policy makers to better understand urban environments.</p> <p>It provides data on European cities that may be of relevance to the BESECURE urban data playground (as domain descriptors) or any aspects of the platform</p>

	such as the policy support system.
Examples of how tool is being applied in a security setting already	<p>Under the ESPON 2013 Programme a wide range of projects/research are carried out by Transnational Project Groups (TPG). Research falling under the Scientific Platform represents a core element in the knowledge base being created by ESPON. It includes data, indicators and analytical tools that can be used in considerations on territorial policies.</p> <p>At the European level several initiatives have been carried out to promote data comparability and data quality, e.g. the <b>INSPIRE Directive</b> which aims at making available relevant, harmonised and quality geographic information for the purpose of formulation, implementation, monitoring and evaluation of Community policy-making and the <b>GMES</b> (Global Monitoring for Environment and Security) initiative launched in 1998.</p> <p>GMES has recently been renamed Copernicus is the European Programme for the establishment of a European capacity for Earth Observation. Copernicus undertakes projects on a number of research themes, including security. One such project is G-MOSAIC.</p> <p>G-MOSAIC was the EU-funded project responsible for the development of the pre-operational versions of the GMES security services addressing border surveillance and support to EU External Action.</p> <p>G-MOSAIC provided Intelligence and Early Warning services for the analysis of the causes leading to regional crises, such as weapons proliferation, fighting for natural resources, population pressure, land degradation, and illegal activities. Crisis indicators were also developed. Intelligence and Early Warning services addressed four security domains:</p> <ul style="list-style-type: none"> <li>• Natural Resources and Conflicts;</li> <li>• Migration and Border Monitoring;</li> <li>• Nuclear and Treaties Monitoring;</li> <li>• Critical Assets.</li> </ul> <p>These indicators may prove relevant for BESECURE.  <a href="http://www.gmes-gmosaic.eu/">http://www.gmes-gmosaic.eu/</a></p>

**Table 15: ESPON Hyper Atlas**

Hyper Atlas	
Description	Hyper Atlas facilitates a visual display (maps) of European datasets on population, GDP and unemployment. Maps are a useful and easy way to make complex information accessible to a wide audience.
Benefits	ESPON's Hyper Atlas can be used in territorial analyses, in support of successful policy development. With the Hyper Atlas you can easily compare and benchmark your region's relative position on a European, national and local scale for a whole set of criteria, such as GDP per capita, unemployment, accessibility, and so on. This has clear parallels with BESECURE project objectives to provide contextual information on factors that influence urban security. Data on thematic indicators may be a useful source for the BESECURE domain descriptors, which many of the tools under development are dependent on.
Challenges	There are a limited number of indicators to choose from. Most of the indicators are for population, GDP and unemployment. Datasets are available for 1999 and 2004 only.

	Datasets are only available for NUTS 0, 1 and 2 territories.
Application within BESECURE	As the smallest spatial scale for which datasets are available is NUTS 2, the Hyper Atlas is not a useful data source for BESECURE, which is more focused on LAU 2 (municipality areas).
Examples of how the tool is being applied in a security setting already	None identified.

**Table 16: ESPON Data Navigator**

<b>Data Navigator</b>	
Description	<p>The ESPON data navigator provides policy makers with access to regional statistical data sources for 28 countries across the EU. Search options included data sources by country, theme and territorial scale or an open search function which allows a combination of all three search options.</p> <p>Metadata including information on contact details for sources, access conditions as well as direct links to the data source is provided.</p>
Benefits	<p>Supports informed decision making by policy makers through the provision on comparable data on a wide range of themes, which may offer potential to BESECURE in terms of providing a data source for domain factors and for acting as secondary descriptors for the MyZone function. The themes are as follows:</p> <ul style="list-style-type: none"> <li>• Economy, finance and trade</li> <li>• Population and living conditions</li> <li>• Labour market</li> <li>• Education</li> <li>• Health and safety</li> <li>• Information society</li> <li>• Agriculture and fisheries</li> <li>• Transport and accessibility</li> <li>• Environment and energy</li> <li>• Science and technology</li> <li>• Governance</li> <li>• Territorial structure</li> </ul> <p>Data on themes is available for a wide range of spatial scales including NUTS 3 (threshold: 150,000 to 800,000 inhabitants), LAU 1 (region), LAU 2 (municipality areas) and other territorial scales.</p>
Challenges	<p>There are some inconsistencies in the availability of data at different spatial scales and for different themes. There is a limited number of datasets available at smaller spatial scales (LAU2) and these are not consistent for each country.</p> <p>The Data Navigator does not collate data on crime statistics.</p>
Application within BESECURE	Some datasets for LAU 2 territories may be a useful source for domain secondary descriptors.
Examples of how tool is being applied in a security setting already	None identified.

Table 17: ESPON Online Map Finder

Online map finder	
Description	Online map finder allows policy makers to search, display, zoom-in and out, download maps and create a comparison list of favourite maps. The map finder is designed to be user friendly allowing users to access maps from ESPON projects and reports.
Benefits	The finder allows you to search for relevant information and projects carried out under ESPON. These projects may have some relevance to BESECURE, particularly in cases where there is a focus on analysing the influence and interaction of domains factors (economic, societal, institutional and urban environment).
Challenges	ESPON projects are related to territorial development and cohesion. Typically, this does not extend to encompassing urban security and so the relevance of ESPON projects to BESECURE is questionable.
Application within BESECURE	ESPON projects are unlikely to be directly relevant to BESECURE, but they may offer information on data sources for secondary domain descriptors.
Examples of how tool is being applied in a security setting already	None identified.

Table 18: ESPON Typologies

ESPON Typologies	
Description	<p>A set of regional typologies was developed under the ESPON programme in 2009. Recommendations on the use of the typologies were also provided. Following, the development of regional typologies by the European Commission services, a revised set of regional typologies were published in 2010. There are 9 regional typologies which encompass specific types of regions:</p> <ul style="list-style-type: none"> <li>• Urban-rural</li> <li>• Metropolitanregions</li> <li>• Border regions</li> <li>• Islandsregions</li> <li>• Sparselypopulatedregions</li> <li>• Outermost regions</li> <li>• Mountainousregions</li> <li>• Coastalregions</li> <li>• Regions in industrialtransition</li> </ul> <p>The purpose of the typologies is to provide a quick-scan tool for ESPON projects under Priority 1 to interpret their main results in relation to the specific types of territories (i.e. the 9 regional typologies) and to compare their situation and performance in the European framework.</p>
Benefits	The typologies offer an interesting means of analysing and comparing different territories across Europe
Challenges	The typologies are intended to be used for analytical purposes for ESPON Priority 1 projects. The typologies are not intended as a service tool to assist policy makers in understanding the areas they are responsible for.

## 4. Decision Making

This section reflects on the topic of decision making on urban security challenges from a practitioners' perspective. This section is authored by practitioners within the project consortium, and captures some of the complexities of decision making in an urban governance context.

### 4.1. Decision making processes for urban security

Decisions urban security we have considered range from the breakdown of public order during mass gatherings to anti-social behaviour on the streets of major settlements. The people charged with tackling these matters are public officials who are broadly in two categories senior local politicians alongside their city officials who intervene to support the creation of public order in many ways. According to political science, decision making is about devising policy, evaluation of resources, alternative courses of action and deploying resources and is thus "at the centre of all security managerial work". Security related decisions are very visible to citizens as they have political profile, media bandwagons and day-to-day visibility. The pressure to yield results surrounds them. Decisions are carried out by government agencies such as the criminal justice system, the police and local authorities. Broad EU wide legal requirements through national policies down to regions and settlements are the context for delivering security for citizens.

A combination of tight resource constraints, short time frames and media focus make for a tough decision making environment. There are often very particular political stances taken by parties in Government that can veer toward emphasising punishment for instances of crime or advocate a long term investment in rehabilitating those who have left prison or supporting those who are likely to commit their first crime. Balancing resources between these often opposing perspectives characterises current EU-wide policy debates. In this milieu, evidence based decisions can be seen, as well as decisions that run counter to available evidence.

In this section we identify several decision making models, which are utilised by public policy makers. Security is a major element of public policy as it underpins not just individual freedoms, but is also important in facilitating markets and trade. Decision-making strategies vary according to the political views of the elected government as facilitated by public servants. The unavoidable occurrence of all sorts of cognitive processes that influence decisions for better or for worse mar decisions about security as they do in other spheres of life (Kahnemann & Tversky, 1979). There appears to be no consensus on the means and ends to tackling crime, which you might find in other professional technical service areas. There are very different views expressed about the best course of action to achieve security. Gathering the right data to set and manage policy implementation or for comparative purposes between and within countries particularly difficult. The UK has had its police data gathering censured recently for manipulation of figures to meet targets.

The field of security engages a wide body of very distinct professional/technical public service staff including social workers, lawyers, educationalists, police, prisons, parole, local authority enforcement and education services, and charitable organisations dealing with victims and ex-prisoners. They all make individual organisational decisions about how to respond to the tasks facing them which are defined by the government through law and financial investment in particular approaches to security.

Across the EU at this time all governments are seeking changes to make services cheaper

and more customer focussed, and security is no exception. Innovation is crucial for effective public service management in modern dynamic societies (Mulgan and Aldbury, 2003)(Hartley, 2005) which are often characterised by ‘hyperchange’ – ‘a combination of linear, exponential, discontinuous and chaotic change’ (Barrett, 1997). As a corollary, there is a demand (from the public and from the state) for more ‘joined up’ or ‘holistic’ government. This results in a range of different public service organisations, many of whom are engaged in socially critical tasks (Donahue, 2005), under pressure to improve their capacity to share information, develop common data standards, and change practices where these relate to their relationship with other organisations (Walker, 2004).

The UK initiative on Troubled Families is an exemplar in both innovation and a multi organisational approach. Involving many organisations working together to obtain startling improvements in the outcomes for perpetrators and victims, and doing so at a tenth of the previous costs. This cost saving and better outcomes is a very welcome result for politicians who took up and ran with the evidence of cost benefit analysis studies, pilot working and operational national deployment of the policy and working methods, (Government, 2013a)(Government, 2013b).

We are conscious though of the following normal resistance to changing to evidence based decision making in any organisation:

1. My experience tells me I’m right;
2. We are doing what the Mayor wants; she pays us;
3. Been tried before and didn’t help;
4. Information is only a small part in organisational decision making processes;
5. Human information processing is experiential and rests on simplification;
6. Complexity in organisations especially large ones is usually incremental or evolutionary, large steps are avoided and change is always resisted;
7. Data and sound evidence is an intellectual commodity as well as a political resource, whose redistribution through information systems affects the interests of particular groups;
8. The big advantage for governments is that in changing the law they also alter the purposes of public bodies in administering it. This does not make multi-agency delivery of important security policy changes any easier to implement, but it does put powerful brick wall deadline energy into public bodies to change;
9. The need to change due to austerity since 2008 has provided a big “freezing moment” (Lewin, 1947), for the public sector across the EU.

Furthermore, the resistance of public bodies to change is well documented (e.g. the National Intelligence Model roll out across the UK, the resistance of local authorities to competitive tendering of white collars services (James, 2011). Inherently public bodies are averse to risk taking given their duty of care requirements and the large volumes of citizen’s needs and information they have to process – sometimes 24/7.

“Public services do not tend to exist within competitive markets. Compared to businesses, they usually exist within a more complex social system, with goals and values that are more ambiguous and difficult to quantify (cf. (Lewis and Hartley, 2001), (March and Olsen, 1989)). Other limiting factors exist – such as a need or desire to avoid ‘rocking the boat’ for vulnerable users of a service. All in all, in the public sector, the incentives to innovate are lower, and risks often higher, than in the private sector. Public service innovation may therefore come to be considered, at least in some cases, as an ‘optional extra or an added burden’ (cf. (Mulgan and Aldbury, 2003), (Lekhi, 2007)). This sets a climate for non-evidence based decision making which can be disastrous for society such as the poor approach adopted by Italy in tackling organised crime till recent massive investment with EU support in a range of programmes.

## 4.2. Organisational Behaviour

This section considers the role of organisational behaviour on decision making. Making decisions includes choosing alternatives and acting accordingly. Uncertainty and the number of actors involved, as well as the initial intention to act have a major influence on the decision making process. Note that these three criteria are part of almost any decision (Butler, 1991).

The environment, in which decisions are made, strongly depends on the organisation. Norms that can be used to measure performance of organisations and thus yield a basis for decisions can be found in (Butler, 1991), see Figure 2.

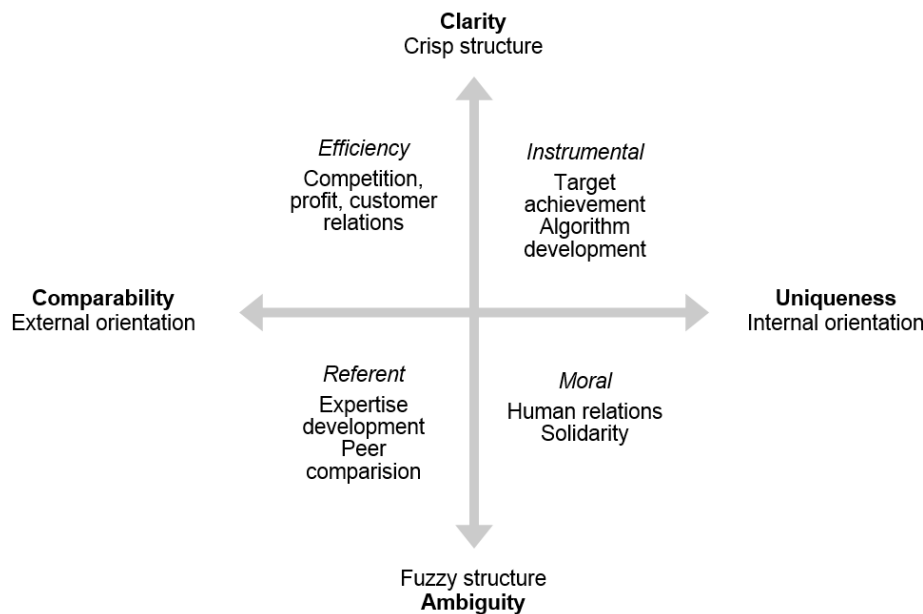


Figure 2: Four norms, four types of effectiveness taken from (Butler, 1991)

Organisational dimensions can be differentiated between comparability versus uniqueness and clarity versus ambiguity. Moreover we see that in different situations different elements should be considered for making decisions.

To get a better picture of what this means for decision making in the urban security domain consider the following two examples:

- We want to install fixed or mobile CCTV (Closed Circuit Television) camera. Where do we locate it?
- We have major costs and systemic failures in dependency, poor educational attainment, ill health and criminality regarding the UK's 120,000 Troubled Families. £9bn per annum is spent on separate services for them. How do we tackle the arising issues?

Placing CCTV cameras can be seen as a clarity-related issue; so the norm used to assess would be either efficiency or instrumental. This means evidence of where crime occurs (hot spot policing information, or victim of serious unpunished offences) defines what type and the location of the cameras.

Tackling troubled families on the other hand can be considered as ambiguous and, depending on whether there is comparability or uniqueness, we need to apply moral norms or refer to peer comparison (best practices). The best way of placing one agent with the family was piloted and then affirmed and rolled out across the UK.

Depending on whether there is comparability or uniqueness, we need to apply moral norms or refer to applied experiences in peer comparison. The CCTV camera placement can be seen as efficiency related decision and the Troubled Families as a moral related decision.

Following the contingent institutional model of organisation as presented in (Butler, 1991), organisations can be characterised via the following three aspects:

- Context: Context described by norms, resources and technology can be complex or simple. Continuums for ambiguity to clarity and unique to comparable;
- Structure: Structure can be characterised as decision rules. The issue is how far distributed cognition is rewarded versus apparent single point decision making in a hierarchy;
- Ideology: Ideology or the 'way we think here' can be differentiated as robust and focused; meaning that decisions are based on values versus efficiency. Both drive the public sector;

Each of the three aspects can either increase complexity or reduce complexity. Moreover there are very interesting insights on what structures are prone to cope with what different kinds of decision need.

Understanding different aspects of organisations is useful in highlighting the variability that is inherent in organisational structures. To cope with this variability one decision-making model will not suffice, as several aspects need to be considered, such as consultation on options being followed by a political decision. Decisions in crisp environments are easier to make with certainty over outcomes, than decisions in ambiguous environments, which may have consequences many years into the future. In Section 4.4 we introduce the most commonly used models.

### **4.3. Decision Making in Bureaucratic Environments**

It is important to note that security related organisations used to be solely part of the government apparatus; there are now considerable numbers of private policing security personnel for private space, used extensively by the public, such as in shopping malls or cinemas. There are also many doormen in city and town centres who ensure good behaviour in places of entertainment usually serving alcohol. The aggregate number of such employees is nearly as great as the total number of policemen in some countries. These firms do not make policy, but they do undertake the following acts: manned guarding including security guarding, door supervision, close protection, cash and valuables in transit, and public space surveillance using CCTV, key holding and vehicle immobilising.

