COST Action TU1203: Working Group 2
Crime Prevention through Urban Design & Planning

Review of CEN 14383

The death and life of great European standards and manuals – Development and implementation of the CEN 14383 standards

EU Standard Implementation Resource

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COST ACTION TU1203

Working Group 2: The CEN 14383 standards

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Foreword

What is COST?

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

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

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

COST's mission focuses in particular on:

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

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

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

As a precursor of advanced multidisciplinary research, COST anticipates and complements the activities of EU Framework Programmes, constituting a "bridge" towards the scientific communities of emerging countries. In particular, COST Actions are also open to participation

by non-European scientists coming from neighbour countries (for example Albania, Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Jordan, Lebanon, Libya, Moldova, Montenegro, Morocco, the Palestinian Authority, Russia, Syria, Tunisia and Ukraine) and from a number of international partner countries.

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

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

About COST TU1203

The focus of COST Action TU1203 is *Crime Prevention through Urban Design and Planning (CP-UDP).* The Action is chaired by Professor Clara Cardia of the Polytechnic University of Milan, Italy, and comprises country representatives from across all European member states.

Its objective is to make a substantial advancement towards the goal of building "safe cities". Bringing together the local and undiscovered research and know-how of different European countries, the Action aims at developing innovation of knowledge and practices in CP-UDP.

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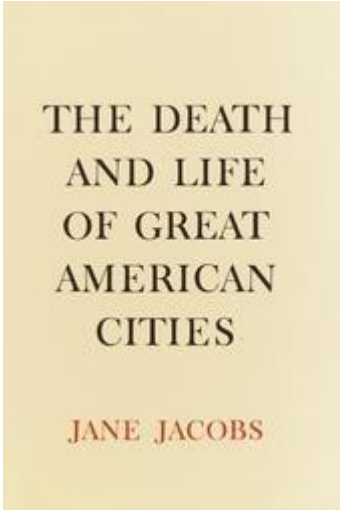
1 Introduction

In this publication, we will summarise the content of a set of CEN documents on *Crime Prevention Through Urban Design and Planning* (CP-UDP), as well as the manual *Safepolis* explaining and elaborating upon the CEN documents. These CEN documents are a series of standards (EN, ENV, TR and TS) published as official European standardization documents and thus available from each national standardisation institute. We will refer to these documents as 'standards'. The focus will be on the 'umbrella standard' CEN/TR 14383-2 on Urban Design and Planning. This standard focusses on a field of expertise which is also called Crime Prevention Through Environmental Design[1] (CPTED often pronounced as Sep-Ted) or Designing Out Crime.

This publication takes its subtitle from the widely cited book by Jane Jacobs (1961) *Death and Life of Great American Cities*. Jacobs provided a critique of the policies and fashions in urban design and planning being used at the time, arguing that they 'rejected' the city and the people who were living in communities characterized by layered complexity and seeming chaos. Jacobs wrote about what maked streets safe or unsafe. Her work is an inspiration for those involved in the development of the CP-UDP standards and the Safepolis manual that aim to make public spaces in European cities safer.



This publication tries to reconstruct the history of why and how these European CP-UDP standards were made in the decade between 1995 and 2007. By doing so, we seek to follow in the tradition of the work of the philosopher Bruno Latour. In books such as *Science in Action* (Latour, 1987) and *Laboratory Life* (Latour and Woolgar, 1979), Latour tries to go back to the 'kitchens' of researchers, engineers and scientists where great dreams are 'baked' and 'cooked' and often also sometimes 'lost'.

The work on this publication started in 2013. In addition to the authors Melissa Marselle and Ares Kalendides were involved in developing the first outline for this booklet. Participants from COST action TU 1203 from several countries contributed by researching the situation regarding standards in their country and by making SWOT analyses on the topic. Comments on earlier draft versions by Clara Cardia, Chiara Simonetti, Aleksandra Djukic, Marie-Aude Corbillé, Victoria Gibson, Francois Welhoff, Sarah Chiodi, Hein Stienstra, Pierre van der Straeten and Vasilia Trova were very valuable and are included in the text.

This study is thus a joint piece of work conducted as part of COST Action TU 1203.

All the authors of this publication were actively involved in preparing of the documents reviewed in this booklet, at one stage or another.

We like to stress that this publication is still a work in progress. This applies particularly to the conclusions and recommendations, since COST Action TU 1203 will be running up until the end of 2016.

Note 1 The widely used term CPTED was coined by C. Ray Jeffery's in his book 'Crime prevention through environmental design' (1971). Jeffery definition of this concept was a rather general behaviouristic psychological one. Timothy Crowe popularized the concept years later in the USA and Asia and focused more on the design of the build environment (Crowe,1991, revised version 2013).

2 Standards on crime prevention

"A norm is a verbal description of the concrete course of action thus regarded as desirable, combined with an injunction to make certain future actions conform to this course."
(Parsons, 1937:75)
In practice, a standard (French: *Norme,* German: *Norm*) is defined by the European Committee for Standardisation (*Comité Europeen de Normalisation* - CEN[2]) as *"a technical document designed to be used as a rule, guideline or definition. It is a consensus-built, repeatable way of doing something. Standards are created by bringing together all interested parties such as manufacturers, consumers and regulators of a particular material, product, process or service."*[3] In this booklet, we will follow this definition and use the English term 'standard'.

2.1 The contents: an environmental and design-led approach

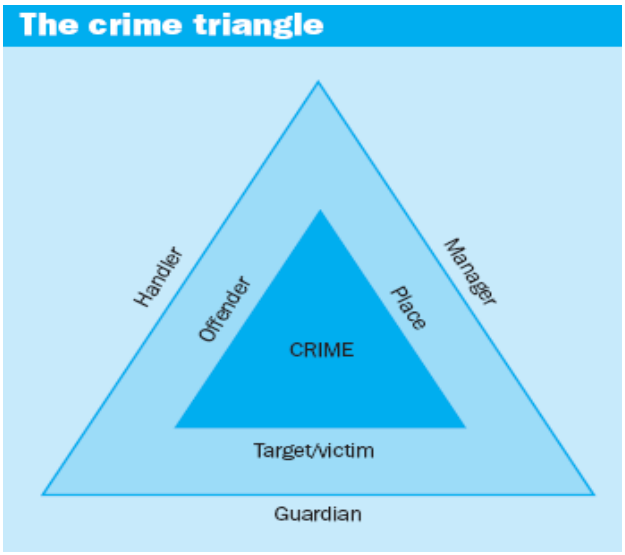
Standards are developed for quality assurance in various fields of industrial and commercial production, but are increasingly also used in services—both in the public and private sector. Standards define the characteristics of products, processes or services, and in many cases determine the design and construction of products in terms of safety requirements. In relation to crime prevention, there are several relevant European product standards. For example: the European standards EN 50130-series for alarm systems; EN 1522/1523 on bullet resistance of doors and windows; EN 1627-1629 on burglary resistance of windows, doors and shutters; EN/ISO 12543 (a European or International standard) on glass in buildings; and EN 1143-1 on secure storage units like safes and strong rooms. These product standards are very specific about security technology and hence most useful for the industry and security firms.