The main powers of investigation and arrest still sit with government. The institutions of the state by their nature are bureaucracies. Bureaucracy is not a pejorative term; rather it describes an organisation which carries out its duties in a systematic hierarchical, role based way, dutifully carrying out policies defined by the political parties in power. In these systems in recent years across the EU, cuts of around 10 percent have been made in the UK, it is a minimum of 20% with London's Deputy Mayor overseeing radical policy shifts (such as neighbourhood policing) alongside a near 33% cut in annual spend. The structure of these policing, local authority and criminal justice related organisations may have altered, however decisions are still made very hierarchically. There is also deep resistance to adopting new practices with skilled avoidance through apparent adoption and the sustained use of supposedly outdated practices. Structure when there is decentralisation, has some impact on decision-making.

Organisational behaviour (OB) has more influence on what happens on the ground, it covers disciplines from psychology to economics. The London Business School in 2007 characterised OB the dimensions of OB as follows:

- Micro – psychological principles that govern the exercise of leadership, motivation, decision-making and creativity;
- Meso – bridges between micro and macro containing factors such as teamwork, group dynamics, and organisational culture;
- Macro – sociological, cultural and institutional factors shaping organisational structure and systems, inter-organisational relationships (niches) and networks.

The main themes in OB taken up by managers have to do with managing change regarding how things are done and who does them, internal and external communications and conflict (Brooks 2003). Managers use ideas from these themes to improve performance against organisational goals. This is achieved through alterations to structure, working practices and consideration of staff's confidence, willingness and abilities, cf. (Hersey et al., 1996). Public organisations charged with generating a secure society are concerned about all these themes.

In terms of delivering a secure society, government organisations and citizens work together to achieve the rule of law. Put simply, the government provides the framework of law and mechanisms for enforcing it, and citizens co-operate by behaving well and acting to support enforcement against those breaking the law where they are victims or witnesses. This trusting relationship is researched in the European Social Survey and is called *legitimacy*. This is major issue across the EU (FIDUJA, 2013) and for the London Metropolitan Police at this time, as well as for other arms of government in the UK (Hough et al., 2013). The ways in which groups and departments function together to make decisions is now a hot political topic. The concepts of distributed cognition and docility (Simon, 1991), (Secchi, 2011) are useful to add to OB thinking at this time and are discussed later.

#### **4.4. Decision Making Models**

In this section we focus on decision-making models. We will introduce the most important lines of thought and present resulting models that describe decision making under different circumstances and environments. We are clear that non evidence based decisions are a common place in security matters as they are elsewhere in society, The impact of security decisions is far more visible than most other government or private business, as it is something that affects all people in their homes and on the streets. We also are conscious that the fear of crime is a pernicious impediment to civil enjoyment of life. We are further aware that the media works to fan the flames of this fear to the extent that as crime rates have fallen, fear of crime has gone up.

Encyclopaedia Britannica defines decision making as the “process and logic through which individuals arrive at a decision”. This definition called the rational model is still used by some economists. It assumes perfect information and computational capability. Perfect information is never available in fast moving public policy arenas like security, nor are computational systems ever perfect. We believe that no national policies on security within the EU are ever devised by one person given the complexity of civil society policy development and operational deployment. Many academics see decision making as a cognitive process resulting in the selection of one course of action among alternatives. The most fast moving non terrorist security challenge is incidents of civil unrest or rioting where officers collaborate on moment by moment decisions regarding where to put police and how to handle perpetrators, spectators, victims and so on. They decide at high level (Gold, Silver and Bronze) what to do, who shall do it and how to do it. We believe that organisational

behaviour contributes massively when politicians and their staff are making decisions. There are situational constraints and cognitive biases as well as errors in judgement and use of heuristics (rules of thumb) to be taken into account.

Due to lack of time, limited cognitive abilities and/or lack of information it is clear that conveying all the information relevant to a given problem, issue or decision, is not possible. Also, the necessary cognitive abilities to analyse the many variables involved may be missing. These considerations have led Simon (Simon, 1979, Simon, 1960) to propose the idea of bounded rationality (whether this is a theory or not is still unclear amongst scholars). Time pressure and inadequate information lead decision makers to reach outcomes that work well given the constraints, resources, and alternatives. This implies that, for any given problem, there are multiple solutions that are satisfactory (i.e., satisfying (Simon, 1979), thus excluding the possibility of “one best solution.”

Parallel to bounded rationality, the coalitional or political model arose in organisation theory. The political model tries to explain how human relations influence decision-making. This model takes into account not only current decisions, but also their effect on future decisions—i.e., it evaluates the consequences as inputs for other decisions (Cyert and March, 1992). This reflects different parties represented by individuals coming together for particular issues and reaching decisions where some of their interests are not furthered.

Cohen et al. (1972) saw that often decision makers do not proceed by a set of logical steps and they describe an alternative process, which is known as the garbage can model. The garbage can model describes the decision making process as four independent streams which flow parallel to each other. The elements in the confluence were problems, solutions, participants and choice opportunities. The model is often used in analysis of government policy formulation where it is difficult to determine cause and effect relationships, there is a turnover of participants in the decision making, and the problem has not presented itself in a similar way before (e.g. UK floods and the government response, or the Ukrainian government's range of responses to large scale rioting and civic protest). In recent years there has been the development of an extension of the bounded rationality model (Secchi, 2011); this was called “extendable” rationality and is presented in Section 4.4.4. We know that organisational behaviour (culture) affects how and when decisions are made. The public sector has the addition of the media spotlight to factor in when any decisions about resource allocations are made to improve security. There are situational constraints and cognitive biases, as well as errors in judgement and use of heuristics (rules of thumb) to be taken into account.

In Figure 3 we present an overview of models related to their relation to uncertainty in two ways: in uncertainty on means and in uncertainty concerning ends.

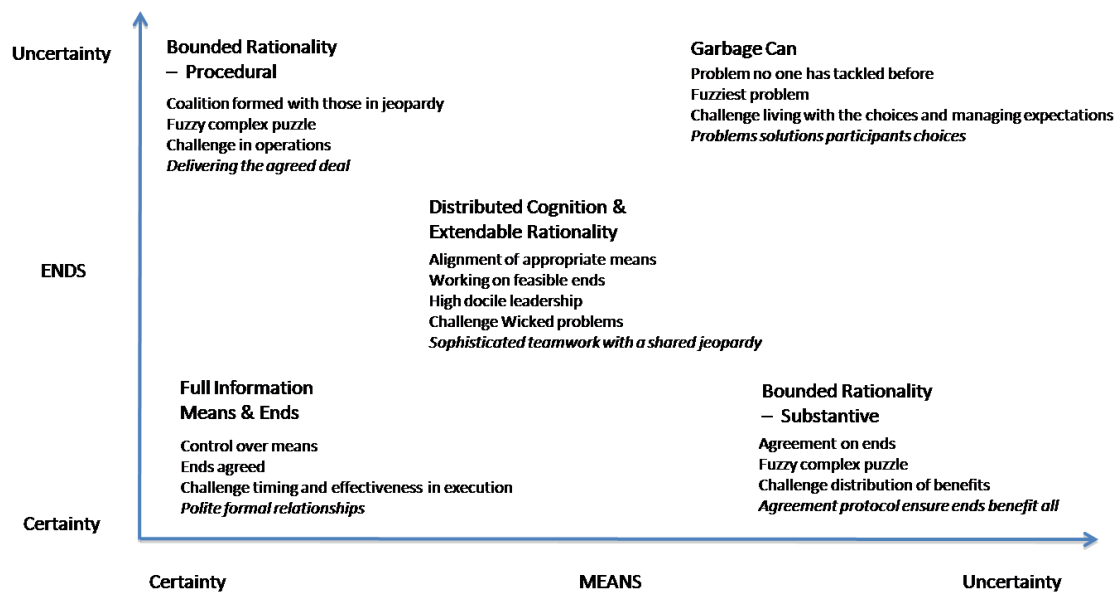


Figure 3: Contingency model. Extended version inspired by Butler and Secchi

#### 4.4.1. Bounded rationality

The bounded rationality model is the application of rational choice theory to reality. This was true in 1955, but has been modified by behavioural scientists who have tested the model repeatedly. Figure 3 above shows the distinction Simon made between substantive rationality, the extent to which rational choices of action are chosen and procedural rationality, the effectiveness, in the light of human cognitive powers of the procedures used. Simon considered the focus should be on how the decision was reached.

For one decision maker alone it is not possible to consider all information, especially not at the same time. In practice it is hard or impossible for a decision maker to gather all relevant information in a given timeframe. Studies show that decision makers often focus only on a few sources, i.e. they take into account only those dimensions that seem relevant for them, or which they are aware of or they trust (Ballester and Hernández, 2012). Although the decision made is not necessarily the best possible decision, it satisfies the need to make a decision in fast-paced environments (Eisenhardt and Zbaracki, 1992), where being in the media spotlight adds further pressure to the process of decision making.

The boundaries set by available information (or the search for it) can result from a mixture of limited cognitive capabilities, actual lack of information, low cognitive abilities or lack of time. If we accept that all available information is bounded and that rational decisions are not possible as there always will be unconsidered dimensions, there are still methods to deal with this context.

Besides the fact that information is bounded still decisions are understood as optimizations of personal gain, i.e. as cost benefit optimizations. An operationalization of this idea often results in defining a utility function (often describing the difference of costs and benefits measured in monetary means). Very valuable insights on utility functions were derived by Kahneman and Tversky (1979); there the idea of objective and linear utility functions were empirically refuted. Utility functions seem to be very subjective and biased; e.g. reflecting that some people are risk averse whereas others have risk appetite. These considerations can be

used to rationally explain also controversial decisions and show the complexity of understanding decisions even under full information where all uncertainties can be expressed as probabilities (decisions under risk). Other approaches are:

- **Satisficing:** Combines satisfying and suffice: it will achieve the desired outcomes but is not a perfect solution / option. In such cases, the need to make a timely decision overrides effort to gather better evidence or build coalitions with the engaged parties.
- **Using rules of thumb:** Making decisions via heuristics is another element to expand our understanding of decision-making. It is the “art” of making good decisions whilst having a lack of information and a lack of time. (Gigerenzer and Goldstein, 1996) discuss a way to take the best heuristic approach in which they suggest and research bears them out that those who are semi-ignorant to all the factors in the context can make better decisions than the experts. Those decision makers rely on what they do know i.e. weigh more important factors they are aware of than things they have no inkling of. We all use heuristics but care is required in sensitive life threatening circumstances when advisers may want to rely on them.
- **Trial and error:** Every possibility is used as long as it fits. Chance seeking is a way of increasing our options in decision making as Bardone (2011) says “humans can be considered chance seekers, because they are continuously engaged in a process of building up and then extracting latent possibilities to uncover new valuable information and knowledge.” This is not an easy mechanism for an adviser to use when using public resources for security actions, financial governance and duty of care for citizens are reasons for caution. So advisers in novel contexts have to say how they are to get better information and create better understanding of contexts and if required produce better options for politicians.

A good summary of rationality related models and utility criteria can be seen in Figure 4.

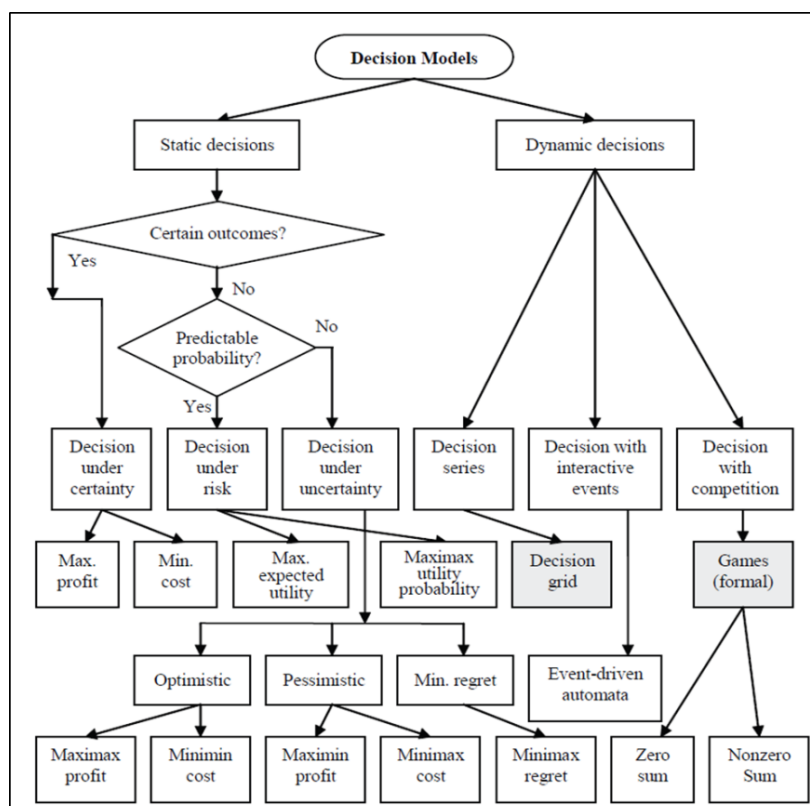


Figure 4: Operationalization for utility given different settings for decisions (Wang and Ruhe, 2007)

#### 4.4.2. Full information but a need to co-operate with other organisations

Different stakeholders have different values, preferences and perceptions of various choice criteria. Different points of view among the stakeholders are therefore predetermined.

When a well-known problem increases in scale or intensity and requires urgently to be addressed, the process of organisational decision making can involve shifting coalitions of interests of temporary alliances of decision makers who can, for the purpose of a decision come together and sufficiently submerge their differences to make a decision” (Butler, 1991). Even if in this way their own opinion is not always enforceable, a partial success can be achieved for each party.

It is recognised that different coalitions have different goals and strategies for pursuing their interests (Weeks, 1980). It is difficult to define strict boundaries among coalitions because of the composition of the coalition’s shift from decision to decision. For this reason side-deals influence the current decision and future decisions.

#### 4.4.3. Garbage Can Model

Models like rational choice theory, bounded rationality and political model do not fully reflect prevailing contingency and thus lack sensitivity in decision making (Eisenhardt and Zbaracki, 1992), i.e. they do not reflect the complex, unstable and ambiguous world.

Therefore, Cohen et al. (1972) introduced the garbage can model as a differentiation to the rationality-based models. It is not a sequence of steps that start with a problem and end in a solution. Rather than steps, this model proposes four independent streams. A decision will be made when problems and solutions can be connected during a time when there are choice ‘opportunities’ (to be made by individuals). This model is more random and illustrates the importance of chance. The garbage can model is relevant to organisations operating in a volatile business environment. This model describes a majority of decisions made in a political environment. Running a country or a continent is far more complex and issues faster moving than in any individual business.

A central element in the garbage can model is called organised anarchies. This term clarifies the extreme ambiguity of organisations. Ambiguity occurs in three ways (Eisenhardt and Zbaracki, 1992):

- Problematic preferences: “Inconsistent and ill-defined preferences that decision makers often possess”
- Unclear technology: “Participants gain knowledge by trial-and-error but without clear understanding of underlying causes”
- Fluid participation: Decisions are influenced by involvement of stakeholders “depending upon their energy, interest and other demands on their time”

This ambiguity is not always present in organisational decision making but most organisations face situations where they have to make decisions under these circumstances (Butler, 1991). Recent circumstances for local political leadership in the Ukraine, and across the EU and Russia show this sort of context very clearly.

The garbage can model assumes that decisions are by a confluence of four streams (Eisenhardt and Zbaracki, 1992). The four streams are (cf. (Butler, 1991)):

1. Problems: Constantly emerge from a gap between currently wanted and actual state of the system.

2. Solutions: Exist independently of the problems and stay over time. Constantly, participants bring in ready-made solutions. These are sought to be implemented by these participants.
3. Participants: Bring in their own understanding, ideas, experience and knowledge of problems which may occur.
4. Choice opportunities: "Occasions which call for a decision" (Eisenhardt and Zbaracki, 1992).

The four streams constantly change over time due to the ambiguity that is prevalent.

Decisions are not a result of a logical step-by-step process but rather occur in a random way when the four streams can be connected. Thus it becomes obvious that decision making depends on the right timing (Eisenhardt and Zbaracki, 1992).

Cohen et al. were able to depict some consequences of the garbage can model to decision making by using computer simulations (Butler, 1991).

- Solutions occur even if no problem is identified;
- Due to a false estimation a solution might not solve a problem;
- There might be no solution for a problem;
- Solutions can lead to other problems needing solving.

Decisions arise when at a specific time a confluence of the four streams is possible (Eisenhardt and Zbaracki, 1992).

#### **4.4.4. Extendable Rationality**

In recent years there has been the development of an extension of the bounded rationality model (Secchi, 2011); this was called "extendable" rationality. The idea builds on distributed cognition (e.g. (Hutchins, 1995); (Clark, 2003)) and all parties learning as they are making decisions and focus on new ways of realising their interests. It does not focus on bounds as limitations and it suggests the bounds move as understanding is built from the knowledge and computational resources available. The model accepts that there are bounds internal to the persons and organisations as well as external limits. The approach recognises that internal resources available together with external efforts change the perspective of rationality and decision-making. This produces different limits to existing bounds and, sometimes, new bounds. The approach is to not provide satisficing solutions and it is aimed at results, which are feasible, to implement producing workable solutions ready to deploy. The critical component of the model is to ensure the right people are in the decision framing (range) and making and that they listen to others and contribute not on their vested personal/departmental interests but towards the feasible decision. This behaviour is from Simon's concept of docility (cf. (Simon, 1993)). It can sometimes be seen in government. In the UK, work on Troubled Families could be seen as an example of this model because a strong evidence-based approach was used to pilot projects, which, after further evaluation, distributed assessment, and feedback, were amended and rolled out nationally.