However, opportunity for committing crime is not contingent upon technical target hardening alone, but depends to a large extent on the social context of a situation in a specific place. Of particular significance to crime prevention is the presence or absence of observers or *'capable guardians'* (Felson, 1998). This approach reflects the *Routine Activity Approach* (Felson, 2002)[4], which basically states that the convergence of three factors determines the opportunity structure of criminogenic situations. Presented in the form of a "problem triangle", the three factors are: (i) a motivated offender; (ii) a suitable target or victim; and (iii) the absence of capable guardians. The concept of a *"guardian"* does not only refer to a police officer or security guard, but to any person whose presence or proximity discourages crime. In fact, the focus of much crime prevention is on the presence of informal rather than guardians. This relationship—termed the *"chemistry for crime"* (Felson and Boba, 2010)—was further elaborated by John Eck. Eck presented the traditional problem triangle in a slightly different way with two triangles, one engulfing the other. The main idea in prevention terms is that each element—offender, target/victim and place—is subject to supervision: *"The handler supervises the offender, the guardian supervises the*

Note 2 CEN, the European Committee for Standardization, is an association that brings together the National Standardization Bodies of nowadays 33 European countries, providing a platform for the development of European Standards in relation to various kinds of products, materials, services and processes.
Note 3 Though the English may sound a bit rusty the quote is taken from the website of CEN https://www.cen.eu/work/ENdev/whatisEN/Pages/default.aspx (visited 12-03-2014).
Note 4 Note some of the literature/references used in this booklet are of a younger age then the period in which the reviewed documents (standard/manual) were made. The ideas were often already available in more informal documents and presentations and/or earlier sources.

target/victim, and the manager supervises the crime setting. Their absence make a crime feasible. A crime occurs when the offender escapes handlers, finds targets free from guardians in settings not watched by managers." (Felson, 2008)

Figure 1: Clarke and Eck 2003



Awareness and recognition of the interrelation between offenders, targets/victims and guardians has led to the decision to draft a general type of standard that focuses on the potential for stakeholders in the urban environment to reduce crime and fear of crime. Stakeholders include: urban planners, architects and building engineers. But also local authorities, social workers and residents, and involves working in close cooperation with the police, security firms and insurers.

The elaboration of the standard on crime prevention by urban planning and design reflects the theoretical work of architectural critics and scientists interested in the built environment from the 1960s until today. A first theoretical concept which was fundamental in the making of this standard is Jane Jacobs' blueprint for a humanistic management of cities in terms of designing for an attractive street life. In *'Death and Life of Great American Cities'* Jacobs (1961) proposed mixed use urban environments—rather than mono-functional districts that were exclusively residential or commercial. Drawing on the notion of 'human vitality', Jacobs proclaimed a sort of informal, natural surveillance and *"voluntary controls among people themselves"* as the first and ultimate factor for public peace.

On the shoulders of Jane Jacobs the, the US architect Oscar Newman focused more on architectural design and building. Newman coined the term "defensible space" (Newman, 1972), which emphasizes the importance of designing the socio-physical environment by seeking to:

- Create perceived zones of territorial influences ("territoriality");
- Provide surveillance opportunities for residents and their agents ("natural surveillance");
- Influence the perception of a project's uniqueness, isolation and reputation ("image and milieu").

Like Jane Jacobs, Newman held that crime flourished in situations where housing design prevented residents from exercising informal control over their environment. Informal control, Newman argues, springs mainly from natural surveillance coupled with a feeling of territoriality deep within the resident's soul: *"see what's happening there . . . stop those blokes from violating my environment"!*

In Newman’s concept of Defensible Space, three levels of intervention are outlined: the physical; the social and the perception of urban settings. This general assertion has a number of practical consequences fro policing, urban planning and social area management—both in terms of their individual contributions and cooperation between these professional fields.

The CEN standards in the 14383 series—and the umbrella standard CEN 14383-2 in particular—are based on these ideas about the prevention of crime and fear of crime. In fact, the theoretical foundation of these standards can be easily traced back, since at one of the early meetings (Delft 1997; see table 2) a paper was presented on relevant theories (Van Soomeren 1987/1996). This paper distinguished between: the Chicago School; the Romantic School (Jane Jacobs, Elisabeth Wood); Oscar Newman the Young (1972); Oscar the Purified (1980); the Situational Approach (UK 1980, Ronald Clarke); the Spatial School (USA 1980, Paul & Patricia Brantingham, 1980); and the 'Rock Hard School' (Target Hardening and Security, worldwide since 10.000 BC).

Scheme 1: the ultimate CPTED summary scheme – Paul van Soomeren (1987/1996:19)

School	Chicagoschool USA; 1920	Romantic school USA; 1961	Newman the Young USA; 1972	Newman the Purified USA; 1980	Situational approach UK; 1980	Spatial school USA; 1980	Rock hard school Worldwide since 10000 8C
Authors	Shaw and McKay	Jacobs, Wood	Newman	Newman	Clarke, Mayhew and others	Brantingham and Brantingham and others	
Key work	Juvenile Delinquency and Urban Areas	The Death and Life of Great American cities	Defensible space	Community of interest	Designing out crime	Environmental criminology	
Area of Interest	Residence of juvenile offenders	Unsafe city streets. Crime site in relation to surrounding buildings	Architectural design of unsafe estates. Physical possibilities for control	The physical setting of social communities	Crime specific Criminal acts resulting from offenders meeting or seeking opportunities. Physical and social environment	Analysis of the location of crimes, to sort out patterns in the 'where, when and how' of crime	Physical strength of objects or parts of buildings
Main questions	Where do Juvenile offenders live? Why do they live there?	How to give city streets good crime preventional qualities?	Does a different housing design gives residents possibilities for exercising informal control over their environment?	See: Newman 1972	How to reduce opportunities for offenders?	Where does crime occur? Why there?	How to prevent (by physical means) people from breaking or demolishing an object or a building
Answer/ theory	Where: Zonal model of urban form (Burgess/Park). Highest number of delinquents living in the concentric zone adjacent to the central business district (zone of transition/slums). Rates declining with increasing distance outwards. Why there: Social disorganization. Youth learn criminal behavior from peers.	1. A clear demarcation between public and private space. 2. Eyes on the street (eyes of residents and eyes of people passing by). Buildings orientated to the street. 3. Streets must be busy and used continuously. Night shops, pubs, bars, etc. can create late hour activity.	Defensible space – natural surveillance coupled with residents feelings of territoriality	Informal control will flourish in a residential environment whose physical characteristics allow inhabitants to ensure their own security. Community of interest (grouping of life-styles)	Prevention strategies are different for each type of crime. In General: 1. Target hardening 2. Target removal 3. Removing the means to crime 4. Reducing the pay-off 5. Formal surveillance 6. Natural surveillance 7. Surveillance by employees 8. Environmental management	Without offenders no crime. Offenders make rational choices. Attention has to be paid to the decision making process of an offender which is time/spatially constrained: offenders prefer to operate in areas they know. Crime risks highest along movement paths of offenders and on borderlines of districts where a lot of offenders reside	Target hardening and urban alarmsystems. Strengh of the target has to keep pace with: • The offenders profit when he succeeds after all (Fort Knox high profit -> this target must be quite hardened? • Time needed to react (police, neighbours, employees, etc)
Critique/remarkt	Research in Europe showed totally different pattern of residence. Danger of ecological fallacy	Research proved Jacobs 'sale streets' to be unsafe! More people – more trouble (especially pubs/bars). Physical determinism. See also Newman critique	Changing the physical environment does not necessarily result in different response to crime. The offender is neglected: how does he perceive D.S.; there are always ways to avoid surveillance. Methodological errors in research	Again: too much physical (or architectural) determinism. Offender still neglected. Strange: Newman 1980 causes little debate; is neglected or unknown in most European countries.	In the eighties the opportunity-focused Situational approach and the Spatial school become strongly intermingled. See e.g. Clarke and Cornish 1985: Criminal behavior is seen as the outcome of the offender's broadly rational choices and decisions	See: Situational approach	Displacement of crime. Creates Bunker environment. Target hardening can promote fear of crime
Most useful application	Preventing youngsters from initial involvement in crime	Reduction of fear of crime by promoting community file	Creating better possibilities for natural surveillance and thus reduce feelings of insecurity. Effects on offenders seem to be at best moderate	See: Newman 1972	Preventing a specific form of crime in a very practical (manageable) way. Fear of crime is hardly incorporated in the theory	Predicting which areas or routes are at risk; modelling offender's decisions by physical environmental changes makes rational crime policy (displacement policy) possible	Preventing victimization in particular case

Interestingly, the literature that laid the foundation for the European CPTED/CP-UDP standards some 20 years ago (see scheme 1 above[5]) is still the most influential and most used today. In a survey among 25 countries participating in the EU COST Action TU 1203, each country was asked to present the top ten most influential CPTED book-titles in their country[6]. Jane Jacobs, Oscar Newman, C. Ray Jeffery, Patricia and Paul Brantingham all made it into the top ten—only to be 'defeated' by Timothy Crowe 'Crime prevention Through Environmental Design' (1991, revised 2013), who achieved 'first place'. Also striking about this European CPTED listing is that large number of books and documents were mentioned only once and the CEN standards in the 14383 series were not mentioned at all. Since all authors listed are from the USA, the general picture gives the impression that standardisation in Europe is mainly a US business.

2.2 Process approach

The new design-led and environmental approach to crime prevention has been connected with a managerial approach according to the international standards on quality management (ISO 9000 series). The ENV 14383-2 used the (then) new ISO 9001:2000 as a reference (of which drafts were already available at the end of the 1990s). The 2000 version of ISO 9000 represented a radical change in thinking by focusing on the concept of 'process management', which was defined as the monitoring and optimization of a company's goals, tasks and activities, instead of just inspection of the final product. Earlier versions of ISO 9000[7] were often ridiculed because of their narrow focus on end results, as opposed to overall goals. It was commonly joked that: "these heavy weight concrete life vests were all ISO 9000 certified". The 2000 version focused on the overall quality goals, demanding involvement from senior management in order to integrate quality into the business system. It also sought to improve effectiveness via process performance metrics: numerical measurement of the effectiveness of goals, tasks and activities. In this way, expectations of continual process improvement and tracking the ultimate business goals—customer satisfaction—were made explicit.

The ISO 9001:2000 standard and later on also the standards on sustainability (ISO 14000 series) were thus *'process-oriented'* with a process defined as *"a set of interrelated or interacting activities, which transforms inputs into outputs"*[8]. Sub clause 0.2 of ISO 9001:2008 states: "The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management to produce the desired outcome, can be referred to as the 'process approach'". The ultimate goal and desired outcome in the case of the ISO 9000 series standard may be summarized as 'a happy client' (i.e. enhancing customer satisfaction by meeting customer requirements). In the case of the newer ISO 14000 sustainability standards, the desired outcome is having a good environmental management system in place.

Even though these standards are voluntary, organisations find it hard to ignore the compliance with world-wide ISO 9001 and ISO 14001 standards when taking part in national or international trade and/or delivering national or international services. An organisation implements—and often also advertises—these standards because they agree it will make (management) processes more effective, efficient and transparent. But organisations are often also 'voluntarily forced' to implement these standard—and comply and pay for external auditing once a year—because their

Note 5 See also Benbouzid 2011 and Stummvoll 2008 and 2012
Note 6 This work was done by Bo Grönlund of Working Group 1 of COST action TU 1203 in 2013/2014. See the COST TU 1203 WG-1 document/booklet
Note 7 The 1987 and 1994 versions of the ISO 9000 series
Note 8 Quote taken from the ISO 2008 document ISO/TC 176/SC 2/N 544R3

clients ask for such standards. When an organisation is not certified, its competing power in the market for products and services is diminished.[9]

Checklist versus coaching/counselling approach

As Van Soomeren and Woldendorp (1997) showed, two process approaches can be identified in relation to giving CPTED advice to architects, planners and designers:

- The checklist approach
- The counselling approach

In the **checklist approach,** energy is devoted to the production and validation of guidance and lists summarising 'good' and 'bad' design features, judged from the crime preventive and fear reducing point of view. Checklists are then disseminated to—or even forced upon—planners and designers. Often their reaction is negative because they have other priorities and they also aspire to achieve their own creative design goals. Planners and architects appeared to look down on those pessimistic crime fighters speaking a completely different language of burglary, robbery and fear. The checklist approach is often only successful in relation to small-scale and technical solutions like target hardening and lighting. These types of technical requirements can also easily be included in building legislation and codes—as has been done in instance, the Netherlands[10]. On the higher scale levels, like urban/district planning, neighbourhood design and landscaping, it still proves difficult—if not impossible—to mold crime prevention into a list of simple "dos and don'ts".

The **counselling approach** often proves to be more successful in relation to urban/district planning. In this approach, crime prevention advisors with a strong academic and practical background in planning and architecture work within the design team. What they actually do is rather simple: they look at the 'bright' designs from the 'dark side' of fear and offending. Thus, the advisors act to counterbalance the creative optimism designers must have to do their job.

This **counselling approach** is costly though, because it depends upon the availability of flexible crime experts able to speak a design and planning language. Unfortunately, police officers trying to do this job all too often lack the knowledge and expertise to come up with new and better solutions from a crime preventive. Police officers may also strictly hold on to their checklists or training courses. If the coaching/counselling approach is really pursued in a country or continent, it may open the way to another form of standardisation: the standardisation of the services delivered by special CPTED/CP-UDP coaches/counsellors (and/or the standardisation of their education). This is aim of the International CPTED Association certification scheme, which enables a person to be officially named 'certified CPTED practitioner' after that person has successfully completed a test[11]. This approach may open up opportunities for universities that could also educate official CPTED/CP-UDP practitioners.

2.3 Content and process: the CEN 14383 series

Taken together, contents (environmental and design-led crime prevention) and processes (as defined and used in standards for quality management and sustainability) are the basic elements that

Note 9 Of course this goes especially for profit organisations and less for non profit organisations, al though more and more non profit organisations are also forced to listen to market issues like client satisfaction and output/outcome requirements set by their managerial and political bosses.

Note 10 With very positive results. Using burglar-proof windows and doors in new residential construction makes homes 25% less likely to be burgled than comparable new homes without those features. See Vollaard and Van Ours, 2011.

Note 11 See the site of the ICA www.cpted.net.

shape the series of European standards on crime prevention by urban planning and design. Today the series comprises 8 standards in total:

Table 1 The CEN 14383 series of standards

CEN 14383 series:
1.Terms and definitions (EN 14383-1:2006)
2. Urban planning (ENV 14383-2:2003 superseded by TR 14383-2:2007)
3. Dwellings (TS 14383-3:2005)
4. Shops and offices (TS 14383-4:2006
5. Petrol stations (TR 14383-5: 2010)
6. Safety in schools (not yet available)
7. Facilities for public transport (TR 14383-7:2009)
8. Protection of buildings and sites against criminal attacks with vehicles (TR 14383-8:2009)

The separate documents were developed in different Working Groups (WGs) of the Technical Committee (TC 325) of CEN and together comprise one large volume of guidelines on “Crime Prevention by Urban Planning and Building Design”.
This study focuses particularly on part 2 – urban planning, although the other parts that concentrate on specific types of building and/or problems shall not be overlooked— as they form parts of the whole.