#### **4.5. Decision making in practice: The Judge and Adviser System (JAS)**

When a new problem confronts a City like Belfast, Naples or London, the political leader is expected to respond effectively to matters from organised crime to rioting. The leader of a big EU city has massive resources available to analyse the national and city wide data, as well as highly trained mathematicians and statisticians at their disposal. There is a range of models related to demographics, economic trends, traffic investment and management, construction of assets and premises. These are further supported by models which go beneath this grain of data to look at police hot spot mapping, poverty, health in its widest

sense of public health and in fine detail at diseases of particular genders or races, educational attainment by gender race and income etc. What the leader wants is information to assist them in managing the issue in the context. Sometimes they may want options and to explore others solutions. This system is called the Judge (the leader/the mayor) and Adviser (staff member advising) System (JAS).

The political leader has the decision making power usually with their inner political cabinet. Though the JAS process facilitates single point decisions, and the leader/mayor will be personally accountable to the people in the public sector, they will always check matters with their inner cabinet. We will briefly discuss some implication of the Judge Advisor System.

### Advice utilisation

Advice utilisation is affected by the leader not knowing the advisers motivations, when this is the case they are less likely to fully accept them. Leaders are prone to trust their own judgement when the issue involved is one they have seen in some way before. They use their own opinion as the starting point for their choice and only use advisor input to a certain extent that may adjust their initial position.

Furthermore, judges tend to overly weigh advice from advisors that have similar viewpoints to their own; regardless of what sort of expertise an advisor appears to have. In some cases, advice given that differs from the judge's initial opinions will be discounted no matter what the advisor's level of expertise.

The preferred advice is an accurate description of the problem in its context. Judges tend not to want options or have recommendations on choices made for them. Judges tend to prefer decided information rather than recommendations for or against courses of action or engagement in complex simulations.

In practice, mayors and other 'judges' are primarily concerned with significant decisions and the public opinion and are often politically-motivated. Consequently, they depend heavily on their advising teams. They don't expect to have to explore best practices or use decision support tools themselves. They expect their office core (their advisers) to have all detailed knowledge of all aspects of the city's governance. However, the degree to which they rely on advice from their adviser teams depends on a number of factors:

- **Solicitation:** As may be expected, advice utilisation is typically higher for solicited versus unsolicited advice.
- **Financial:** When there is a financial incentive for making the best decision, judges tend to rely more heavily on their advisors. Similarly, when judges must pay for advice that input is taken much more into account than when it is freely given.
- **Advisor-characteristics:** The less a leader knows about a situation compared to their advisor, the more likely they are to consider the advice.
- **Task-difficulty:** Where there are wicked issues leaders tend to take the advice of experts, whereas if the issues appear simple to the leader they tend to rely on their own experience.

So, an advising team that assists with understanding and informing politicians on a difficult task will be better received than on a task the politician has resolved before. Conversely, politicians tend to rely less than they should on advisor information when the task seems easy (Gino and Moore, 2007). However, if the decision task seems straightforward, they will be likely to go with their own opinions more heavily than their advisors' inputs, whatever the expertise the advisors have.

### Judge decision-making style

There are many different decision-making styles that judges can adopt. Five styles have been identified by Scott and Bruce (1995) for judges taking advice are:

- **Rational:** relying on logical evaluations and exhaustive searches for all relevant information
- **Intuitive:** relying on intuition, hunches, and other intangibles
- **Dependent:** relying on others for advice and direction
- **Spontaneous:** relying on a strong urge to make decisions as soon as possible
- **Avoidant:** relying on strategies for putting off the decision-making process as long as possible

These styles have an impact on the uptake of advice. Judges may adopt different styles depending on the situation at hand.

**Trust and confidence.** If the judge does not trust the adviser, their input will be discounted to a greater or lesser extent. The adviser does not need to trust the judge. The judge can be influenced by their view of the advisers own confidence and displayed expertise.

**Accuracy of judge's final decision.** When they have access to multiple advisors with different information sources, judges make better decisions. This process makes judges feel they are acting consensually.

**Judge's confidence in final decision.** Where there is a range of advisers and consensus has been reached between them, judges have more confidence. As the effort to process and understand advice increases, so does a judge's overall confidence in their final decision. Judges who always rely on advice often become over confident.

For both practitioners' and researchers it is important to understand the dynamics between 'judges' and 'advisers'. In any urban environment, one can easily recognise many judge/advisor pairs on the operational, tactical and strategic level.

## 4.6. Supporting Decision Making

In the previous section we described decision-making models from a fundamental point of view. Now we take a look at the more practical aspects of decision-making by investigating instruments that can support decision making on urban security challenges.

A typical decision support tool (DST) takes expert knowledge and expertise as its starting point. A DST stores expert ways of thinking and relevant information in an easily accessible manner that is meaningful to the user, and facilitates the identification and evaluation of decision options. Because DST's are typically used to facilitate complex and important decision making processes, it is critical that users understand the mechanisms and data origin and integrity of information contained in the DST. However, this is not always possible due to the technical composition of these systems, or the in-transparency of the system design process. Such considerations make it difficult for decision makers to trust and adopt DST in their day-to-day work. Nonetheless, DSTs are present in many domains and in many shapes, including urban environments.

Successful DST characteristics have (cf. (Power, 2002, Power et al., 2011)):

1. Explicitly designed to solve ill-structured problems;
2. They have an easy to use and powerful user interface;
3. They combine analytical models with data;
4. They help build alternative solutions;

5. They work with a variety of decision-making styles; and
6. They enable interactive problem solving.

These characteristics seem well suited to security problems faced at all levels of government. It appears to us at this stage that data driven (internal and external) DSTs are best at servicing real time security situations and that simulation based DST's can support training needs.

Those organisations that already use decision support tools will know how they work and understand that data requirements are driven by the variables chosen for the model. They are more likely to get good use out of such technology than organisations that have no such tools in use. In some senses the view of the user as to the importance of different variables is key to their buy-in in terms of the value of the service/product.

In the following sections, we give two practical examples on how evidence-bases can be created that assist urban security decision-making: Risk Terrain Modelling and Cost Benefit Analysis.

#### **4.6.1. DST Example: Risk terrain modelling**

In this section we investigate a particular evidence base for decision support based on risk estimations. To be evidence-based is to build policies and practices on the foundation of empirical knowledge that is objective, reliable, and valid." (Carter, 2011). Thus evidence-based decision-making is about understanding empirical insights about particular issues and reflecting on this knowledge to inform decisions. From the perspective of the field of criminal justice this normally means reducing risks (Carter, 2011).

To understand what risk reduction means we first need to understand the concept of risk. By following thoughts from Munck and Verkuilen (2002) on how to define concepts by avoiding minimalist as well as maximalist definitions, and instead placing a focus on using flexible concepts that concentrate on the most outstanding aspects, two defining aspects of risk become apparent (cf. (ISO 31000, 2009)):

- Risk is the effect of uncertainty on the objectives; and,
- Risk is the combination of likelihood and consequence.

Thus the link to decisions is obvious: when making decisions we are most prone to consider the effect of uncertainty on our objectives; and do so in terms of how likely we deem a particular development and what the consequences of this development could be.

Especially in the field of criminology the stakes are high, and can have a major influence on the life of inhabitants. To illustrate this, we give an example of how the risk posed through crime in urban areas can be tackled. To that end we briefly introduce Risk Terrain Modelling developed by Joel M. Caplan and Leslie W. Kennedy (cf. e.g. (Caplan and Kennedy, 2010)). Risk Terrain Modelling utilises criminogenic factors to spatially predict crime and thus deliver evidence on how policies can be designed so that they can successfully tackle crime.

A spatial prediction of crime can only estimate the likelihood or frequency of a specific crime occurring in a particular area (at a particular time). Thus we are explicitly interested in calculating the spatial distribution of crime related risks.

To calculate the risk of a particular crime happening, a number of factors that add to a risk or diminish risks in certain areas should be considered. A brief overview of this is provided, for a

better understanding consider a summary of routine activity theory as can be found in (Chainey and Ratcliffe), i.e.

- Likely offender + suitable target – capable guardian = crime opportunity.

Some basic assumptions such as: *if there is a crime opportunity it will be exploited* lead us directly to a quantification of risks by looking at suitable unguarded targets and expecting that these are the places where crime is most likely to take place. Of course this view simplifies the problem, but allows us to understand the spatiotemporal distribution of criminogenic factors and their spatiotemporal merging leads to insights on the spatiotemporal distribution of risk and facilitates intelligence-led policing.

The basic idea of Risk Terrain Modelling is to make layers for all risk factors on a discredited map (called risk terrain) consisting of defined rectangles of the map. These rectangles are combined with a value to quantify the exposition to a certain risk factor. The next thing to do is to merge these layers and thus create a composite risk terrain map that takes into account all the identified risk factors. The created map shows an estimate for the considered risk and thus helps strategic decision-making and tactical action. (cf. (Caplan and Kennedy, 2010)) Remember that the displayed risk is a prediction of future events and their respective likelihood.

Explicit steps are as follows (taken from (Caplan and Kennedy, 2010)):

- Select an outcome event of particular interest;
- Decide upon a study area for which risk terrain maps will be created;
- Choose a time period to create risk terrain maps for;
- Obtain base maps of the study area;
- Identify aggravating and mitigating risk factors that are related to the outcome event;
- Select particular risk factors to include in the risk terrain model;
- Operationalise risk factors to risk map layers;
- Enter Risk Map Layer Weighting;
- Combine Risk Map Layers to Form a Composite Map;
- Finalise the Risk Terrain Map to Communicate Meaningful Information.

As the steps need some serious thought to be understood completely for further reading we recommend the lecture of (Caplan and Kennedy, 2010). In this publication, all the steps to effective risk terrain modelling are explained in detail.

#### 4.6.2. DST Example: Cost benefit analysis

Cost benefit analysis is about balancing costs and benefits to understand expected gains or losses of a given policy, thus yielding a utilitarian evidence base for decisions. Using cost benefit analysis, possible choices can be assessed and prioritised with regard to the expected cost benefit ratio.

Calculating costs and benefits of policies, especially when social matters are concerned is not straight forward. A good example concerning child neglect can be found in (Karoly et al., 2005), where different early child interventions are evaluated with respect to the programme costs per child and the benefits to government and society. The methodologies used to quantify benefits, especially whether intangible costs - like e.g. costs to the quality of life - are considered or not leads to incomparability of different policies. That there can be a huge difference in the cost benefit ratio can be seen e.g. in (Miller et al., 1996) where intangible costs as costs to quality of life are often larger than the tangible costs, see below.

	Productivity	Medical Care/Ambulance	Mental Health Care	Police/Fire Services	Social/Victim Services	Property Loss/Damage	Subtotal: Tangible Losses	Quality of Life	Total
<b>Fatal Crime</b>									
Rape, Assault, etc.	\$1,000,000	\$16,300	\$4,800	\$1,300	\$0	\$120	\$1,030,000	\$1,910,000	\$2,940,000
Arson Deaths	724,000	17,600	4,800	1,900	0	21,600	770,000	1,970,000	2,740,000
DWI	1,150,000	18,300	4,800	740	0	9,700	1,180,000	1,995,000	3,180,000
<b>Child Abuse</b>	<b>2,200</b>	<b>430</b>	<b>2,500</b>	<b>29</b>	<b>1,800</b>	<b>10</b>	<b>7,931</b>	<b>52,371</b>	<b>60,000</b>
Sexual Abuse (incl. rape)	2,100	490	5,800	56	1,100	0	9,500	89,800	99,000
Physical Abuse	3,400	790	2,700	20	2,100	26	9,000	57,500	67,000
Emotional Abuse	900	0	2,700	20	2,100	0	5,700	21,100	27,000
<b>Rape &amp; Sexual Assault (excluding Child Abuse)</b>	<b>2,200</b>	<b>500</b>	<b>2,200</b>	<b>37</b>	<b>27</b>	<b>100</b>	<b>5,100</b>	<b>81,400</b>	<b>87,000</b>
<b>Other Assault or Attempt</b>	<b>950</b>	<b>425</b>	<b>76</b>	<b>60</b>	<b>16</b>	<b>26</b>	<b>1,550</b>	<b>7,800</b>	<b>9,400</b>
NCVS with Injury	3,100	1,470	97	84	46	39	4,800	19,300	24,000
Age 0-11 with Injury	2,800	1,470	100	84	46	39	4,600	28,100	33,000
Non-NCVS Domestic	760	310	81	0	0	39	1,200	10,000	11,000
No Injury	70	0	65	69	9	15	200	1,700	2,000
<b>Robbery or Attempt</b>	<b>950</b>	<b>370</b>	<b>66</b>	<b>130</b>	<b>25</b>	<b>750</b>	<b>2,300</b>	<b>5,700</b>	<b>8,000</b>
With Injury	2,500	1,000	65	160	44	1,400	5,200	13,800	19,000
No Injury	75	0	66	110	15	400	700	1,300	2,000
<b>Drunk Driving</b>	<b>2,800</b>	<b>1,400</b>	<b>82</b>	<b>40</b>	<b>?</b>	<b>1,600</b>	<b>6,000</b>	<b>11,900</b>	<b>18,000</b>
With Injury	12,100	6,400	82	120	?	3,600	22,300	48,400	71,000
No Injury	170	0	82	17	0	1,000	1,300	1,400	2,700
<b>Arson</b>	<b>1,750</b>	<b>1,100</b>	<b>18</b>	<b>1,000</b>	<b>?</b>	<b>15,500</b>	<b>19,500</b>	<b>18,000</b>	<b>37,500</b>
With Injury	15,400	10,000	24	1,000	?	22,400	49,000	153,000	202,000
No Injury	8	0	18	1,000	0	14,600	16,000	500	16,000
<b>Larceny or Attempt</b>	<b>8</b>	<b>0</b>	<b>6</b>	<b>80</b>	<b>1</b>	<b>270</b>	<b>370</b>	<b>0</b>	<b>370</b>
<b>Burglary or Attempt</b>	<b>12</b>	<b>0</b>	<b>5</b>	<b>130</b>	<b>5</b>	<b>970</b>	<b>1,100</b>	<b>300</b>	<b>1,400</b>
<b>Motor Vehicle Theft or Attempt</b>	<b>45</b>	<b>0</b>	<b>5</b>	<b>140</b>	<b>0</b>	<b>3,300</b>	<b>3,500</b>	<b>300</b>	<b>3,700</b>
* Child Neglect	25	3	910	2	840	0	1,800	7,900	9,700

Figure 5: Losses per criminal victimisation in dollars (including attempts) (Miller et al., 1996)

In Figure 5 we can see estimated costs for different types of criminal victimisation. Using tables with fixed costs per incident, benefits of practices can be estimated by estimating the amount of prevented incidents.

The level of detail to which costs and benefits can be considered is normally very high. That poses the threat that one might justify decisions and make “decision based evidence making” (cf. (Tingling and Brydon, 2010)), meaning that made decisions are retrospectively justified. Besides these difficulties, cost benefit analysis (CBA) is a very important and useful technique and is recommended for almost any kind of practice. One major benefit is that cost benefit analyses are easily communicated, which is particularly important as security relevant decisions often have political, media and community visibility.

In our experience there are a number of possible approaches to cost benefit analysis, the appropriateness which depending on a number of factors such as:

- the complexity and scope of the theme for which CBA is being undertaken;
- whether we are looking to evaluate a past intervention approach or assess the potential of some future approach;
- the extent to which the organisations involved around any theme can work together to undertake the work and;
- the availability of information and assumptions to support the process.

The approach outlined here is generic in that it can be (and has been) applied to many different potential themes. The approach has been used to assess the impact of interventions around Troubled Families, for the prevention of Domestic Abuse, NEETs (juveniles Not in Education, Employment or Training) and on hospital admission avoidance for older people to name a few.

CBA can be as complex and detailed or as simple and straightforward as a situation permits. The level of details depends on the requirements of the CBA. Good practice CBA though should include at least the following stages:

1. Defining the theme of the CBA evaluation and its scale and scope
2. Agreeing on the mechanism for undertaking the financial evaluation
3. Discussing the information and assumptions to be used in the analysis
4. Establish the process for quality assurance and governance of the analysis
5. Carry out the modelling and cost calculation

We will briefly discuss each stage.

## **1. Defining the theme of the CBA evaluation and its scale and scope**

Which services, which client groups and what costs will be included and excluded from the evaluation? Key stakeholders should come together to agree on the scope and share knowledge to realise a more detailed understanding of:

- the theme;
- the client base;
- the consequences or negative social outcomes;
- the services which are required to address those consequences and;
- the affected partner organisations.

This might be in the form of a structured set of workshops, brainstorming or interviews. Whatever the approach, it's important that the consequences of any intervention are fully understood,

For example, consider the case of young people not in education, employment or training (NEETs) - the immediate short term consequences may be a reduced educational attainment and impacts their preparedness for work. So employment benefits and reduced contribution to government in the form of taxation may be the obvious consequences. However, research suggests there are links to increased criminality, ASB and health consequences (including mental health) that occur for NEETs.

All of these negative social outcomes have costs associated with them for partner organisations. Some of those partner organisations also spend on prevention. To understand the true financial impact, a full understanding of this scale and scope for any given theme needs to be developed and agreed upon. This will help us to understand the current financial consequences of the negative outcomes of the theme and hence the potential benefits that can arise from reducing the frequency of those negative social outcomes. One key question to answer here will be if changes in outcomes (and costs) can be reasonably attributed to the intervention.