2.4 In sum

The series of CEN standard on Crime Prevention by Urban Design and Planning (CP-UDP) are issued to help and encourage the inclusion and consideration of safety and security issues in urban planning and design focusing on crime, anti social behavior/incivilities and fear of crime/feelings of insecurity. The CEN 14383 series was—and still is—a means to this end, from terminology/definitions (1) and the 'umbrella standard' on urban planning and design (2) to the series of following specific standards for types of buildings (dwellings, shops, offices, public transport facilities, petrol stations, schools) and problems (ram raiding).
The umbrella standard CEN/TR 14383-2 aims to combine questions of “contents” and “process”, and:

- Helps to develop “strategies and measures which may be implemented to prevent and reduce crime problems in a given environment”
- Gives advice on “how to follow an effective and efficient procedure in which stakeholders should choose the strategies and measures most effective and feasible to prevent and reduce the crime problems as defined by the stakeholders" (CEN/TR14383-2:2007:7).

3 The making of …

The development of the European Standard on Crime Prevention by Urban Planning and Design (CEN/TR14383-2) has a long history. This is partly due to the given bureaucratic procedure prescribed by the CEN, but it is also attributed to the sometimes difficult process of finding a consensus between experts—architects, planners, police, security organisations and civil servants —from about 30 different European countries in the Technical Committee and the Working Groups. The development of the European Standard was fuelled by many administrative, political and ideological controversies[12], and can be broken down in three stages:
(1) Launch of the Technical Committee CEN/TC325 in 1995
(2) Development of a pre-standard (ENV) from 1996 until 2002 (or 2003)[13]
(3) Revision of the Standard until 2007.

3.1 The launch of TC325

In the United Kingdom, the growth of crime prevention policies, academic research and theorising on crime was driven by the Home Office, the police and several academic criminological research institutes at universities. At the time of experimenting with strategies and programmes for crime prevention in local developments one scheme—*Secured by Design*—has been established as the major national police initiative that has prevailed until today. Founded in 1989, Secured by Design (SBD) is a police initiative that employs a group of police specialists—Architectural Liaison Officers and Crime Prevention Design Advisors—who are trained to consult local authorities, architects and the construction industry. With this experience, it was only a small step for the United Kingdom to get involved in the development of the European Standard from the very beginning. In the mid-1980s, the British Standardisation Institute (BSI) was the first Standardisation Institute in Europe to publish the crime prevention standards on dwellings, street layout (preferring cul-de-sacs[14]), and on shops and offices.

In the beginning of the 80th crime prevention and insurance experts in the Netherlands were also working on standards for e.g. burglary resistance (NEN 5088:1983 and NEN 5089:1983). The NEN 5089 standard was based on testing methods of the Swedish Theft Prevention Association (SSF, Svenska Stöldskyddsföreningen) and Nordic Standards which institutes were – according to the Dutch expert[15] - years ahead in standardization.

Independent from the British and Dutch efforts, Denmark was the next European country to develop crime prevention guidelines as national Standards, although under different circumstances. In 1995 representatives from the Danish Engineering Society instigated a new way

Note 12 For a vivid summary in the scientific philosophical tradition of Bruno Latour (1987) see also: Benbouzid, B. (2011). (http://www.veilig-ontwerpbeheer.nl/publicaties/la-prevention-situationelle/view?searchterm=bilel)
Note 13 CEN approval of the ENV 14383-2 November 21st 2002 (quote from the cover: "This European Prestandard (ENV) was approved by CEN on 21 November 2002 as a prospective standard for provisional application."). Strange fact though is that the official publication date is set more than a year later at December 2003. See for a copy of the cover paragraph 3.2 below
Note 14 To prevent burglary which was a big problem in the UK.
Note 15 Information from Hein Stienstra, crime prevention expert TBBS (crime prevention insurance institute).

of thinking about standardisation of crime prevention in Europe[16]. In cooperation with the Danish Crime Prevention Council, the Danish Building Research Institute and some architects, the Society developed two national crime prevention standards: the DS/R 470 (NP-204-R) on prevention of violence and vandalism (1990); and the DS 471 (NP-206-N) on burglary (1991), which also included a more general chapter on lighting. The Danish standards were different from the BSI standards: instead of taking different building types and different functional use as the starting points, the Danish Standards started out from situational factors.[17] In the end, the Danish Standards were disseminated and approved by 20 or more state agencies and NGOs, including the ones responsible for the administration of the planning law and the building regulation. The Danish Standards were translated into English and German, and it was seen as a national success. This fuelled the Danish ambition to further improve the standards through international cooperation. Hence the Danish experts approached CEN in order to establish a European committee to strengthen the support for the use of the standards throughout Europe.
The Danes invited experts from the Netherlands and the United Kingdom to establish the Technical Committee 325 (TC325) in the European Committee for Standardisation (CEN). Their aim was to focus on safety and security in urban developments in a wider sense. Apart from promoting the use of technical products in the building laws, a European standard should be established that provides policy guidelines to tackle crime in the process of urban planning and design.

Motives

With hindsight, it is interesting to observe that the representatives from Denmark, the Netherlands and the United Kingdom had different motives for helping develop this European Standard. The Dutch Ministry of the Interior and the Dutch police promoted the *Dutch Police Label for Safe and Secure Housing*—an accreditation scheme similar to the British SBD-scheme—which was already in place in the Netherlands in 1995[18]. Next to the 'Police Label' a more general scheme— the 'Safety Effect Report'—was also operational from the early 1990s. This scheme was designed to provide a deeper insight into the safety risks in spatial and building plans. Even before the actual construction takes place, possible risks are mapped out and safety measures are suggested[19]. Whereas the Danish experts wanted to some degree export their guidelines to Europe, the Dutch officials from the ministry of Interior took a more defensive position. The officials wanted to protect their schemes against possible European developments that could hamper the Dutch instruments. This is because there was a chance that a European standard (EN) would supersede national standards, invalidating those in conflict with the European one.

Despite these different motivations, a close cooperation between crime prevention experts from these countries was successfully established. It was acknowledged that the design and building sector would become more and more international, with mandatory Europe-wide tenders for urban planning and architectural design-projects. The aim was for requirements for the consideration of crime prevention issues in urban planning to be captured in a series of European

Note 16 At the time there was no separate Standards Institute in Denmark and the standardisation work was more tightly connected to the general professional activities within the Engineering Society, which meant that some members of the large engineering consultancies were already on board.
Note 17 In 1983 Ronald Clarke (then UK Home Office) defined the core of situational crime prevention focusing on the event of the crime – the immediate physical and social settings, as well as wider societal arrangements –, instead of the offenders. Ron Clarke summarizes Situational Crime Prevention as the science and art of decreasing the amount of opportunities for crime using "measures directed at highly specific forms of crime that involve the management, design, or manipulation of the immediate environment in as systematic and permanent way" (Clarke, 1983:225)
Note 18 See: Jongejan A. and Woldendorp T. (2013): A Successful CPTED Approach: The Dutch 'Police Label Secure Housing'.
Note 19 The 'Safety Effect Report' was at first developed in 1994 as the 'Crime Effect Report'; for a recent version in English see: http://www.hetccv.nl/binaries/content/assets/ccv/instrumenten/veiligheidseffectrapportage/ver-engelstalig.pdf. (6.3.2014).