## **2. Agreeing on the mechanism for undertaking the financial evaluation**

In broad terms this consists of the construction of an outline formula for calculating financial impacts. There are many options:

- comparing a group of subjects' outcomes and costs before an intervention to those after;
- comparing the outcomes and costs for a group of subjects receiving an intervention to an actual or proxy control group who did not receive the intervention, or;
- using simulations to predict the impact of an intervention on a group of individuals or a population, and then applying this impact to their costs in order to identify savings.

The mechanism most appropriate to use will usually depend on the circumstances and availability of data, each approach will require a different set of data and assumptions in order to undertake the CBA.

For example, a recent exercise involving evaluating the impact of a hospital admission avoidance intervention for over 65's involved a before and after comparison in order to test the hypothesis that the intervention was effective. The approach followed 100 individuals in receipt of the intervention through the health system for two years prior to their intervention commencing and a year after the intervention. Costs of hospital, Accident & Emergency, social care, community services and GP practice based costs were monitored before and after intervention. A whole health and social care system-wide comparison of the impact of the intervention on all partners was then made.

Exploring potential mechanisms can therefore help identify the types of information necessary and areas where assumptions may need to be made.

### **3. Discussing the information and assumptions to be used in the analysis**

Based on the proposed mechanism, an exercise to identify the data sources and persons best placed to inform and decide on key assumptions needs to be undertaken. In practice this needs to be done alongside the discussions on the calculation mechanism in point (ii) above. The known available data, proxies for elements of the data, and fit for purpose issues on data should be discussed. Key individuals holding that information include finance, performance and front line teams who use key KPIs to monitor their impacts. These teams should come together to discuss information and assumptions. Issues regarding data quality and completeness should also be covered and areas such as data sharing and client/patient confidentiality addressed.

For example, a recent CBA evaluation of the impact of changes on commissioned prevention services in adult social care, identified that to monitor the impact of their intervention, data would need to be collected that was not currently available, and this should form part of appointed contractors' remit.

### **4. Establish the process for quality assurance and governance of the analysis**

Discussion on the best placed persons to review, challenge and advise on the CBA approach should take place and the input of these persons to the CBA process should be arranged. We would expect all those responsible in some way for handling their part of the issue to be engaged so with troubled families it has encompassed, housing officers, social services officers, health care officers, probation officers, police officers, officers elsewhere in the criminal justice system, education officers and employers. It is always useful in our experience on high profile political projects to have a senior local politician involved in this assessment of evidence based policy thinking.

Any CBA exercise for which the results will be published and/or investment or disinvestment decisions will be based on needs to be properly scrutinised by sufficiently senior staff, executives and project sponsors. Their input needs to be ongoing, not just at the end.

### **5. Carry out the modelling and cost calculation**

Modelling the impacts of the findings brings together all of the four stages above. The modelling should:

- Capture each negative social outcome in the theme;
- Identify each partner organisation's response to the negative social outcome;
- Quantify the prevalence of each negative social outcome and map this to activity;

- Apply unit cost (marginal costs of activity) assumptions to map the current costs related to the theme and supplement this with known prevention cost budgets from partner organisations;
- Assess the impacts of the intervention and apply these to current activity levels to arrive at a 'delta' in terms of activity reduction;
- Estimate the 'cashability' of savings and whether activity reduction simply leads to creation of capacity rather than cost saving opportunities;
- Understand the costs of each intervention so the net benefit can be understood, and
- Model scenarios around key assumptions so that the range of possible financial consequences can be understood.

The modelling approach needs to be an iterative one. The first answer may not be the final answer. Involving key stakeholders in the CBA process is crucial to its accuracy and reliability.

## **5. The role of technology in enhancing urban security**

### **5.1. The role of technology in understanding urban security**

The advancement of technology and especially open source technology in recent years has resulted in greater development of information systems. Much of this advancement has centred upon making functionality simpler for the end user, as well as reducing the cost of the technology itself as a consequence of greater competition in the IT market place. The security sector has been no different. Indeed, it has seen greater uptake in the role in which information systems play in evidence based decision making, be it from a business management context (such as resource allocation), through to data intelligence (understanding potential issues).

This greater uptake has been as a consequence of a number of factors. First, there has been a significant reduction in cost (Longley et al., 2001) of security related technology, coupled with much greater non-proprietary functionality. This in turn has enabled organisations to develop and or procure software that provides them with much greater utility, more efficiently. Second, advancement in user interface technology has made development much more relevant to non-experts in IT systems and particularly GIS. Historically, functionality has been based on the ability of the user to programme queries into the software. This put the onus on the user to carry out the input, which reduced the exposure of the technology as limited staff had sufficient skills to carry out the analysis (Longley et al, 2001). This however is no longer the case, with most functionality being semi-automated. Third, the business benefits of using information systems and GIS have also increased significantly, with most organisations realising the potential return on investment that simpler data analysis and intelligence derives. This benefit realisation is nonetheless also a pseudo-barrier. In this respect, whilst there is recognition of the benefits that information systems and GIS can bring, there can also be a lack of willingness to invest in this area as benefits and efficiency have not been realised within that organisation; it is simply about the bottom line (Longley et al, 2001).

In reality, information systems and GIS should be seen as an enabler to enhancing evidence based decision making and policy support. Such approaches help us manage the status quo, or what we know already, more effectively and efficiently. They do so by allowing the management, storage, collation and analysis of the data which in turn, allows user defined outputs which can facilitate the development of an evidence base for decision making (Longley et al, 2005). The user must appreciate the difference between the data that goes in to the system, be it spatial or non-spatial technology, and understand that the information generated through the analysis is essentially the data answering questions, or effectively giving a degree of interpretation to the data going in. This is where the real power of the information systems and GIS resides and is where perhaps the BESECURE project is best placed: Information is power.

In order to generate information that goes towards understanding and enhancing urban security and its policies, security information systems and GIS developers must first understand what problems their technology is trying to solve, or more importantly what questions it needs to answer. Consultation with end users of the BESECURE project has essentially illustrated that in many cases, the end user does not necessarily know definitively what their key issues are in their respective areas, or at best only know anecdotally. Therefore, technology must first help the end user understand what their key issues are and where they are most pertinent. This could be done through the development of a simple web based data application that allows users' data to be understood in context and situ, simple analytics to illustrate trends, as well as the functionality to understand where hotspots of

problems may exist. This provides the end user with the ability to fully understand what problems exist, where they exist and where they are most concentrated. Such technology is not new and many examples, both proprietary and open source, exist to do this, albeit not necessarily geared towards the security environment.

## 5.2. Examples of good practice and practices for enhancing urban security

Most of this new technology is web based allowing much greater access to the right information at the right time for the end user. Indeed, most of this technology centres upon the visualisation of tabular and spatial data to present the end user with a simple knowledge and understanding of the key problems. Whilst many examples of this type of data visualisation exist, little information exists on the role of such technology in the security sector, something which the BESECURE platform will overcome. Examples are diverse and transcend different sectors, although most are geared towards the public sector, or at least that's where literature and forward facing technology appear most prevalent.

Table 19 illustrates specific good practice exemplars of data visualisation technology currently available. This list is not exhaustive, but provides a snapshot of different technology and functionality that BESECURE will try to utilise and ultimately advance. Table 20 also provides a synopsis of other European tools that are currently in existence based on helping to enhance urban security policy development. Whilst most of these are not specific technologies, many set guiding principles that should be considered when developing technology for enhancing urban security.

**Table 19: Good practice exemplars of data visualisation technology**

<b>Armagh Web Mapping</b>	
<b>Description</b>	Web mapping application developed by Armagh City Council to provide a mechanism for communicating information to the public, as well as providing a web based form for the public to report problems. Problems can range from ASB through to maintenance requests. Each individual report is then automatically geocoded and visualised on the map internally for the Council staff to understand areas of potential problems.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Easy to use interface for communicating issues to Council</li> <li>• Reduces amount of time spent by staff dealing with complaints</li> <li>• Provides a visualisation of the data to the end user and associated analytics/ trends</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Initial outlay to develop software</li> <li>• Maintenance of database</li> <li>• Analytics rather simplistic</li> </ul>
<b>Application within BESECURE</b>	BESECURE has been able to understand the types of information that can be visualised and how to potentially do this. Indeed, as it is a local authority who developed this web application, it gives BESECURE an understanding of the type of approach that local authorities are currently taking in relation to enhancing their evidence base for decision making.
<b>Examples of how tool is being applied in a security setting already</b>	Used to collect and visualise spatially, information on a range of anti-social behaviour types in the Armagh City Council area.

<b>Source</b>	<a href="http://www.eastborderregionmaps.com/armagh/">http://www.eastborderregionmaps.com/armagh/</a>
<b>Queensland Police Crime Map</b>	
<b>Description</b>	Crime mapping platform developed to analyse crime data by different typologies which is publically available for the Queensland force area.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Easy to use interface for analysing crime</li> <li>• Provides ability to analyse temporally and spatially</li> <li>• Provides a visualisation of the data to the end user and associated analytics/ trends through tabular and graphical data</li> <li>• Ability to derive hotspots of crime</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Development costs</li> <li>• Maintenance of database</li> <li>• Slow processing speed</li> </ul>
<b>Application within BESECURE</b>	We have been able to understand the potentiality of different reporting/analysis techniques for enhancing the understanding of security related issues by an international police force. This has allowed us to understand the type of functionality that police forces require and how this could be implemented in to the BESECURE platform
<b>Examples of how tool is being applied in a security setting already</b>	Crime mapping application geared specifically towards security and crime management.
<b>Source</b>	<a href="http://www.police.qld.gov.au/forms/crimestatsdesktop.asp">http://www.police.qld.gov.au/forms/crimestatsdesktop.asp</a>
<b>Open Glasgow</b>	
<b>Description</b>	A local government based open data analysis platform for Glasgow City Council area used to analyse data for resource allocation, understanding of problems and the reporting of problems.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Visualisation is simple, easy to use and understand and easy to interpret</li> <li>• Provides ability to visualise data spatially on maps and graphical through a dashboard</li> <li>• Has apps which can be downloaded and also enhanced</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Data licencing restrictions</li> <li>• Was developed through Technology Strategy Board funding to make Glasgow a 'future city' (funding of £30million for a range of mechanisms geared towards enhancing decision making and efficiency in Glasgow)</li> </ul>
<b>Application within BESECURE</b>	Have been able to understand potential data licencing issues which exist for the BESECURE project and how to avoid those. The graphic design of the user interface has enabled us to understand how a large local authority requires the information to be presented to them and how they need to communicate to
<b>Examples of how tool is</b>	Provides the end user with the ability to understand the location of CCTV cameras in relation to crime.

being applied in a security setting already	
Source	<a href="http://open.glasgow.gov.uk/">http://open.glasgow.gov.uk/</a>
Police.uk	
Description	A crime based open data and web mapping platform that allows users to understand crime patterns with their local area.
Benefits	<ul style="list-style-type: none"> <li>• Map based interface that allows users to draw their own specific area of interest and only crime recorded within that area is returned.</li> <li>• Provides a visualisation of the data to the end user and associated analytics/ trends</li> <li>• Links the data to snap points to enhance confidentiality</li> <li>• Links to local neighbourhood police officers so the public have a direct line of communication</li> <li>• Provides API for data</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>• Slow</li> <li>• Does not allow for any time series analysis within web mapping application</li> <li>• Analytics rather simplistic</li> </ul>
Application within BESECURE	The BESECURE project has been able to use the API to draw down official crime data for Belfast and London and present and analyse these spatially and graphically within the user interface of the BESECURE platform
Examples of how tool is being applied in a security setting already	Crime mapping application developed for crime analysis and management within UK.
Source	<a href="http://www.police.uk">http://www.police.uk</a>
Pii Analytics	
Description	Web mapping and dashboard application designed to help organizations create an information rich environment by joining together disparate data. This data is then visualised and enhanced through open source business intelligence
Benefits	<ul style="list-style-type: none"> <li>• Holistic Analysis &amp; Integrated Decision Making can be achieved by bringing together disparate data to provide an information rich environment</li> <li>• Provides a visualisation of the data to the end user and associated analytics/ trends</li> <li>• Distributions, patterns and trends can easily be identified, understood or disseminated</li> </ul>
Challenges	<ul style="list-style-type: none"> <li>• Licence fee based</li> </ul>
Application within BESECURE	BESECURE has been able to understand the types of reporting functionality that is required from a business intelligence point of view and the GIS based functionality needed to derive specific analysis spatially. Product mostly geared towards government and has been designed with government needs in mind. Therefore,

	BESECURE has been able to understand the types of functionality government needs.
<b>Examples of how tool is being applied in a security setting already</b>	Currently no utilisation in the security environment
<b>Source</b>	<a href="http://www.geopii.com/show.php?id=6&amp;page=PiiAnalytics">http://www.geopii.com/show.php?id=6&amp;page=PiiAnalytics</a>
<b>Politie Crime Map</b>	
<b>Description</b>	Web mapping application providing aggregated crime data for the Netherlands snapped to specific clusters. Developed through the Dutch police and is based on neighbourhood/local geographic units for burglaries.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Provides zip code based analysis of burglaries spatially</li> <li>• Provides a visualisation of the data to the end user</li> <li>• Clusters can be easily identified</li> <li>• Updated daily</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Only for burglaries</li> <li>• No data visualisation other than map based</li> <li>• Attributes attached to clusters, but limited utility</li> </ul>
<b>Application within BESECURE</b>	The BESECURE project has been able to understand housebreaking/burglaries in the Hague. Able to understand current state of the art in the Netherlands and enhance the utility of the web application for end users.
<b>Examples of how tool is being applied in a security setting already</b>	Geared specifically towards crime analysis
<b>Source</b>	<a href="http://www.politie.nl/misdaad-in-kaart">http://www.politie.nl/misdaad-in-kaart</a>
<b>Crime Mapping (crimemapping.com) – building safer neighbourhoods</b>	
<b>Description</b>	CrimeMapping.com has been developed by The Omega Group to help law enforcement agencies throughout North America provide the public with valuable information about recent crime activity in their neighbourhood.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Provides crime data for entire United States over time geocoded to point of incident</li> <li>• Allows time series analysis and date query for the end user</li> <li>• It allows the production of a simple crime report for an area, or a more detailed report showing all attributes of the crimes in a particular area</li> <li>• Allows specific agencies/areas/addresses to be searched</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Based on ESRI map engine which is proprietary</li> <li>• Analytics are not always obvious, can't compare map trends with graphical/tabular trends</li> </ul>
<b>Application within</b>	The BESECURE project has understood from crimemapping.com about the type of user interface to think about and type of functionality and reporting mechanisms

<b>BESECURE</b>	that are possible through java.
<b>Examples of how tool is being applied in a security setting already</b>	Currently being used in US to present crime data to end users
<b>Source</b>	<a href="http://www.crimemapping.com/map.aspx">http://www.crimemapping.com/map.aspx</a>
<b>Metropolitan Police Crime Mapping</b>	
<b>Description</b>	Web mapping application designed specifically to illustrate crime trends spatially across London.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Allows selection by crime types/ areas</li> <li>• Provides a tabular listing and trend analysis of crime across areas of London</li> <li>• Allows plotting of crime in relation to police stations in London</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Does not include any other socio-economic data</li> </ul>
<b>Application within BESECURE</b>	The BESECURE project has been able to see what is currently available in London and use this knowledge to enhance the functionality that an end user in London may have.
<b>Examples of how tool is being applied in a security setting already</b>	Specifically used for crime mapping and management in the Metropolitan Police area
<b>Source</b>	<a href="http://maps.met.police.uk/">http://maps.met.police.uk/</a>
<b>SpotCrime</b>	
<b>Description</b>	Application designed to illustrate crime patterns across Rome
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Provides analysis on crime locations by type across Rome</li> <li>• Easy to use user interface</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Subscription service</li> </ul>
<b>Application within BESECURE</b>	The BESECURE project has been able to identify how it could make certain elements of its platform open accessible and keep other components behind security measures
<b>Examples of how tool is being applied in a security setting already</b>	Specifically used for crime mapping and management in Rome, Italy
<b>Source</b>	<a href="http://spotcrime.com/it/rome">http://spotcrime.com/it/rome</a>
<b>Crime Analyst, ESRI</b>	
<b>Description</b>	Extension available for the ESRI GIS software suite in the UK to analyse crime

	patterns and predict where crime is likely to take place
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Link crime hot spots, hot routes and hot times, enhancing your ability to deploy resources when and where they will have the greatest impact</li> <li>• Get rapid, easy access to up-to-date data from any desktop, or mobile device, so that you can react quickly to new threats</li> <li>• Present crime data in a format that is easy to understand and share it with a wider range of partners, to improve your community relations and partnership working</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Requires user to have ArcMap Desktop/Server licenced and installed to be able to use Crime Analyst Extension</li> <li>• Licence based</li> </ul>
<b>Application within BESECURE</b>	Key features have been understood to realise what current state of the art is in relation to proprietary software for understanding and enhancing urban security
<b>Examples of how tool is being applied in a security setting already</b>	Specifically used for crime analysis and is in many UK police forces. Specific example, South Yorkshire Police
<b>Source</b>	<a href="http://www.esriuk.com/software/arcgis/crimeanalyst">http://www.esriuk.com/software/arcgis/crimeanalyst</a>
<b>MapInfo Crime Profiler</b>	
<b>Description</b>	Extra component available within the MapInfo offering for analysing and link crime data with other related information.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Easy to use hotspot creation wizard</li> <li>• Link maps, charts and graphs in real time</li> <li>• Define police force boundaries</li> </ul>
<b>Challenges</b>	<ul style="list-style-type: none"> <li>• Requires user to have MapInfo Desktop/Server licenced and installed to be able to use Crime Profiler</li> <li>• Licence based</li> </ul>
<b>Application within BESECURE</b>	Key features have been understood to realise what current state of the art is in relation to proprietary software for understanding and enhancing urban security
<b>Examples of how tool is being applied in a security setting already</b>	Specifically used for crime analysis Specific example, Safer Derbyshire Partnership
<b>Source</b>	<a href="http://www.mapinfo.com/product/mapinfo-crime-profiler/">http://www.mapinfo.com/product/mapinfo-crime-profiler/</a>

Table 20: Considerations for urban security technology development

**Security, Democracy and Cities: The Manifesto of Aubervilliers and Saint-Denis (2012)**

<b>Description</b>	<p>The Manifesto is a political platform on urban security which brings together all the values and principles that form the foundations of EFUS' and its members' actions. It constitutes a continuation of the principles and recommendations of the Naples Manifesto (2000) and the Saragossa Manifesto (2006), yet it also forms a future plan of action for local authorities that can be followed during the years to come.</p> <p>Through adopting the Manifesto, local authorities from all over Europe are refusing to tackle questions of security as last-minute crises and instead are calling for the promotion of long-term policies. They are defending the choice of prevention "as a rational, strategic and cost-efficient option", deciding to invest in prevention "to guarantee that the security of future generations, indispensable to the quality of life in cities, is a basic right for all."</p>
<b>Benefits</b>	It was conceived as a source of support and inspiration for local authorities in the conception and promotion of their security policies. It also acts as a mouthpiece for local authorities amongst national, European and international institutions. Finally its purpose is to support and promote debates on questions of security with citizens.
<b>Challenges</b>	-
<b>Application within BESECURE</b>	Potential resource for the inspiration platform
<b>Examples of how tool is being applied in a security setting already</b>	Already adopted by a number of local authorities
<b>Publication: Safer Drinking Scenes - Alcohol, City and Nightlife</b>	
<b>Description</b>	This publication presents recommendations for improving the prevention and management of binge drinking among young people in public spaces based on the work led by the French and European Forums for Urban Security (Efus and FFSU) and ten European cities as part of the project "Safer Drinking Scenes"
<b>Benefits</b>	The publication also presents political and operational recommendations intended for local authorities. The partners of the project Safer Drinking Sc are especially in favour of intervention policies based on a balance between public health and public security, between human presence on the ground, prevention and respect for the legislation. They also encourage all nightlife stakeholders, not only the health and emergency services but also groups of young people themselves and nightclub managers, to work locally in partnership.
<b>Challenges</b>	<p>(The publication is free for members of the Efus/FFSU network and can be ordered from the FFSU for 8 Euros.)</p> <p>In addition, the project ended in August 2013 – potential for recommendations to become dated.</p>
<b>Application within BESECURE</b>	Contributes to knowledge of best practice approaches in youth anti-social behaviour
<b>Examples of how tool is being applied in a security setting already</b>	Although official information on the extent to which the recommendations of this publication (released in September 2013) have been adopted by Efus members is not available, it is anticipated that they will influence the formulation of security and safety initiatives/policy designed to address youth anti-social behaviour.
<b>Publication: EU Street Violence: Youth Groups and Violence in Public Spaces</b>	
<b>Description</b>	The European Forum for Urban Security's (Efus) has undertaken the EU Street

	<p>Violence project with the Belgian and Spanish Forums for Prevention and Urban Security, the Emilia Romagna Region (Italy), the British National Community Safety Network and the French information engineering NGO Psytel.</p> <p>The project “EU RECO STREET VIOLENCE”, which has obtained the support of the European Commission in 2010 within the framework of the Daphné III, programme, aims at gathering existing knowledge on this subject and making it available to practitioners, political decision-makers and researchers.</p> <p>A database will make the knowledge on street violence available to:</p> <ul style="list-style-type: none"> <li>• Field actors involved at the local level (mainly city level) or central State level in the implementation of prevention programmes focusing on street violence caused by urban youth groups;</li> <li>• Local decision makers and politicians deciding whether or not to implement a particular programme;</li> <li>• Experts involved in diverse projects at local, national or European levels;</li> <li>• Researchers in the field of urban safety and sociology;</li> <li>• European policy makers.</li> </ul>
<b>Benefits</b>	<p>In response to this form of street violence, a number of cities have put in place prevention programmes. However, the feedback from these experiences, local policies and practices is not always well known. The same goes for insights gained through academic research. Indeed, the knowledge and know-how on this issue constitutes a pool of ideas and suggestions (“recommendations”) that are currently largely untapped, not easily accessible and not widely spread.</p> <p>The “EU Reco Street Violence” project aims at capitalising the knowledge on this topic from various sources, and making it accessible to practitioners, policy makers and researchers. It aims at collecting recommendations on street violence caused by urban youth groups and at organising this information in an online database – thus potentially aiding the policy development process in other national / city contexts.</p> <p>Ultimately, the project’s goal is to benefit the young urban population and more generally the population of urban areas by enhancing knowledge and updating recommendations in order to create policy guidelines and effective prevention programmes.</p>
<b>Challenges</b>	<p>As this is a project funded for a particular time period it is possible that database will fail to be updated regularly enough for it to be useful for end users.</p>
<b>Application within BESECURE</b>	<p>Potential resource for the Policy Support Platform</p>
<b>Examples of how tool is being applied in a security setting already</b>	<p>This project is specifically focused on sharing best practice approaches to tackling street violence (in order to contribute to enhanced urban security).</p>
<b>Charter for a democratic use of video-surveillance</b>	
<b>Description</b>	<p>The video-surveillance systems of European cities are witnessing qualitative and quantitative evolutions which are subject to differences in local and national contexts, as well as political, economic, cultural and social factors.</p>

	This project, involving ten European partners – Cities of Genoa, Rotterdam, Liège, Le Havre, Ibiza, Saint-Herblain, Regions of Veneto and Emilia-Romagna, London Metropolitan Police, Sussex Police – and experts, aimed to reaffirm those points of convergence that exist in spite of these differences. These points of convergence are the foundation of this work; upon them can be constructed methods and strategies for the effective and appropriate use of video-surveillance
<b>Benefits</b>	The Charter includes a series of basic principles and practical tools aimed at helping local authorities to guarantee the respect of fundamental rights in the use of CCTV.
<b>Challenges</b>	-
<b>Application within BESECURE</b>	The findings of this study could help to inform the Policy Support Platform (as risk factors).
<b>Examples of how tool is being applied in a security setting already</b>	This Charter has been signed by various mayors of European cities, and is open for signature to all. For more information, go to: <a href="http://www.cctvcharter.eu">http://www.cctvcharter.eu</a>
<b>Local Safety Audits - A Compendium of International Practice</b>	
<b>Description</b>	<p>A clear picture of crime and victimisation in a given city is the foundation for targeted action to reduce crime and increase individual and collective security. The Local Safety Audit Compendium provides guidance on how to develop a tool for carrying out safety audits, including how to acquire the necessary knowledge and to build commitment from the range of partners whose collaboration is necessary to achieve results. The guidance recognise that local safety audits need to examine not just crime and victimisation, but also their linkages with socio-economic factors and existing services, as well as the wider political and institutional context in which problems occur. The Guidance has been written for everyone who has a significant role to play in designing and funding crime prevention programs and in directing, developing or delivering crime prevention activity.</p> <p><a href="http://efus.eu/files/fileadmin/efus/secutopics/efus_safety_audit_e_web.pdf">http://efus.eu/files/fileadmin/efus/secutopics/efus_safety_audit_e_web.pdf</a></p>
<b>Benefits</b>	The document states ' <i>Crime prevention is most successful when it is part of a strategic and inclusive process that is strongly supported by civic leaders who have a responsibility for community safety</i> '. This guidance document is an important potential resource for building commitment and support among civic leaders and other end users.
<b>Challenges</b>	<p>Available only in a few languages - It can be accessed in English, French and Spanish versions online at <a href="http://www.fesu.org">http://www.fesu.org</a>. A German version is available thanks to the Council for Crime Prevention of Lower Saxony (Ministry of Justice) on <a href="http://www.beccaria.de">http://www.beccaria.de</a></p> <p>Having been written for an international audience, this Guidance cannot provide detailed advice for every country; a degree of generalisation and selectivity is unavoidable. Individual states are therefore encouraged to use this resource to develop their own national toolkits, translating ideas presented here into a 'local' context and identifying specific resources to support safety audit implementation</p>
<b>Application within BESECURE</b>	The guidance provides information on the connection between safety audits and wider social, economic and environmental issues, such as sustainable development, social inclusion and good urban governance. These may help to inform the policy support platform and other aspects of BESECURE such as the inspirational platform. The guidance highlights challenges to carrying out audits,

	and highlights risks posed to specific demographic groups. The guidance also provides recommendations on the use of qualitative and quantitative data, which can inform the development of the urban data platform.
<b>Examples of how tool is being applied in a security setting already</b>	This guidance is specifically focused on security and safety issues.
<b>AUDITS project: Methodological tools for drafting local security policies in Europe</b>	
<b>Description</b>	<p>The main objective of this project is to further disseminate the “local safety audits” approach and make it operational.</p> <p>It is built on three non-successive phases:</p> <ul style="list-style-type: none"> <li>A. Support project partners in their work on the methodological tools recommended by the Compendium through a series of field visits in cities, in which project partners and experts will participate. The purpose of this phase is to elaborate a common European approach on the methodology of local safety audits.</li> <li>B. Support cities in their field work (audits, surveys, questionnaires) in order to test on the ground the recommended methodological tools.</li> <li>C. Production of a European guide on the methodology of local safety audits that can be used by all European cities when conducting a local safety audit.</li> </ul>
<b>Benefits</b>	Provides further practical advice to policy makers in undertaking local safety audits.
<b>Challenges</b>	Funded for a period of three years from 2013 – potential to become outdated after the funding period has passed.
<b>Application within BESECURE</b>	There is potential to provide links to methodological tools available under this project.
<b>Examples of how tool is being applied in a security setting already</b>	This project is specifically targeted to enhancing urban security.
<b>SURVeillance: Ethical Issues, Legal Limitations, and Efficiency</b>	
<b>Description</b>	Which security and surveillance technologies are being used in European cities and for what purpose? Is investing in technologies worthwhile, given that in terms of prevention every euro can only be spent once? How is the use of these technologies perceived? How are fundamental rights and privacy protected if surveillance technologies are used? The European FP7 research project “SURVEILLE” (which stands for SURVeillance: Ethical Issues, Legal Limitations, and Efficiency), co-financed by the European Commission, wants to provide answers to these questions and analyse the ethics and efficiency of surveillance technologies.
<b>Benefits</b>	SURVeillance aims to assess the benefits and costs of surveillance technology. ‘Benefits’ refers to the delivery of improved security; ‘costs’ to the economic costs, negative public perceptions, negative effects on behaviour and infringement of fundamental right – Useful for the policy support platform
<b>Challenges</b>	-

Application within BESECURE	Potential resource for policy support platform
Examples of how tool is being applied in a security setting already	This is an EU FP7 security project.

## 6. Information and ideas for the enhancement of urban security

### 6.1. Information: Examples of field practices

Information and ideas for the enhancement of urban security that have emerged from ongoing reviews of European and international research landscapes, is presented in this section. Best practices identified within the field of crime related urban insecurities were first presented as part of the D1.4 report (submitted in month 18). However, the review of literature is an ongoing task within the remit of WP1. A selection of interesting findings that have been collated as part of this ongoing research is presented below. The collated information flows into a knowledge repository that underpins the BESECURE platform, particularly the inspirational platform.

Role of CCTV in enhancing urban security	
<b>Reference</b>	Welsh, B., Farrington, D. (2004): Evidence-based crime prevention: The effectiveness of CCTV. In: Crime Prevention and Community safety: An international journal 2004, 6 (2). S.21-33.
<b>Description of practice</b>	<p>This study presents the findings of a systematic review, incorporating meta-analytic techniques as of evidence on the effects of CCTV on crime in public space.</p> <p>The study, which focused particularly on violent crime, and vehicle theft, indicated that half of the study areas (10 out of 19) showed evidence of a desirable effect of CCTV on crime occurrences and that CCTV was most effective in reducing crime in car parks, particularly so when combined with improved lighting, and was much more effective in reducing crime in the UK than in North America. However, there was no evidence that CCTV led to a reduction of crime in city centers, public housing or on public transport. CCTV was most effective in car parks where a decrease of 35% was noted in experimental areas compared with control areas.</p>
<b>Reference:</b>	Zurawski, Nils (2012): Information Polity: The International Journal of Government & Democracy in the Information Age, 2012, Volume 17, Issue 1 p 45-55
<b>Description of practice</b>	<p>This study examined the effect of security cameras in Hamburg, Germany on crime. The study was inconclusive, reporting that it is questionable whether security cameras introduced to study area had a positive impact on crime. It was found that urban development and setting up of cafes in an area actually had a greater impact. Residents felt that CCTV was no longer preventing crime but "inhibiting..." local life.</p>

Role of urban design in enhancing urban security	
<b>Reference</b>	Raco, Mike (2003) Remaking Place and Securitising Space: Urban Regeneration and the Strategies, Tactics and Practices of Policing in the UK. Urban Studies, August 2003, v. 40, iss. 9, pp. 1869-87
<b>Description of practice</b>	<p>This paper presents a series of measures taken in Reading, Berkshire UK as part of a major regeneration programme, including measures relating to security and policy. A key aspect of the regeneration programme and the design/implementation of security measures was the forging of partnerships between police, the local council, local developers and other agencies. The local police have a team of crime prevention officers, which is headed by an experienced Architectural Liaison Officer. The team provides advice and guidance to developers and other organisations on</p>

	<p>ways to design out crime. Urban design measures advocated by the team include the creation of local spaces that have designed-in features that create a more secure environment. These include measures such as eliminating unnecessary access ladders to roof areas, vulnerable skylights etc. to prevent burglaries, and avoiding the construction of long expanses of blank wall and dead spaces to prevent vandalism and public order. Requirements that tunnels and underpasses should be straight, wide and well lit were put in place and good natural surveillance for unsupervised areas was advocated. Other more prescriptive measures include advice that landscaping should be no higher than 1m and that the crowns of trees should not hang down below 2.5 metres, to avoid the creation of 'hiding places' for potential attackers. Public seating has been placed in clear view of CCTV.</p> <p>Technology, particularly the use of CCTV, has also been acknowledged as key to solving the town's security problems. Developers and private sector players have worked with the local police to formulated new security initiatives including for instance a scheme to employ 50 security guards to maintain order in the area of a major shopping centre. A door safe scheme was also established in which police and local employers worked together to train door staff on the sensitive handling of violent situations so that they can be easily diffused and an escalation into violence avoided.</p>
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Tackling Anti-Social Behaviour	
<b>Reference:</b>	Kevin J. Brown (2012) 'It is Not as Easy as ABC': Examining Practitioners' Views on Using Behavioural Contracts to Encourage Young People to Accept Responsibility for their Anti-Social Behaviour. The Journal of Criminal Law: February 2012, Vol. 76, No. 1, pp. 53-70.
<b>Description of practice</b>	<p>Acceptable behavioural contracts are used as a tool for encouraging the voluntary acceptance of responsibility in children and young people perceived to be engaging in anti-social behaviour and low level criminality. This article examines their effectiveness based on the results of a qualitative empirical analysis with local government and social housing anti-social behaviour teams. The article highlights the attitudes of practitioners to the use of acceptable behaviour contracts.</p> <p>Acceptable Behavioural Contracts (ABC) have been widely used by practitioners, with Home Office data records between 2003 and 2009 indicated that there were 49,586 ABCs agreed across England and Wales (Conservative Home Office Minister, James Brokenshire, from a press release entitled 'New Help for Anti-Social Behaviour Victims', 4 January 2011, available at <a href="http://www.homeoffice.gov.uk/media-centre/news/asb-victims">www.homeoffice.gov.uk/media-centre/news/asb-victims</a>, accessed 27 November 2011).</p> <p>ABCs are written agreements between a public agency and an individual who has been involved in anti-social behaviour. ASB are specifically tailored to the individual concerned. The individual must sign an agreement that they accept a series of conditions stating that they will no longer engage in such behaviour. The conditions may include restrictions on an individual's freedom such as for instance the imposition of curfews and restrictions on meeting with certain people and in particular locations.</p> <p>ABC's are informal contracts, which the individual can, in theory, withdraw from at any stage. Where the individual concerned is a minor, their parents are also asked to sign the contract.</p>

Police practices	
<b>Reference:</b>	Redgrave, William (2007): "Cut-price Justice ?", New Law Journal, Volume 157, (28th September 2007) p 1334