Standards for Crime Prevention by Urban Design and Planning. The principles and guidelines developed would be used to support global construction firms and architectural offices in all planning proposals in Europe.

3.2 The development of the pre-standard ENV 14383-2 (1996 – 2002)

The general character of the work in the following two stages after the launch in 1995 followed an iterative process of writing-checking-talking-rewriting-checking-talking-rewriting-etc. Representatives from participating countries (usually the chairman of the Working Group) prepared a text, which was circulated to the other participants in the Working Group for review prior to a meeting. Meetings were held in different European cities, hosted by the National Institutes for Standardisation in cooperation with local practitioners either from the police, architects, planners or the city council, who organised field trips to illustrate how CPTED ideas can be applied in practice. At the meetings, the partners discussed principles, comments, addendums, rejections and the exact wording in the standardisation document. After a meeting, it was again mainly the chairman of the Working Group who included the suggestions made during the meetings in the text, and a new version was sent out to be reviewed. This procedure was constantly repeated to improve the Standard until all —or most—participants supported the result, and the document could then be circulated and put to a formal vote, in which all CEN members say 'yes' or 'no' to the text of the standard.

Between 1996 and 2001 several countries joined the process one after another: France (June 1997), Sweden (1997), Austria (October 1997), Italy (February 1998), Spain (June 1998), Belgium (December 1998), Switzerland (1998), Estonia (February 2000). Several efforts to involve Germany failed, and Germany has officially remained opposed to the idea of European standardisation in the field—a position still maintained. In each of the participating countries there were 'mirror committees' and/or support structures also talking-checking-talking-checking-etc.

Table 2: Expert meetings 1995 - 2001

TC325 meetings and WG2 meetings 1995 - 2001[20]:

Summer 1995:	Copenhagen: Launch of CEN/TC325: WG1+WG2+WG3
Oct. 1996:	London: Appointment of the Netherlands as chair and secretary of WG2
Feb/March 1997:	Delft
June 1997:	Paris
23/24 Oct. 1997:	Vienna
16/17 Feb 1998:	Den Haag
11/12/13 March 1998	Milan
June 1998:	Barcelona
Sept. 1998:	Stockholm
Feb. 1999:	Paris
March 1999:	Brussels
Sept. 1999:	Amsterdam
Feb/March 2000:	Tallinn

Note 20 Meetings on the other standards (terminology and the several building types) are not included in the table. There is no overview available but these working groups also had meetings on a regular basis.

June 2000:	Copenhagen
2/3 Nov. 2000:	Barcelona
8/9 March 2001:	London – Netherlands last time chair and secretary
2002/2003:	Formal vote of 20 CEN countries and publication of ENV14383-2:2003

Under the leadership of the Netherlands,[21] a document was elaborated in Working Group 2, and after 5 years of deliberation, the Standard on Crime Prevention by Urban Planning and Design was distributed for a formal vote. The result of that vote (see table 4 below) showed: Austria, France, Sweden[22] and Switzerland opposed to the document; Germany had declared no interest in the standardisation process in relation to this subject; and Belgium, the Czech Republic, Finland and Portugal abstained from voting (and Ireland never replied). In 2002, the Standard was approved with the majority of votes (10 acceptances, 4 rejections, 6 abstentions). The results of this vote are in many respects remarkable: Denmark, Greece, Iceland, Italy, Luxembourg, Malta, the Netherlands, Norway, Spain and the United Kingdom voted in favour of the ENV-standard. Some countries voted for the standard, although they had not contributed to the development. On the other hand, Austria and France, who were involved in the development, rejected the Standard in the final vote. In these cases, early enthusiasm for the standard at some point turned into resistance. This was due to changing political constellations in the particular institutions - in city councils, ministries, the police and urban planning departments - which appointed representatives to participate in the Technical Committee 325. For example, in France a battle was fought between the Ministry of the Interior (with representatives participating almost from the start) and the Ministry of Infrastructure (*L'equipement*), whose representatives joined later in the process (Benbouzid, 2011, pp. 176 – 290)[23]. In 2003, the Standard was published by CEN as the European Pre-Norm ENV14383-2.

Note 21 Chair DSP-groep (Amsterdam) and secretariat by the Dutch standardisation institute NEN (Delft).

Note 22 Sweden became a member of the EU in 1995. When the Swedish government realized that the ENV might interfere with their Planning Law, which according EU treaties is a national affair, they voted against the Standard. It was more a general legal decision, than a decision about the actual content of the ENV. Almost at the same time as the official vote for the ENV, the Swedish government in 2002 initiated a renewal of the Swedish planning and building law, a work that only finished in 2010, so they could not even know if the ENV would create problems in the future or not. http://sv.wikipedia.org/wiki/Plan-_och_bygglagen and SOU 2005:77

Note 23 Benbouzid (2011:177): "…une guerre froide des paradigms au gouvernement".

EUROPEAN PRESTANDARD

PRÉNORME EUROPÉENNE

EUROPÄISCHE VORNORM

ENV 14383-2

December 2003

ICS 13.310; 91.020

English version

Prevention of crime - Urban planning and design - Part 2: Urban planning

Prévention de la malveillance - Urbanisme et conception des bâtiments - Partie 2: Urbanisme

Vorbeugende Kriminalitätsbekämpfung - Stadt- und Gebäudeplanung - Teil 2: Stadtplannung

This European Prestandard (ENV) was approved by CEN on 21 November 2002 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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Ref. No. ENV 14383-2:2003 E

3.3 From a European pre-standard to a Technical Report (2003 – 2007)

With the completion of the work and the publication as a pre-standard (ENV14383-2), the process came to a standstill for a considerable time. First of all, the process entered the experimental stage for testing the standard for its usability and applicability in the member countries, and it was thought by many that there was no need in most countries to meet and discuss for a few years[24]. Secondly, most organisations and ministries that had funded the leading experts in the Technical Committee TC325 and the Working Group 2 considered the process to be finished and stopped the financial support for further participation in CEN. This situation led to the resignation of the chairman and secretariat of the Working Group 2 (Netherlands). Denmark had partly to withdraw too, because the funding from the Ministry of Justice to the Danish Standards Institute to work in the CEN/TC325 stopped after the defeat of the central-left government in the 2001 election.

In 2003, the Swiss Standardisation Institute (SNV)—though voting against the ENV14383-2 in the year 2002—took the chair of the overall Technical Committee TC325. Just as surprising, France provided the chair (convenor) to Working Group 2 on 'Urban Planning" to invigorate the work. However, instead of guiding the experimental period, the Standard was going to be modified and re-edited again and a new process of deliberation was launched. Subsequently, the initiative and the enthusiasm to further develop the standard on Crime Prevention by Urban Design and Planning shifted in Europe from the North West to the South. Denmark, the Netherlands, the United Kingdom, who were the initiators and drivers of the work in the first stage of the development of the Standard, more or less bailed out. France, Italy, Belgium, Spain and Switzerland took the lead[25]. All other countries were passive observers, who rarely or never attended meetings, nor interfered in the process. Austria, the Netherlands, the United Kingdom and Sweden had withdrawn completely from the Working Group 2.