<b>Description of practice</b>	This study examines proposals in England to create Short Term Holding Facilities in busy urban areas for uses of detaining suspects for shorter time periods (4 hours or less). The facilities are proposed to be used to provide a short term holding place for people who have committed minor offences like drunken behavior. The objective is to ease pressure on police forces on the frontline by saving time by not having to transport people to police stations and allow them to deal with more serious offences. The proposals were favoured by some police forces particularly transport police who believed it to be useful for major sporting events or concerts. However, some legal commentators believe that such short term detention facilities would have to subject to strict guidelines.
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<b>Community and Police Collaboration</b>	
<b>Reference:</b>	European Crime Prevention Network – Good Practice: ‘Trident’ Approach (UK Approach) Available on <a href="http://www.eucpn.org/goodpractice/showdoc.asp?docid=264">http://www.eucpn.org/goodpractice/showdoc.asp?docid=264</a> Accessed 24.01.14
<b>Description of practice</b>	<p>Trident was set up in March 1998 as an intelligence-based initiative in response to a series of shootings and murders in and around the areas of Lambeth and Brent. By taking a hard-line approach to gun use, Trident aims to reduce the fear of crime in London’s Black and other communities and to increase public confidence in the police, so that citizens are more likely to help the police, and more crimes can be solved.</p> <p>Community support was identified at an early stage as being vital. The Trident Independent Advisory Group was formed to harness the support of the community and to help police operations to be better informed. It has remained at the heart of the Trident strategy.</p> <p>Trident solved 14 murders in 2007/8 making an overall detection rate of 78% Trident is also encouraged by the sentences being handed down by London courts. Trident criminals were imprisoned for a total of 937 years in 2010/11 (15 life sentences). Other Trident statistics 2010/11 90 firearms seized and £207,000 in cash seized.</p> <p>In August 1999, following a continuation of the shootings and murders, Trident was implemented on a London wide scale and now covers all gun related homicide within the Black community and other shootings within pertaining to all communities.</p>
<b>Reference:</b>	Machin, Stephen and Olivier, Marie (2011) Crime and Police Resources: The Street crime Initiative. Journal of the European Economic Association, August 2011, v. 9, iss. 4, pp. 678-701
<b>Description of practice</b>	<p>This paper explored the impact of additional police resources on crime, based on a policy intervention that took place in Wales and England in 2002/3. The Street Crime Initiative (SCI) focused on reducing robbery. Under the policy initiative, additional resources were allocated to some police forces to combat street crime, with other forces not receiving any additional funding. The SCI involved community- police partnerships to try to combat street crime.</p> <p>This study compared the robbery rates in SCI police forces with non SCI police forces before and after the initiative was introduced. Robberies fell significantly (estimated drop of between 15-17%) in SCI police forces relative to non SCI police forces after the initiative was introduced. The policy also proved to be cost effective, with the annual net social benefits being somewhere in the range of £58 to £127 million, compared to the cost of the additional funding provided under the initiative of £24 million.</p>

Weapons crime	
<b>Reference:</b>	European Crime Prevention Network – Good Practice: ‘Knife Amnesty’ Approach (UK Approach) Available on <a href="http://www.eucpn.org/goodpractice/showdoc.asp?docid=264">http://www.eucpn.org/goodpractice/showdoc.asp?docid=264</a> Accessed 24.01.14
<b>Description of practice</b>	The aim of ‘Knife Amnesty’ is to encourage residents of Great Britain to hand over their stabbing weapons to the police voluntarily. Police stations have special lockers where people can leave their weapons anonymously. This ensures safety, and freedom from prosecution for possession of a weapon. The intervention was part of a broader ‘Tackling Knives Action Programme in the UK.

Prevention of crime against the elderly	
<b>Reference:</b>	European Crime Prevention Network – Good Practice: ‘Safe Senior in Safe Home’ Approach (Poland) Available on <a href="http://www.eucpn.org/goodpractice/showdoc.asp?docid=264">http://www.eucpn.org/goodpractice/showdoc.asp?docid=264</a> Accessed 24.01.14
<b>Description of practice</b>	This project was especially designed to meet the expectations of a precisely described target group – elderly people. Its main objective is to prevent the crimes of which usually elderly people become victims of. Wide range of actions undertaken included among others 1) educational activities - lectures, seminars and workshops given at the University of Third Age, sermons warning from becoming a victim of various kinds of frauds or other crimes given by priests, meetings with seniors from various retired people associations, visits in medical care centres for elderly people, 2) rising awareness information campaign – shooting a TV spot, radio spots, doing interviews with policemen in local media, organizing press conference about the project 3) preventive initiatives of an creative nature – theatre workshops, painting and photo contests.

Youth crime	
<b>Reference:</b>	European Crime Prevention Network – Good Practice: ‘Fallschirm’ Project (Germany) Available on <a href="http://www.eucpn.org/goodpractice/showdoc.asp?docid=264">http://www.eucpn.org/goodpractice/showdoc.asp?docid=264</a> Accessed 13.01.14
<b>Description of practice</b>	Fallschirm is a non-residential project, which works with young offenders under the age of criminal responsibility, Fallschirm offers support and alternatives to delinquent behaviour and follows the criteria of obligation (even in case of aggression support is still offered). The resources and competencies of the children is important and regular contact to the family is established as Fallschirm tries to help the kids and their families learning to deal with crises and setting rules.  Self-evaluation shows that in about 50% of the cases targets (reducing or cancelling of criminal behaviour and truancy, changing leisure activities into social adequate, parental responsibility) could be realised.

Gang related youth crime	
<b>Reference:</b>	Shute, Jon (2013) Family Support as a Gang Reduction Measure. Children & Society. Jan2013, Vol. 27 Issue 1, p48-59. 12p. National Children’s Bureau and Blackwell Publishing Limited.
<b>Description of practice</b>	<b>Family Support Programme:</b> The study presents a case for family support programmes as a gang reduction

	<p>measure in the UK. The paper argues that family support is an effective gang reduction tool, where programmes are non-punitive and acceptable to families. The paper presents a series of criteria, building on Shute (2008) and Aldridge and others (2009) that will help to overcome the barriers to effective family support programmes. These criteria include:</p> <p><b>Family mediated but child behaviour focused:</b> Where wider family level risk is present as a result of a family member becoming involved in a gang, a family intervention is proposed. It is suggested that the primary focus of interventions should be on tackling problematic behaviour, with gang membership to be viewed as an aggravating factor.</p> <p><b>Voluntary, non-stigmatic and non-judgemental:</b> Interventions should always be voluntary, supportive and non-judgemental.</p> <p><b>Based in high quality relationships:</b> Support should be delivered by a small number of trained and committed individuals, who are viewed as being 'on side' (Aldridge and others, 2009).</p> <p><b>Likely to work:</b> Review the conclusions of the 'what works' review in relation to family support and intervention (e.g. Farrington and Welsh, 2008), before choosing an intervention</p> <p><b>Proven to work in the (UK) context:</b> The intervention should be proven to be effective in the (UK) context (interventions should be context appropriate).</p> <p><b>Possess gang relevant components:</b> Programmes should contain information on gangs ('well evaluated gang modules'). It is suggested that these could focus on highlighted the negative consequences of membership.</p>
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## 6.2. Usecases for the BESECURE platforms

This section presents real world scenarios to demonstrate how the practices and problems described in this report will be used in the BESECURE toolbox and made available to end users to inspire them in the enhancement of urban security. The scenarios are inspired by the interactions with stakeholders, and thus represent day-to-day challenges to urban security policy makers.

### 6.2.1. Inspirational Platform

#### Scenario I

I am an Urban Planner working in Limerick County Council, Ireland. Crime perpetrated by gangs is a security issue in the city of Limerick which we are seeking to address as part of a wider regeneration strategy for a particular area of the city. I would like information on practices that are proven to work in urban neighbourhoods that are similar to the regeneration area. Financial and human resources are tight, and any measures adopted as part of the regeneration strategy must demonstrate a clear cost benefit. Furthermore, we need to consider any knock on effects or unintended consequences that might arise as a result of measures.

#### Main supporting BESECURE feature: MYZONE

- Information on practices that are proven to work in urban neighbourhoods that are similar to the regeneration area ✓
- Financial and organisational requirements for design and implementation of practice ✓



- Information on knock on effects or unintended consequences to practice ✓

The Urban Planner answers a series of questions on the characteristics (context) of the neighbourhood concerned and selects 'gang crime' as the security issue of concern.

- An urban profile is created. The planner presses the 'submit' button.
- Using the underlying coding structure, the system searches the knowledge repository for information on practices (approaches) to tackle gang crime, and which have been applied in areas that share the same or similar characteristics to regeneration area (based on the choices selected by the planner at step 1).
- A series of best practices for tackling gang crime in neighbourhoods which display similar characteristics to the regeneration area are returned to the planner.
- Information on the financial and organisational requirements for implementing these practices is highlighted.
- Information on long term knock on effects of the practices or unintended consequences is highlighted.

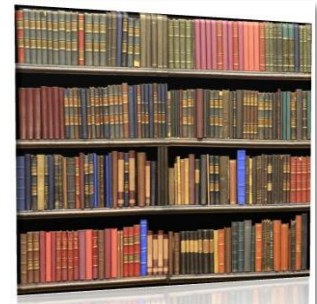
## Scenario II

I am a Police Community Support Officer in Manchester, United Kingdom. I work with and for communities to prevent crime and anti-social behaviour, and to reduce fear of crime within the community. A key aspect of my role is to promote inter-agency problem solving. A key aspect of my work with community groups and voluntary organisations is to strengthen knowledge and understanding of the underlying factors that contribute to urban insecurity or conversely that enhance the security of urban areas. Therefore, I have a keen interest in learning more about the causes and effects of crime and anti-social behaviour, but I am finding it difficult to access relevant information that is specifically attuned to my research interest.

## Main supporting BESECURE feature: eGuide: Literature Files

- Information on causes and effects of different types of crime ✓
- Information on police-community collaborative approaches ✓

The Police Community Support Officer can use the eGuide to explore literature presenting empirical evidence on the causes and effects of a wide range of crime and anti-social behaviour. Additionally, he can search the eGuide for examples of practices that involve a community-police collaborative approach.



## 6.2.2. Urban Data Platform

### Scenario

The Safer City manager within Belfast City Council has been informed by Council that they have been allocated approximately GBP 3 million to spend on urban security related interventions across the City of Belfast. These interventions can range from the installation of physical security measures such as alley gates and CCTV through to educational and community based projects designed to enhance community safety. This money has been made available to showcase Belfast as a safe city by reducing crime and anti-social behaviour in the urban core, promote Belfast as a living destination and act as a mechanism for encouraging investment in to the City. As a consequence of this money being made available, the Safer City manager has to understand the key problems occurring, potential hotspot areas of these problems across the City that may impact upon the day and night time economy, decide the best type of intervention for the problems in specific areas and understand the optimum location for these interventions.

### Main supporting BESECURE feature: the urban data platform

The urban data platform provides the functionality for the Safer City analysts to answer these specific questions efficiently, intuitively and effectively with the best possible evidence base.

Looking at each of the questions individually, the urban data platform can build up a complete picture for informing the right decision.

### Understanding the key problems✓

By using the urban data platform, the analyst can quickly and easily query the urban data to understand general trends of crime related problems across the City, as well as have an understanding of any relationships with other socio-economic, physical and other ancillary datasets. The results of this analysis are presented in both graphical form as well as map based outputs at different spatial scales (ward, absolute location). This provides the analysts with the ability to identify what the key problems are across the city on a spatio-temporal basis.



### Potential Hotspots affecting day and night time economy✓

The functionality of the urban data platform allows the user to draw their own area in the city. The platform then only returns the information within that area. This provides an understanding of what problems are most pertinent in certain areas. For instance, the analyst could draw a polygon around the main nightlife area and the software will only return the information within that area providing bespoke crime and area reports. Indeed, the platform will also permit hotspots to be identified. The analyst could then use this to draw polygons around the hotspot areas and use as a means to allocate resources and police beats.

## Intervention Support✓

The analysts can use the urban data platform as a means for supporting the location of interventions within the City. Indeed, it can first identify the hotspot areas and then second, test the location of the proposed intervention to see how much crime occurs within certain distances of the proposed intervention. For example, the Police could use it to build up an idea of what potential CCTV sites would require some sort of intervention due to high levels of crime in certain areas. They could use the platform to understand how much historic/past crime falls within certain distances of the proposed sites to understand which sites need the intervention the most.

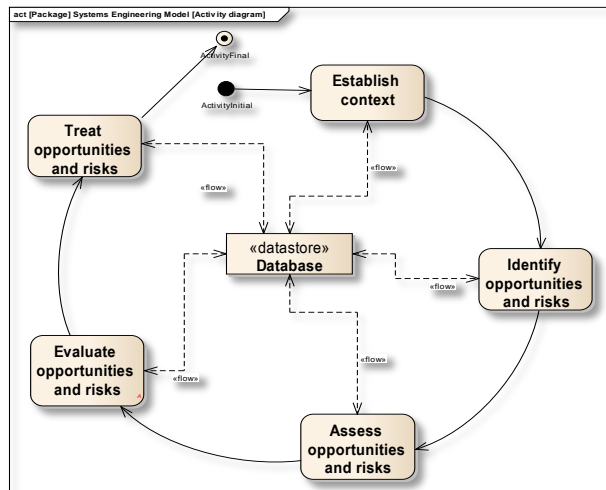
### 6.2.3. Policy support platform

#### Scenario

I am a policy advisor with the city council of a major Dutch city. I have been tasked to prepare a intervention advice on youth crime reduction in a declining neighbourhood in our city. I am guided by our four-yearly security plan that imposes major priority themes and areas, but leaves lots of room for choice when it comes to operationalization. I need to work with a multitude of internal and external partners, such as the local police, the local borough administration, the public prosecutor, local social care organisations and housing corporations to come up with an intervention that fits the allocated budget, has a high likelihood of success and is supported by inhabitants, local communities and the city council. I am overwhelmed by options and constraints, and find it hard to define widely-accepted interventions.

#### Main supporting BESECURE feature: the policy support platform

The Policy Support Platform is one of three development lines of the BESECURE project to support and inspire policy makers in making decisions on urban security. The aim of the Policy Support Platform is to guide policy makers through several steps in building an evidence base for their urban security decisions. The Policy Support Platform guides the user through a comprehensive work process to identify promising solutions for specified security challenges. The process challenges the user to explore objectives, possible options, and helps to make sensible judgements on intervention effectiveness through assessment processes and option selection.



The steps in the policy support process draw from the other BESECURE tools (the Inspirational Platform and Urban Data Platform) to combine data and experiences from your area with information from other cities across Europe. The result of the Policy Support Platform is a concise report of a suggested intervention, and a collation of supporting evidence, such as references to relevant case files, literature and urban data analyses.

**Provides an accessible and comprehensive process to work towards to identify interventions and build-up a supporting evidence base. ✓**

The policy support platform helps the user from the scenario to adopt a more structured approach to policy and intervention design. This helps to prevent a disordered design process, and helps to prevent biases that arise from the interactions with partner organisations, or the political or public opinion.

**Create more insightful interventions by combining local urban data analyses with established knowledge and experiences from other areas. ✓**

Each step in the process draws from the BESECURE information repository and urban data analysis features, and thus can provide input to the various steps of the policy support process. For instance, the user can draw on experiences from areas that are similar in nature and have faced similar issues (through the MyZone feature and case file repository). The user can use the urban data platform to pinpoint the underlying causes of a challenge through data analysis, and from that understanding find interesting interventions from other areas through a simple comparative matching process.

**Supports collaboration on intervention design ✓**

The policy support process compels the user to be explicit about assumptions, objectives, and interpretations. By doing so, the user creates an easily communicable canvas that facilitates interaction and negotiation with other parties. The structured approach reduces misunderstandings between parties, and helps to emphasise important aspects, such as the supporting evidence for effectiveness and cost assumptions.

The outcome of the policy support process is a concise report of a suggested intervention, and a collation of supporting evidence, such as references to relevant case files, literature and urban data analyses. In the scenario, the policy advisor would build up such an intervention proposal on youth crime reduction in collaboration with partner organisations. Since this would be a well-evidenced and broadly accepted report, the chances of adoption and implementation would be greatly enhanced.

## Appendix 1: References

- BALLESTER, C. & HERNÁNDEZ 2012. Bounded rationality. *Revista Internacional de Sociología*, 70, 27 - 38.
- BARDONE, E. 2011. *Seeking Chances. From Biased Rationality to Distributed Cognition*, New York, Springer.
- BARRETT, D. 1997. *The Paradox Process: Creative Business Solutions...Where You Least Expect to Find Them*, AMACOM.
- BEIERLE, T. C. & CAYFORD, J. 2002. *Democracy in practice: Public participation in environmental decisions*, Washington, DC, Resources for the Future.
- BROWN, K.J. 2012: 'It is Not as Easy as ABC': Examining Practitioners' Views on Using Behavioural Contracts to Encourage Young People to Accept Responsibility for their Anti-Social Behaviour. *The Journal of Criminal Law*: February 2012, Vol. 76, No. 1, pp. 53-70.
- BRUINE DE BRUIN, W., FISCHHOFF, B. & PARKER, A. M. 2007. Individual differences in adult decision-making competence. *Journal of Personality and Social Psychology*, 92.
- BUTLER, R. 1991. *Designing Organizations: A Decision-Making Perspective*, London, Routledge.
- CAPLAN, J. M. & KENNEDY, L. W. 2010. *Risk Terrain Modeling Manual - Theoretical Framework and Technical Steps of Spatial Risk Assessment*, Newark, NJ, Rutgers Center on Public Security.
- CARTER, M. 2011. Evidence-Based Policy, Practice, and Decisionmaking. U.S. Department of Justice.
- CHANEY, S. & RATCLIFFE, J. *GIS and Crime Mapping*, John Wiley & Sons Ltd.
- CLARK, A. 2003. *Natural-Born Cyborgs. Minds, Technologies, and the Future of Human Intelligence*, New York, Oxford University Press.
- COHEN, M. D., MARCH, J. G. & OLSEN, J. P. 1972. A Garbage Can Model of Organizational Choice. *Administrative Science Quarterly*, 17.
- CYERT, R. & MARCH, J. 1992. *Behavioral Theory of the Firm*, Wiley-Blackwell.
- DONAHUE, J. D. 2005. Dynamics of Diffusion: Conceptions of American Federalism and Public-Sector Innovation. Ash Institute for Democratic Governance and Innovation, John F. Kennedy School of Government, Harvard University.
- EISENHARDT, K. M. & ZBARACKI, M. J. 1992. STRATEGIC DECISION-MAKING. *Strategic Management Journal*, 13, 17-37.
- FIDUJA 2013. New European Crimes and Trust-Based Policy. In: MAFFEI, S. & MARKOPOULOU, L. (eds.).
- GIGERENZER, G. & GOLDSTEIN, G. 1996. Reasoning the Fast and Frugal Way: Models of Bounded Rationality *Psychological Review* 103, 650-669.
- GINO, F. & MOORE, D. A. 2007. Effects of Task Difficulty on Use of Advice. *Journal of Behavioral Decision Making*, 20.

GOVERNMENT, D.F.C.A.L. 2013a. The Cost of Troubled Families. Department for Communities and Local Government.

GOVERNMENT, D.F.C.A.L. 2013b. The Fiscal Case for Working with Troubled Families - Analysis and Evidence on the Costs of Troubled Families to Government. Department for Communities and Local Government.

HARTLEY, J. 2005. Innovation in Governance and Public Services: Past and Present. *PUBLIC MONEY & MANAGEMENT*.

HOUGH, M., JACKSON, J. & BRADFORD, B. 2013. Legitimacy, Trust and Compliance: An Empirical Test of Procedural Justice Theory Using the European Social Survey. In: TANKEBE, J. & LIEBLING, A. (eds.) *Legitimacy and Criminal Justice: An International Exploration*. New Haven: Yale University Press.

HUTCHINS, E. 1995. *Cognition in the Wild*, Cambridge, The MIT Press.

ISO 31000 2009. Risk Management -- Principles and Guidelines.

JAMES, A. 2011. *The Influence of Intelligence-Led Policing Models on Investigative Policy and Practice in Mainstream Policing 1993-2007: Division, Resistance and Investigative Orthodoxy*. Doctor of Philosophy, London School of Economics and Political Science.

KAHNEMAN, D. & TVERSKY, A. 1979. Prospect Theory: An Analysis Of Decision Under Risk. *Econometrica*, 47.

KAROLY, L. A., KILBURN, M. R. & CANNON, J. S. 2005. Early Childhood Interventions - Proven Results, Future Promise. RAND Corporation.

LEKHI, R. 2007. A Research Report for The Work Foundation's Knowledge Economy Programme. Manchester: Research Republic LLP.

LEWIN, K. 1947. Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change. *Human Relations*.

LEWIS, M. & HARTLEY, J. 2001. Evolving forms of quality management in local government: lessons from the Best Value pilot programme *Policy & Politics*, 29, 477-496.

LONGLEY, P.A., M. F. GOODCHILD, D. J. MAGUIRE and D. W. RHIND, 2001: Geographic Information Systems and Science. First Edition. John Wiley, Chichester

LONGLEY, P.A., M. F. GOODCHILD, D. J. MAGUIRE and D. W. RHIND., 2005 Geographic Information Systems and Science. Second Edition. John Wiley, Chichester

MACHIN, S & OLIVER, M. 2011. Crime and Police Resources: The Street crime Initiative. Journal of the European Economic Association, August 2011, v. 9, issue. 4, pp. 678-701

MARCH, J. G. & OLSEN, J. P. 1989. *Rediscovering Institutions: The Organizational Basis of Politics* The Free Press.

MILLER, T. R., COHEN, M. A. & WIERSEMA, B. 1996. Victim Costs and Consequences: A New Look. Washington, D.C.: National Institute of Justice.

MULGAN, G. & ALDBURY, D. 2003. Innovation in the Public Sector. Strategy Unit, Cabinet Office.

MUNCK, G. L. & VERKUILEN, J. 2002. Conceptualizing and measuring democracy - Evaluating alternative indices. *Comparative Political Studies*, 35, 5-34.

POWER, D. J. 2002. *Decision Support Systems: Concepts and Resources for Managers*, Quorum Books.

POWER, D. J., BURSTEIN, F. & SHARDA, R. 2011. Reflections on the Past and Future of Decision Support Systems: Perspective of Eleven Pioneers. In: SCHUFF, D., BURSTEIN, F., SHARDA, R., PARADICE, D. & POWER, D. J. (eds.) *Decision Support: An Examination of the DSS Discipline*. Springer Science + Business Media.

RACO, M. 2003. Remaking Place and Securitising Space: Urban Regeneration and the Strategies, Tactics and Practices of Policing in the UK. *Urban Studies*, August 2003, v. 40, iss. 9, pp. 1869-87

REDGRAVE, W. 2007. "Cut-price Justice?", *New Law Journal*, Volume 157, (28th September 2007) p 1334

SCOTT, S. G. & BRUCE, R. A. 1995. Decision-making style: The development and assessment of a new measure. *Educational and Psychological Measurement*, 55, 818-831.

SECCHI, D. 2011. *Extendable Rationality: Understanding Decision Making in Organizations*, New York, Springer.

SIMON, H. A. 1960. *The new science of management decision. The Ford distinguished lectures*, New York, Harper & Brothers.

SIMON, H. A. 1979. Rational decision making in business organizations. *The American economic review*, 69, 493-513.

SIMON, H. A. 1991. Bounded rationality and organizational learning. *Organization science*, 1, 125-134.

SIMON, H. A. 1993. Altruism and economics. *American Economic Review*, 83, 156-161.

TINGLING, P. M. & BRYDON, M. J. 2010. Is Decision-Based Evidence Making Necessarily Bad? *MITSloan Management Review*, 51.

WALKER, R. M. 2004. Innovation and Organisational Performance: Evidence and a Research Agenda *Advanced Institute of Management Research Paper No. 002*.

WANG, Y. & RUHE, G. 2007. The Cognitive Process of Decision Making. *Int'l Journal of Cognitive Informatics and Natural Intelligence*.

WEEKS, D. K. I. T., K. AND SALAMAN, G. 1980. *Control and Ideology in Organizations*.

WELSH, B., FARRINGTON, D. 2004: Evidence-based crime prevention: The effectiveness of CCTV. In: *Crime Prevention and Community safety: An international journal* 2004, 6 (2). S.21-33.

ZURAWSKI, NILS. 2012: Information Polity: The International Journal of Government & Democracy in the Information Age, 2012, Volume 17, Issue 1 p 45-55

## **Appendix 2: List of practices/approaches (case files)**

Appendix 2 contains the overview of registered case files per 11 April 2014. Case file acquisition will continue until the final stages of the project.

## Appendix 3: Case File for the Aracne Approach

Appendix 3 contains the completed case file registration template for *the Aracne approach*. The Aracne approach originated in Napels, Italy, and is targeted at predatory crime or street crime. See section 2.4.1 for a short description of the Aracne approach.

## Appendix 4: Data available for the BESECURE project

This appendix contains descriptions of the dataset available for use in the BESECURE project per 11 April 2014. Data acquisition will continue until the final stages of the project.

Case study area	Starting page
Belfast, UK	75
Arghilla, Italy	80
The Hague, The Netherlands	82
Freiburg, Germany	86
Poznan, Poland	89
Napels. Italy	94
London, UK	96

<b>Case study Area:BELFAST, UK</b>							
<b>Data Provider:</b>	POLICE SERVICE OF NORTHERN IRELAND						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The Police Service of Northern Ireland (PSNI) is responsible for policing within Northern Ireland and was established in 2001 following the recommendations of the Patten Report; it had previously been known as the Royal Ulster Constabulary. The PSNI has some 7,000 full-time officers supported by 2,400 police staff. The province is divided into 8 policing districts (A – H) and operates a policing with the community approach whereby both the police and local community work pro-actively together.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Recorded Crime (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime
	ASB (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime
	Violence against the person (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime
	Criminal Damage (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime
	Other theft offences (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime
	Burglaries (Number and Rate per 10,000 population)	csv	1998-2012	Irish grid	Electoral wards, PSNI Areas, Local Government Districts	Acknowledge Data Source	Crime

<b>Source:</b>	<a href="http://www.ninis2.nisra.gov.uk/">http://www.ninis2.nisra.gov.uk/</a>
<b>Potential Use in BESECURE</b>	The data could be used to visually present crime data as recorded by the Police Service of Northern Ireland at different geographic scales. This information could be used to understand crime patterns in different electoral wards over time.

<b>Case study Area:BELFAST, UK</b>							
<b>Data Provider:</b>	NORTHERN IRELAND STATISTICS AND RESEARCH AGENCY (NISRA), AN AGENCY WITHIN THE DEPARTMENT OF FINANCE AND PERSONNEL IN NORTHERN IRELAND						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The Northern Ireland Statistics Research Agency (NISRA) is the primary source of official statistics and social research on Northern Ireland and is tasked with the collation and publication of statistics related to the economy, population and society of Northern Ireland. Additionally, it conducts the Northern Ireland census. NISRA is an executive agency of the devolved Northern Ireland government and is located within the Department of Finance and Personnel.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Employment and Support Allowance Claimants	csv	2011-2012	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Economic
	Child Benefit Claimants	csv	2000-2011	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal
	Disability Living Allowance	csv	1999-2012	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal
	Housing Benefit Claimants	csv	1999-2012	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal
	Income Support Claimants	csv	2000-2012	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal

	Job Seekers Allowance Claimants	csv	1999-2012	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal
	Median Age of Death	csv	2005-2011	Irish grid	Electoral Wards, Local Government Districts	Acknowledge Data Source	Societal
	Population Change	csv	2001-2011	Irish grid	Electoral Wards, Super Output Areas, local Government Districts	Acknowledge Data Source	Societal
	Population Totals	csv	1999-2011	Irish grid	Electoral Wards, Super Output Areas, Local Government Districts	Acknowledge Data Source	Societal
	Employee Jobs	csv	2001-2011	Irish grid	Electoral Wards, local Government Districts	Acknowledge Data Source	Economic
	Gross Weekly Pay (£)	csv	2004-2012	Irish grid	Electoral Wards, local Government Districts	Acknowledge Data Source	Economic
	Redundancies Confirmed	csv	2002-212	Irish grid	Electoral Wards, local Government Districts	Acknowledge Data Source	Economic
	Deprivation Measure	csv	2001,2005,2010	Irish grid	Electoral Wards, Super Output Areas, Local Government Districts	Acknowledge Data Source	Societal
	Higher Education Qualifications	csv	2002-2011	Irish grid	Electoral Wards, local Government Districts	Acknowledge Data Source	Societal
	Further Education Enrollments	csv	1999-2011	Irish grid	Electoral Wards, local Government Districts	Acknowledge Data Source	Societal
Source:	<a href="http://www.ninis2.nisra.gov.uk/">http://www.ninis2.nisra.gov.uk/</a>						
Potential Use in BESECURE	The data obtained from NISRA would provide an official socio-economic and demographic picture of the City of Belfast. The data is available at most geographic levels with the exception of absolute location.						

Case study Area:BELFAST, UK							
<b>Data Provider:</b>	Police.uk						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	Official Web Service providing local crime, policing and criminal justice data for England, Wales and Northern Ireland.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	ASB	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Burglary	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Criminal Damage and Arson	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Drugs	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Other Theft	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Public Disorder and Weapons	csv	September2011 to July 2013 (Monthly Data)	Irish Grid/ WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime

	Robbery	csv	September 2011 to July 2013 (Monthly Data)	Irish Grid/WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Shoplifting	csv	September 2011 to July 2013 (Monthly Data)	Irish Grid/WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Vehicle Crime	csv	September 2011 to July 2013 (Monthly Data)	Irish Grid/WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Violent Crime	csv	September 2011 to July 2013 (Monthly Data)	Irish Grid/WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
	Other Crime	csv	September 2011 to July 2013 (Monthly Data)	Irish Grid/WGS1984	Local Grid (X,Y Coordinates), Lat/Long (snapped to closest street)	Acknowledge Data Source	Crime
Source:	<a href="http://www.police.uk/overview/?q=Belfast,%20UK">http://www.police.uk/overview/?q=Belfast,%20UK</a>						
Potential Use in BESECURE	The absolute location of crime (centroid of street that crime occurs on) can be used to get a better understanding of micro level crime trends and hot spots. It can also be used to identify how many crimes (by type) are occurring within distances of certain physical interventions (cctv etc) and amenities and then used to inform where new interventions could be located.						

Case study Area: BELFAST, UK	
Data Provider:	BELFAST CITY COUNCIL- COMMUNITY SAFETY UNIT
Type of Organisation:	PUBLIC SECTOR-RESTRICTED

<b>Description</b>	The Community Safety Unit was established in 2003 to develop Belfast Community Safety Partnership (a multi-agency partnership that was to develop a Belfast Community Safety Strategy and initiatives). Around the same time Belfast District Policing Partnership (a body to monitor policing performance, with four area subgroups) was established. These were established as part of the outworking of the Patten Report. Two years ago both of these structures ceased to exist and last year a new Belfast Policing and Community Safety Partnership (with four area partnerships) was established. These new bodies monitor the performance of PSNI against local policing plan and also have to develop community safety plans for their areas.						
<b>Data sets:</b>	ASB (70+ types)	csv	2007-2013 (updated monthly)	Irish Grid	Local Grid (X,Y Coordinates)	Private Data Source/ Project Specific Data	Crime
<b>Source:</b>	Belfast City Council – Community Safety Unit						
<b>Potential Use in BESECURE</b>	The absolute location of crime can be used to get a better understanding of micro level crime trends and hot spots. It can also be used to identify how many crimes (by type) are occurring within distances of certain physical interventions (e.g. CCTV) and amenities and then used to inform where new interventions could be located. Indeed, it also provides the time and date of each report instance of ASB which permits temporal trends to also be identified.						

<b>Case study Area: ARGHILLA, ITALY</b>							
<b>Data Provider:</b>	ITALIAN NATIONAL INSTITUTE OF STATISTICS (ISTAT), CENSUS 2011, STATISTIC SERVICE OF MUNICIPALITY OF REGGIO CALABRIA						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The Italian National Institute of Statistics is a public research organisation. It has been present in Italy since 1926, and is the main producer of official statistics in the service of citizens and policy-makers. It manages the Census activities, publishing reports on each Sector (agriculture, population, industry). Since 1989 Istat has been performing the role of directing, coordinating, and providing technical assistance and training within the National Statistical System (Sistan). The System was established in order to rationalise the production and publication of information and to optimise resources allocated to official statistics. Sistan is made up of Istat, central and branch statistical departments of Public Administrations, of local and regional bodies (I.E. Statistic Service of Municipality of Naples and Reggio Calabria), Chambers of Commerce, other public bodies and administrations providing statistical information. The Census 2011 is the last statistical framework, now in the process of being published.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson	Domain

						use	
	Population (by age, gender, total, density)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Birth and Death Rates	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Immigrants (by age)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Education level (degree)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Literacy Rate	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Out-of School Children	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Employment/Unemployment rates	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Economic
	Employees (by sector, totals)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Economic
	Housing Density	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Vacant Housing	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal
	Housing Tenure	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Societal

	Homicide Rates (by type)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
	Burglary	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
	Other theft	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
	Drug Crime	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
	Juvenile Crime	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
	ASB	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	Crime
<b>Source:</b>	Italian National Institute of Statistics						
<b>Potential Use in BESECURE</b>	The data obtained from ISTAT would provide an official socio-economic and demographic picture of Arghilla. The data is available at census geographic levels.						

<b>Case study Area:THE HAGUE, NETHERLANDS</b>	
<b>Data Provider:</b>	THE HAGUE IN NUMBERS

<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	Den Haag in Cijfers” (The Hague in Numbers – <a href="http://denhaag.buurtmonitor.nl">http://denhaag.buurtmonitor.nl</a> ) is a website of the municipality of The Hague that offers various statistical data to the public. The data is gathered and aggregated by the various city council departments, and provided to the public through the Den ‘Haag in Cijfers’ website.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Violent Theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Street Robbery	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Violent Theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Non-violent Theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Bicycle Theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Moped and Scooter Theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Burglary from Companies and Institutions	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Domestic Burglary	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Burglary from Vehicles	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Theft of Motor Vehicles	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Shop Robbery	csv	2006-2013	Amersfoort,	Neighbourhood (Buurt), District (wijk)	Acknowledge	Crime

				EPSG:28992	wijk)	Data Source	
	Pickpocketing	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Theft without Violence	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	All non-violent theft	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Violence	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Threats	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Assault	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Violence	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	All Violence	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Sex Crimes	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	All Sex Crimes	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Destruction of Property	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	All Destruction of Property	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Traffic Crimes	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Leaving place of accident	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Traffic Crime	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime

	All Traffic Crimes	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Crimes	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other Crimes within regular law	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Other crimes within special laws	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	All other crime	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Crime
	Unemployment	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Economic
	Population of working age	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Economic
	Population Totals	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Social
	Population by gender	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Social
	Population by age	csv	2006-2013	Amersfoort, EPSG:28992	Neighbourhood (Buurt), District (wijk)	Acknowledge Data Source	Social
<b>Source:</b>	<a href="http://denhaag.buurtmonitor.nl/">http://denhaag.buurtmonitor.nl/</a>						
<b>Potential Use in BESECURE</b>	The data obtained from The Hague in Numbers would provide an official socio-economic, crime and demographic picture of the City of Den Haag. The data is available at most geographic levels with the exception of absolute location.						