Table 3 TC-meetings and WG2-meetings 2003 - 2007

20/21 March 2003:	TC meeting in Watt, Regensdorf, Switzerland
19/20 April 2004:	TC meeting in Vienna, Austria
25/26 October 2004:	WG2 meeting in Zürich, Switzerland
7/8 February 2005:	WG2 meeting in Leuven, Belgium
23/24/25 May 2005:	TC and WG2 meeting Paris, France
24 October 2005:	TC and WG2 meeting Rome, Italy
27/28 March 2006:	WG2 meeting in Copenhagen, Denmark
15 May 2006:	TC meeting in London, UK

In 2007, after a number of revisions and amendments, the new version of the Standard was (again) sent to a formal vote, and this time 12 countries voted in favor of it (Austria, Belgium, Czech Republic, Denmark, Finland, France, Lithuania, Norway, Romania, Slovakia, Sweden and Switzerland). Only Germany voted against it. Italy and the United Kingdom abstained from voting, which is rather astonishing because British experts had been so active in drafting the ENV-standard and Italy was very active in the second (TR) phase. Fifteen CEN member states did not

Note 24 According to CEN rules an ENV (pre-standard) had an official experimental period of three years before the final decision had to be made whether to upgrade the standard to an official EN, or to downgrade it to a TS (Technical Specification) or TR (Technical Report). See also the text on the reproduced cover of the ENV above.
Note 25 With Denmark to some degree playing the role of go-between.

respond to the vote: Bulgaria, Cyprus, Estonia, Greece, Hungary, Iceland, Ireland, Latvia, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia and Spain. The abstinence of the Netherlands (former chair) in this formal vote obviously shows that they had lost interest after the revision of the Standard (see table 4). [26]

Table 4 May I have your votes please … results formal votes CEN 2002 and 2007

STAGE 1 Launch DK*, NL, UK	STAGE 2 Active participation 1996 – 2001 NL*, DK, UK, F, Sweden, A, I, Spain, B, Swiss, Estonia			STAGE 3 Active participation 2003 - 2007 F*, I, DK, Spain, B, Swiss, N		
	Voting results 2002			**Voting results 2007**		
	Acceptance	**Rejection**	**Abstention**	**Acceptance**	**Rejection**	**Abstention**
	Italy	Austria	Germany	Austria	Germany	Italy
	UK		Belgium	Belgium		UK
	Netherlands		Czech Rep	Czech Rep		
	Denmark		Portugal	Denmark		
	Malta		Finland	Finland		
	Greece	France		France		
	Spain			Lithuania		
	Norway			Norway		
	Iceland			Romania		
	Luxemburg			Slovakia		
		Sweden		Sweden		
		Switzerland		Switzerland		
	10	**4**	**5**	**12**	**1**	**2**
No reply:	Ireland			BG, CY, EST, GR, H, IS, IRL, LV, LUX, M, NL, PL, P, SLO, Spain		
CEN members	20			30		

The revision of the pre-standard after 2003 shows several changes that are indicative for the complex debate about the practical implementation of the CP-UDP or CPTED idea in general. There are two decisions on changes that are important.

Decision 1: A checklist instead of problem-solutions

In the 2002-version of the standard, Annex D—an informative annex[27]—consisted of a comprehensive matrix covering three dimensions:

- Strategies and measures (respect the structure, liveliness, mixed status, visibility, accessibility, territoriality, surveillance, robustness, etc.) were given for
- a specific set of crime problems (fear of crime, burglary, vandalism, violence, car crime, theft and arson) happening within
- specific types of environment (residential, schools and youth facilities, commercial buildings and offices, shopping and retail, parks and public gardens, leisure centres, public transport and parking facilities, and town centres and public space).

The critique on this matrix in the ENV annex D was not only its complexity, but more importantly, the fact that specific suggestions for solutions were given to certain problems in certain kinds of

Note 26 The number of CEN countries changed in between the 2003 and 2007 vote. We might therefore also make a 'vote comparison' in percentages. All in all the 2007 TR 14383-2 was favored by 40% of all 30 CEN members (rejected by 3%, abstained 7%, no reply 50%), while the ENV 14383-2 was favored by 50% of all 20 CEN members (rejected by 20%, abstained 7%, no reply 3%). Note these percentages are only a rough indication. The process of formal voting uses weighted votes. Big countries like Germany, UK and Poland have a higher voting weight than small countries like Estonia and Malta.

Note 27 Annexes in the ENV14383-2 were informative, which means that the annex only presented explanations, suggestions and possible solutions.

places. The French delegates in particular, challenged this approach, arguing that the precise recommendations were too narrow and deterministic to be applied in all European countries. This matrix would give preferences to certain problem-solutions that could not be assumed to be valid and applicable in all cultures and societies. Thus, the matrix in Annex D was transformed into a "Safety Audit Framework". Namely, a checklist of questions regarding various aspects of safety in a neighbourhood in order to support users of the Standard in a kind of "self-test". In total, the new "Safety Audit Framework" in Annex D contains 108 questions classified into the categories that correspond with the structure used in the Standard: (1) Urban planning strategies, (2) Urban design strategies, (3) Management strategies. Replacing the matrix with questions has enhanced the analytical character of the Standard, giving it a more consultative appeal.

Decision 2: From European standard to Technical Report

The most crucial change in the development of the standard was made in a resolution at the meeting of Working Group 2 in Paris in May 2005, where the delegates decided to abstain from the idea of working towards a European standard (EN). The experts came to the conclusion that it should not be recommended to develop a standard on Crime Prevention by Urban Design and Planning in the form of a European EN standard. Instead, the document was changed from the status of a Pre-Norm (ENV) to a Technical Report (TR). A Technical Report is[28] *"an informative document that provides information on the technical content of standardisation work. It may be prepared when it is considered urgent or advisable to provide additional information to the CEN national members, the European Commission, the EFTA Secretariat, other governmental agencies or outside bodies." (…) "No time limit is specified for the lifetime of TRs, but it is recommended that they are regularly reviewed by the responsible Technical Body to ensure that they remain valid."*

A technical report does not force EU countries to change their national standards in case of conflict with the TR, as is the case when an ENV is upgraded to an EN: *"It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached."* (ENV 14383-2:2003:cover page). Due to the decision to change the status of the ENV to a TR, this moment for checking and changing national standards never occurred. A TR has no impact on national standards whatsoever.

In the foreword of the CEN/TR 14383-2, the decision to change the status from ENV to a TR is officially explained by the following text: *"This document supersedes ENV 14383-2:2003. The status of Technical Report was proposed to give all countries the opportunity to compare experiences and to harmonise procedures".*

Note 28 Quotes from CEN website https://www.cen.eu/work/products/TR/Pages/default.aspx (visited 28-03-2014)

4 Structure and contents of the Standard CEN/TR14383-2

4.1 Contents and process

The work in the Technical Committee TC325 of CEN has been structured in different working groups. One group of experts focused on the basic “terms and definitions” (WG1: terminology); a second group elaborated guidelines for “urban planning” (WG2), whereas detailed design guidelines for specific functional elements of a city (dwellings, shops, offices, public transport system, petrol station, schools) were worked out separately in other working groups. The documents that are elaborated in the different working groups were subsequently compiled into one large volume of guidelines on “Crime Prevention by Urban Planning and Building Design”[29]. The standard on terminology and umbrella standard on urban planning and design might be seen as the basis for the development of more specific standards on dwellings (part 3), shops and offices (part 4), petrol stations (part 5), schools (part 6 - not yet finished), public transport facilities (part 7), protection of buildings against criminal attacks with vehicles (part 8). In contrast to other security standards (security doors, alarms systems, etc.), the umbrella standard CEN/TR 14383-2 is not about products, but features guidelines to support policies in design-led crime prevention. In about 50 pages, the standard "gives guidelines on methods for assessing the risk of crime and/or fear of crime and measures, procedures and processes aimed at reducing these risks.” (CEN/TR14383-2:2007, p. 9). Basically, the standard covers two topics:

> **“Contents”** refers to the question: Which strategies and measures *may* be implemented to prevent and reduce crime problems in a given environment.
> Note the word 'may' (and not shall or should) is used deliberately here because the actual choice for certain strategies and measures can only be made by the stakeholders, and in the end by a responsible body.
> **“Process”** refers to the question: how to follow an effective and efficient procedure in which stakeholders should choose the strategies and measures most effective and feasible to prevent and reduce the crime problems as defined by the stakeholders.
>
> (CEN/TR 14383-2:2007:7)

The standard does not give prescriptions on how to incorporate security technology, but provides policymakers with strategies. At the same time, it suggests to work according to the implementation process of the ISO 9000 series of management standards.

Note 29 The authors of this COST study seriously doubt that the 8 CEN documents in the 14383 series are well enough coordinated and harmonised in their theoretical foundation and terminology/definitions as well as in the process approach followed. In short: eight flowers do not yet make a wonderful bouquet. We'll elaborate upon this critique in the concluding chapter of this COST booklet.

TECHNICAL REPORT
RAPPORT TECHNIQUE
TECHNISCHER BERICHT

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Prevention of crime - Urban planning and building design - Part 2: Urban planning

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Vorbeugende Kriminalitätsbekämpfung - Stadt- und Gebäudeplanung - Teil 2: Stadtplanung

This Technical Report was approved by CEN on 21 July 2007. It has been drawn up by the Technical Committee CEN/TC 325.

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4.2 Structure

The European standard CEN/TR 14383-2 is structured in the following way:

- Preliminary questions about the area, its crime problems and the stakeholders
- Urban planning and design guidelines
- The implementation process based on EN ISO 9001
- Annex A: Crime Assessment
- Annex B: Crime Review
- Annex C: Fear of Crime
- Annex D: Safety audit framework of an urban project

4.2.1 Preliminary questions: where, what and when?

In this comprehensive document, guidelines on crime prevention by urban planning and design are given for all types of urban environments. The standard proposes a strategic assessment of a specific area ("where?"), different kinds of safety and security problems ("what?"), and different stakeholders who can or should be involved in the management of insecurity ("who?").

Where?: the identification of the exact location of the area (by co-ordinates, and/or defining boundaries, and/or postal codes, etc.) and the type of area; this area is either an area comprising an existing urban fabric of buildings and streets/roads or a planned (new) area;
What?: the first and general identification of the crime problems occurring in this existing area, or the future crime problems that may occur in this new area, as well as the propensity of this area toward attracting crime and incivilities, anti-social behavior and generating fear of crime;
Who?: the identification of the stakeholders involved in defining the crime problems more precisely, assessing or reviewing them in more depth and implementing/executing the measures to prevent and / or reduce the crime problems.

(CEN/TR 14383-2:2007, p10)

In this section of the standard, a matrix shows the *"levels at which action can be taken to improve security in the built environment".* A number of suggestions are made to combine the specific location-types (buildings, public spaces, neighbourhood, land use and infrastructure) and key-players (owners and contracting authorities, specialists, residents and users) in suitable actions for safety planning and security management. The level of intervention can range from a simple improvement of routine security actions without physical intervention to refurbishments, upgrading and re-design of the layout of urban areas. For example, police and shopkeepers can simply decide to increase their attentiveness and alertness to suspicious situations and inform each other on the occurrence of incidents. On a higher, more complex level of intervention, it could be decided to increase informal social surveillance by re-designing the layout and by planning shops, banks or businesses with windows facing the street in the plinth of buildings to maintain the continuity of pedestrian flows and social vitality of the neighbourhood. However, this needs to be decided in a multi-agency partnership approach between the municipality, architects and planners, housing associations, commercial stakeholders, police and representatives of the local civil society.

The level of intervention depends on the assessment of the 'crime problems' (the 'what' mentioned above), which can be classified as (1) criminal offences (including burglary, assault, robbery, car crimes, theft, arson, etc.), (2) anti-social behavior and minor conflicts (minor vandalism, graffiti, noise, aggressive begging, illegitimate use of street furniture, neighbourhood conflicts, etc.)[30], and (3) fear of crime and feelings of discomfort linked to characteristics of the area (poor lighting, isolation, intimidating behavior, etc.). Additionally, the process of problem

Note 30 In the Anglo Saxon literature the term of **'incivilities'** is sometimes used; disorder or signs of disorder. Incivilities can be of two types: social or physical. The incivilities thesis is a family of closely related theories, first articulated by James Q. Wilson in 1975, and elaborated by Al Hunter, Dan Lewis, Paul Lavrakas, Michael Maxfield, Wesley Skogan and George Kelling. Incivilities may lead to crime, fear of crime (Wesly Skogan, 1986) or more incivilities. Experiments by Keizer at al (2008) showed that when people observe that a social norm or legitimate rule is violated – e.g. graffiti, street pollution, vandalism - they are more likely to violate even other norms or rules, which causes disorder to spread. This may cause neighborhoods to decay and the quality of life of its inhabitants to deteriorate.

identification should investigate also the propensity of a place toward attracting crime, incivilities or fear of crime.

Stakeholder analyses: who?

Crime Prevention by Urban Planning and Design does not exclusively address planners and designers, nor is it focused primarily on the police. A wide range of stakeholders might be involved in the process of crime assessment and security management in urban areas. The specific partnership for cooperation is simply dependent upon the problems that exist or may in future arise in a specific area. The list below shows some of the institutions that may be involved:

- *Politics and legislation (local, municipal, regional politicians)*
  The appropriate political level on which decisions are made vary with the local administrative structure in European countries and cities, but the involvement of politics also depends on the scope of the project. Sometimes it may be sufficient to involve the local council or a planning committee (district level). In other cases, municipal and regional politicians will have to be consulted, as official (legal) permission for an intervention in the physical structure or infrastructure of a neighbourhood has to be obtained. Moreover, building- and planning committees and social housing departments in the city administration may be involved in cases of fresh planning of urban developments, but also in urban improvement of housing projects from the 1960s and 1970s.
- *Designers and planners*
  Representatives from the planning professions may include urban planners, architects, landscape architects, civil engineers, traffic engineers and lighting engineers. They may be based in public offices or in private firms, specialising in local, regional, national or even international developments.
- *(Semi) private or public developers / builders*
  Commercial and business interests of property owners, project developers, investors, housing associations, builders and sub-contractors will have to be taken into account in the decision making process for crime prevention.
- *Police and other professionals for public order*
  The police usually has a lot of detailed information on the crimes and incidents happening in local areas, not only through (geographic) data analysis of crime statistics (GIS), but also in the way of personal experience and “local 24/7 knowledge” of crime prevention officers, victim support units and strategic policing staff.