Case study Area: FREIBURG- GERMANY							
Data Provider:	FR.ITZ ONLINE STATISTICAL SERVICE CITY OF FREIBURG						
Type of Organisation	Public Sector						
Description	FR.ITZ Online Statistical Service City of Freiburg is an online platform for the publication of communal statistics. The municipal (public sector) 'office for citizen's service' runs the platform to provide citizens, academia and business free access to statistical data about the city of Freiburg.						
Data sets:	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Employment and Support Allowance	csv	2005-2011	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Economic
	Child Benefit Claimants (Elterngeld, note: Kindergeld is different from Elterngeld)	website	2009-2011	Gauss-Krueger	State Level (Bundesland)	Acknowledge Data Source	Social
	Unemployed	CSV	1999-2012	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Economic
	Housing Benefit Claimants	CSV	2005-2001	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Income Support Claimants	CSV	2008; 2012	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district	Acknowledge Data Source	Economic

					(KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)		
	Job Seekers Allowance Claimants	CSV	2008; 2012	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Risk of Victimisation	CSV	2006-2011	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Crime
	Population Change (%)	CSV	2012-2030	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Population Totals (	CSV	1999-2010	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Employed persons	CSV	2001-2010	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Gross Weekly Pay (£)	CSV	2004-2011	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Economic
	Redundancies Confirmed	CSV	2000-2011	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Economic
	Deprivation	CSV	2010	Gauss- Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	Highest education	PDF, SPSS	2012	Gauss-	Citylevel	non-public	Social

	attainment			Krueger			
	Further Education Enrolments	CSV	1999-2010	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	private vehicles per 1000 inhabitants		01.01.2012 - 31.12.2012	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	inhabitants per apartment	website	01.01.2012 - 31.12.2012	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	population density	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	average living space per person	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	average living space per apartment	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	average period of residence at address in years	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	reproduction rate (childs per woman)	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	proportion young/old people	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district	Acknowledge Data Source	Social

					(KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)		
	percentage of foreigners	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	percentage of people with migration background	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
	average age of inhabitants	website	2012-2013	Gauss-Krueger	3-digit microspatialclassification, statisticalborough/district (KleinräumigeGliederung, Gemeindeteil, Stadtbezirk)	Acknowledge Data Source	Social
<b>Source:</b>	FR.ITZ Online Statistical Service City of Freiburg and Freiburg Police						
<b>Potential Use in BESECURE</b>	The data obtained from FR.ITZ ONLINE STATISTICAL SERVICE CITY OF FREIBURG would provide an official socio-economic and demographic picture of the City of Belfast. The data is available at most geographic levels with the exception of absolute location.						

<b>Case study Area:POZNAN, POLAND</b>	
<b>Data Provider:</b>	EDUCATION DEPARTMENT IN POZNAN
<b>Type of Organisation:</b>	PUBLIC SECTOR

<b>Description</b>	The Education department is responsible for the publishing of education related information for the City of Poznan.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	Geocode type	Restrictionson use	Domain
	Higher Education Qualifications	DOC	2006-2012	NA	Local Government District, Poznań, Poland.	Acknowledge Data Source	Social
	Further Education Qualifications	DOC	2006-2012	NA	Local Government District, Poznań, Poland.	Acknowledge Data Source	Social
<b>Source:</b>	Education Department in Poznań						
<b>Potential Use in BESECURE</b>	This data can be used to better understand the educational attainment profile of Poznan						

<b>Case study Area:POZNAN, POLAND</b>							
<b>Data Provider:</b>	PUS-STATISTICAL OFFICE IN POZNAN						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The statistical office in Poznan provides statistical data on the socio-economic and demographic context of the City of Poznan						
<b>Data sets:</b>	Name	Format	Time Series	Projection	Geocode type	Restrictionson use	Domain

	Median Age of Death	PDF	2010-2012	NA	District Council; Health & Social Care Trust; Poznań, Poland.	Acknowledge Data Source	Social
	Population Change (%)	PDF	2004-2012	NA	District Council; Health & Social Care Trust; Poznań, Poland.	Acknowledge Data Source	Social
	Population Forecast ( up to 2030)	PDF	2011-2030	NA	District Council, Poznań, Poland.	Acknowledge Data Source	Social
	City Development Strategy	PDF	2010-2030	NA	Local Government District, Poznań, Poland.	Acknowledge Data Source	Social
	Population Totals	PDF	2010-2012	NA	District Council; Health & Social Care Trust; Poznań, Poland.	Acknowledge Data Source	Social
	Employee Jobs	PDF	2010-2012	NA	Local Government District Council, Health and Social Services Board, Poznań, Poland.	Acknowledge Data Source	Economic
	Gross Weekly Pay €	PDF	2010-2012	NA	District Council, Poznań, Poland.	Acknowledge Data Source	Economic
	Redundancies Confirmed	PDF	2010-2012	NA	Local Government District Council, Poznań, Poland.	Acknowledge Data Source	Economic
<b>Source:</b>	PUS-STATISTICAL OFFICE IN POZNAN						
<b>Potential Use in BESECURE</b>	This data can be used to better understand the socio-economic and demographic profile of Poznan						

<b>Case study Area:POZNAN, POLAND</b>	
<b>Data Provider:</b>	POLICE HEADQUARTERS IN POZNAN

<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The Police Headquarters in Poznan provides an overview of the crime context of the City of Poznan						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	State of security and life-saving in the city of Poznań	DOC	2010-2012	NA	District Council, Local Government Council, Poznań, Poland.	Acknowledge Data Source	Crime
	Sate of security and public order in the city of Poznań	PDF	2012	NA	District Council, Local Government Council, Poznań, Poland.	Acknowledge Data Source	Crime
	State of security and public order in the city of Poznań	DOC	2011	NA	District Council, Local Government Council, Poznań, Poland.	Acknowledge Data Source	Crime
	City Guard Annual Report	PDF	2012	NA	Local Government District, Education & Library Board, Poznań, Poland.	Acknowledge Data Source	Crime
	City Guard Annual Report	PDF	2011	NA	Local Government District, Education & Library Board, Poznań, Poland.	Acknowledge Data Source	Crime
	Threats catalogue	DOC	2011	NA	Local District Council, Local Government District, Poznań, Poland.	Acknowledge Data Source	Crime
	Recorded Crime	PDF	2010-2012	NA	District Council, Health and Social Services Board, Poznań, Poland.	Acknowledge Data Source	Crime
	Road Accidents index	PDF	2011	NA	Local Government Council, Poznań, Poland.	Acknowledge Data Source	Crime
<b>Source:</b>	Police Headquarters, Poznan, Poland						
<b>Potential Use in BESECURE</b>	This data can be used to better understand the crime profile of Poznan						

Case study Area:POZNAN, POLAND							
Data Provider:	ANALYTICAL SERVICE UNIT- POZNAN CITY HALL						
Type of Organisation:	PUBLIC SECTOR						
Description	The Analytical Service Unit in Poznan provides statistical data on the socio-economic and demographic context of the City of Poznan						
Data sets:	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Poznan Living Conditions - survey among inhabitants	PDF	2010	NA	Local Government District, Health and Social Services Board, Poznań, Poland.	Acknowledge Data Source	Social
	Unemployment rate	PDF	2006-2012	NA	Local Government District, Poznań, Poland.	Acknowledge Data Source	Social
	Inhabitants migrations	PDF	2009	NA	Local Government District, Health and Social Services Board, Poznań, Poland.	Acknowledge Data Source	Social
	City of Poznań state-of-art.	PDF	2006-2012	NA	Local Government District, Health and Social Services Board, Poznań, Poland.	Acknowledge Data Source	Social
	Public gatherings index.	WMS	2011-2012	NA	Local Government District, Poznań, Poland.	Acknowledge Data Source	Social
Source:	Analytical Service Unit, Poznan City Hall						
Potential Use in BESECURE	This data can be used to better understand the socio-economic profile of Poznan						

Case study Area:NAPLES, ITALY							
<b>Data Provider:</b>	ITALIAN NATIONAL INSTITUTE OF STATISTICS (ISTAT), CENSUS 2011, STATISTIC SERVICE OF MUNICIPALITY OF NAPLES						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	<p>The Italian National Institute of Statistics is a public research organisation. It has been present in Italy since 1926, and is the main producer of official statistics in the service of citizens and policy-makers. It manages the Census activities, publishing reports on each Sector (agriculture, population, industry). Since 1989 Istat has been performing the role of directing, coordinating, and providing technical assistance and training within the National Statistical System (Sistan). The System was established in order to rationalise the production and publication of information and to optimise resources allocated to official statistics. Sistan is made up of Istat, central and branch statistical departments of Public Administrations, of local and regional bodies (I.E. Statistic Service of Municipality of Naples and Reggio Calabria), Chambers of Commerce, other public bodies and administrations providing statistical information. The Census 2011 is the last statistical framework, now in the process of being published.</p>						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictions on use	Domain
	Population (by age, gender, total, density)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Birth and Death Rates	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Immigrants (by age)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Education level (degree)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Literacy Rate	csv	2011	Italian National	Census geographical areas	Acknowledge Data Source	

				Grid			
	Out-of School Children	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Employment/Unemployment rates	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Employees (by sector, totals)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Housing Density	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Vacant Housing	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Housing Tenure	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Homicide Rates (by type)	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Burglary	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Other theft	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Drug Crime	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
	Juvenile Crime	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	

	ASB	csv	2011	Italian National Grid	Census geographical areas	Acknowledge Data Source	
<b>Source:</b>	Italian National Institute of Statistics						
<b>Potential Use in BESECURE</b>	The data obtained from ISTAT would provide an official socio-economic and demographic picture of Naples. The data is available at census geographic levels.						

<b>Case study Area: LONDON , UK</b>							
<b>Data Provider:</b>	METROPOLITAN POLICE						
<b>Type of Organisation:</b>	PUBLIC SECTOR						
<b>Description</b>	The Metropolitan Police Service (abbreviated to MPS and widely known informally as "the Met") is the territorial police force responsible for law enforcement in Greater London, excluding the "square mile" of the City of London (the responsibility of the City of London Police). The Met also has significant national responsibilities such as co-ordinating and leading on counter-terrorism matters.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Anti-Social Behaviour Incidents Recorded by the Police	csv	12/2010-03/2013	British National Grid	Street Level, LSOA, Ward, Local Government District, London, England	Acknowledge Data Source	Crime
	Domestic Abuse Incidents and Crimes	csv	2007/08-2011/12	British National Grid	Lower Super Output Areas, Electoral Ward, District Council, London	Acknowledge Data Source	Crime
	Crime Survey for England and	csv	1981-2012	British	England and Wales	Acknowledge	Crime

	Wales (formerly British Crime Survey) [for Risk of Victimisation, Domestic Abuse]			National Grid		Data Source	
	Crime Rates in the Metropolitan Police area by Ward	csv	2001/02-2012/13	British National Grid	Electoral Ward, District Council, London	Acknowledge Data Source	Crime
	Recorded Crime Summary Data for London: LSOA Level	csv	04/2011-03/2013	British National Grid	Lower Super Output Areas, Electoral Ward, District Council, London	Acknowledge Data Source	Crime
	Hate Crimes (administrative geographies)	csv	2011-2012	British National Grid	Lower Super Output Areas, Electoral Ward, District Council, London	Acknowledge Data Source	Crime
	Crime Rates (by type)	csv	2008-2013	British National Grid	Lower Super Output Areas, Electoral Ward, District Council, London	Acknowledge Data Source	Crime
	Metropolitan Police Service Recorded Crime Figures and Associated Data	csv	Jun 2010- May 2013	British National Grid	Police Force Area	Acknowledge Data Source	Crime
<b>Source:</b>	<ul style="list-style-type: none"> <li>• <a href="http://maps.met.police.uk/">http://maps.met.police.uk/</a></li> <li>• <a href="http://maps.met.police.uk/tables.htm">http://maps.met.police.uk/tables.htm</a></li> </ul>						
<b>Potential Use in BESECURE</b>	The Metropolitan Police crime data is extracted from the crime reporting information system (CRIS) every month and therefore it is continuously updated. Also, The Metropolitan Police recorded crime figures are an important indicator of police workload. They can be used for local crime pattern analysis and provide a good measure of trends in well-reported crimes. The data gathered by the Met police informs policy and practice in a constantly changing and dynamic environment that has community safety at its core						

<b>Case study Area: LONDON TOWER HAMLETS</b>	
<b>Data Provider:</b>	OFFICE FOR NATIONAL STATISTICS (ONS)

<b>Type of Organisation:</b>	Public Sector						
<b>Description</b>	ONS is the UK's largest independent producer of official statistics and the recognised national statistical institute of the UK.						
<b>Data sets:</b>	Name	Format	Time Series	Projection	GeocodeType	Restrictionson use	Domain
	Benefit Claimants - Employment and Support Allowance	CSV, Excel	2008-2012	British National Grid	Local Government District,	No restriction on public access/ NONE	ONS
	Child Benefit - London (geographical statistics)	CSV, Excel	2003-2012	British National Grid	Electoral Ward, Local Government District,	No restriction on public access/ NONE	ONS
	Benefit Claimants - Disability Living Allowance	CSV, Excel	2002-2012	British National Grid	Local Government District	No restriction on public access/ NONE	ONS
	Housing Benefit Claimants	CSV, Excel	2002-2013	British National Grid	Local Government District	No restriction on public access/ NONE	ONS
	Income Support - Ward	CSV, Excel	1999-2012	British National Grid	Electoral Ward, Local Government District	No restriction on public access/ NONE	ONS
	JSA Sanctions Office Level	CSV, Excel	2000-2012	British National Grid	Job Centre Plus Group/District, Local Government District	No restriction on public access/ NONE	ONS
	Life expectancy at birth and at age 65 for local areas in England and Wales	CSV, Excel	1991-2010	British National Grid	Local Government District	No restriction on public access/ NONE	ONS
	2011 Census Ward Population Estimates	CSV, Excel	2001-2011	British National Grid	Electoral Ward, Local Government District	No restriction on public access/ NONE	ONS
	ASHE 2012 (provisional)	CSV, Excel	1997-2012	British National Grid	Local Government	No restriction on	ONS

	Table 7 - Place of Work by Local Authority				District	public access/ NONE	
	RED02: Redundancies by industry, age, sex and re-employment rates	CSV, Excel	1997-2013	British National Grid	London, England, United Kingdom	No restriction on public access/ NONE	ONS
	A level Results by Gender and Location of Residence for Pupils	CSV, Excel	2004-2011	British National Grid	LSOA, Local Government District	No restriction on public access/ NONE	ONS
	Mortgage and Landlord Possession Actions	CSV, Excel	2003-2011	British National Grid	Local District Council	No restriction on public access/ NONE	ONS
	Total Deaths by Ward	CSV, Excel	2002-2011	British National Grid	Electoral Ward, Local Government District	No restriction on public access/ NONE	ONS
	A level Results by Gender and Location of Residence for Pupils	CSV, Excel	2004-2011	British National Grid	LSOA, Local Government District	No restriction on public access/ NONE	ONS
	Further Education and Higher Education destinations of KS5 students, Borough and Institution	CSV, Excel	2009/2010	British National Grid	Local Government District	No restriction on public access/ NONE	ONS
	2012 Round Ward 5 Year Age Bands - Standard Projection (SHLA)	CSV, Excel	2001-2012	British National Grid	Electoral Ward, Local Government District	No restriction on public access/ NONE	ONS
	Indices of Deprivation 2010 (a separate summary for 2007 also available)	CSV, Excel	2007, 2010	British National Grid	Electoral Ward, Local Government District	No restriction on public access/ NONE	ONS
	Household Income	CSV, Excel	2005-2012	British National Grid	Local Government District	No restriction on public access/ NONE	ONS

	Population Density	CSV, Excel	2011	British National Grid	Local Government District, by Ward-London	No restriction on public access/ NONE	ONS
	Economic Deprivation Index Score	CSV, Excel	2010	British National Grid	Local Government District, by Ward-London	No restriction on public access/ NONE	ONS
	Further Education and Higher Education destinations of KS5 students, Borough and Institution	CSV, Excel	2009/2010	British National Grid	Local Government District	No restriction on public access/ NONE	ONS
<b>Source:</b>	<a href="http://www.ons.gov.uk/ons/datasets-and-tables/index.html">http://www.ons.gov.uk/ons/datasets-and-tables/index.html</a>						
<b>Potential Use in BESECURE</b>	The ONS play a leading role in the development of national and international good practice in the production of official statistics. The ONS statistics are crucial for effective debate and decision making in government, industry, academia or by private individuals.						