  Public private partnerships may include private security firms and security consultants as well as insurance companies. Policing of car parking may be the task of municipalities or private companies.
- *Services*
  Service providers in waste management and facility management may be vital for the maintenance and cleanliness in trains and in stations of the public transport system, in parks, streets, underground-parking and public places in the city. This includes cleaning as well as repair work (e.g. lighting, graffiti, etc.).

- *Social workers*

  Crime is often a consequence of social conflict[31]. Therefore social workers have an important role as conflict managers between certain interest groups such as youth, older people and ethnic minorities, but also in neighbourhood disputes. Moreover, social workers act as important mediators between the police and certain users of public space (e.g. an open drug scene, prostitution, youth gangs and football fans) who often may be source of problems for police and communities.

- *Education*

  Educational facilities not only act as a stakeholder in crime prevention, but may also provide good places for crime prevention partnerships to hold regular meetings.

- *Population (individual and/or organisation)*

  Last but not least, it is important to include civil society in crime prevention projects, either as individuals or in the form of representatives of clubs (youth, older people, sports, cyclists, etc.) or other interest groups (shop owners, businesses, employees, tourists). The consultation process may take different forms, according to the local situation and the democratic system at hand.

The consultation process shall be supported by research-experts such as sociologists, psychologists and criminologists. The role of the media is a delicate one, since issues like crime and insecurity are often addressed in an exaggerated fashion. Hence all participants in the process of crime prevention are urged to give just and factual information to the press.

4.2.2 Urban Planning and Design Guidelines

The following section of the standard TR14383-2 lists the major planning-, design- and management strategies that can be used to support stakeholders in the process of selecting action for the prevention of crime and fear of crime. There is also an explicit warning, as the selection of particular measures *"depends on local context, cultural tradition and past experience"* and thus vary considerably from place to place (page 19). Therefore no specific answer is given to a particular problem. However, a checklist is given in Annex D.

Note 31 The European Standard does not refer to social inequality as a possible source of conflict and crime (see Wilkinson and Pickett, 2011).

The main factors of the physical environment to be taken into account are:

- ↘ General character of the area and land uses
- ↘ Built form and density
- ↘ Characteristics of open spaces and green areas
- ↘ Relationship between public, semi-public, private and semi-private spaces
- ↘ Street frontage and building entrances
- ↘ Public transport routes and stops
- ↘ Traffic flows and parking
- ↘ Pedestrian and bicycle movements
- ↘ Ground floor activities and their time schedules
- ↘ Prevailing activities in the upper floors
- ↘ Public and private lighting in public spaces
- ↘ Presence of urban decay or derelict land
- ↘ Level of maintenance and care.

(CEN/TR 14383-2:2007:16. Annex D further specifies these factors. See also the *Safepolis* manual).

With regard to fear generating factors, three broad categories of urban places and locations are distinguished[32]:

1 Streets or areas with certain types of entertainment or activity that attracts individuals who also generate fear in other individuals (e.g. drug dealing and prostitution). Crimes against the person are more likely to occur in such areas.
2 Neglected or badly maintained places can give an impression of danger because a lack of occupancy can be a signal for social disorganization, as Chicago school researchers called it (see scheme 1 in paragraph 2.2), or plain social disorder. This is in short the “broken windows thesis”[33].
3 Locations of problematic urban design: lack of surveillance, isolation, lack of visibility by others, poor lighting, poor orientation and the lack of alternative routes to avoid confrontation with anti-social behavior (homeless people, drug addicts, beggars, alcoholics, youth gangs, etc.).

General guidelines are given according to different stages and tasks in the overall urban planning process: urban planning, design and management.

1 Urban planning strategies
2 Urban design strategies
3 Management strategies.

Note 32 In annex 2 (an informative annex)

Note 33 Wilson and Kelling (1982) argued that when people see e.g. abandoned cars in the streets, graffiti everywhere and broken windows not covered, this is a sign/cue that no one really cares about that neighborhood. That perception of public disorder or physical disarray serves to lower inhibitions against further destructive or criminal action among average citizens who are not ordinarily criminal. Kelling and Wilsons simple solution to crime control: remove abandoned cars, paint out graffiti and fix broken windows--restoring order to urban disorder. Recent experiments by Keizer et al (2008) in Groningen (The Netherlands) back the broken window theory.

Crime prevention strategies shall be considered at an early stage of planning, in master plans, development plans and urban regeneration programmes. Decisions on the layout and particular land-use affect routine activities. Roads and transport routes, school campuses, shopping centres, business parks, churches and playgrounds for children are only some examples for the physical organisation of activities and population in urban spaces: each location implies a certain order for behavior. The guidelines in crime prevention by urban planning and design have been composed to support this normative order. This reflects the relations between the physical environment and social behavior. It is also important though, that the crime prevention strategies are also written into the 'local plans' at the detailed, legally binding planning document level.

The European standard CEN/TR14383-2 raises certain issues that can be considered in the planning process. It is important to note that the standard does not make specific prescriptions, but merely gives the planner ideas and pointers in a certain direction. In this way, the standard is a starting point to elaborate upon specific ideas. For example, the normative statement “take into account existing social and physical structures” seems rather vague, but it nevertheless opens up a discussion about social networks and particular informal meeting places, which encourage sociability and consequently spontaneous surveillance. The physical refurbishment often leads to an intervention in existing routine activities, which may have severe consequences on social cohesion and the natural social balance in a neighbourhood. On the other hand, it also provides a chance for planners to deliberately focus on creating activity space and landmarks to encourage people to identify with the area, and help develop within the community a sense of belonging and territoriality. It is in this way that the standard supports openness, flexibility and creativity in the planning process.

The aim of the standard is to help all stakeholders involved (from local authorities, planners and designers to residents) to critically reflect on proposals, focusing on the aspect of safety, security and the prevention of (fear of) crime and incivilities. It is as if the standard asks all stakeholders questions like:

- What kind of social and physical structures do you find in the area under consideration?
- What are the symbolic or real boundaries to separate private space, semi-private space, semi-public space and public space?
- Do you expect any crowding effects, user-conflicts, isolation? For what reasons will certain people use this place and at what times (also after dark and when the weather is bad)?
- Does this place encourage or hamper sociability?

In this way, the CEN/TR14383-2 standard reminds planners that they are planning social spaces as well as physical spaces. Thus, each question in the list may entail further research for information, which can only be gained from other stakeholders. In fact, the list of planning-, design- and management strategies (below) is reflected in the form of control-questions in Annex D. Moreover, the *Safepolis* manual has been created as a practical explanation of the guidelines in the standard TR14383-2.

Some of the strategies listed in the standard and below may be questionable in some countries or in some specific situations. For instance, a strategy like 'guaranteeing accessibility' was questioned by the UK representatives, since burglary is a big problem there and UK policies are cautious about 'accessibility'. Further, the UK’s Secured by Design scheme advocated, at least in the early days, a form of street layout that does not promote accessibility, namely the 'cul de sac'. But also a strategy like 'providing mixed status' sometimes met negative reactions. For example, it was

pointed out that in France, where there are enormous areas like the *banlieus*, it is not easy to change such neighbourhoods into a mixed socio economic status. However, the standard included the possibility for diversity by stating: *"Strategies, in order to be implemented, need to be translated into a set of coordinated actions and measures. These actions and measures depend though on local context, cultural tradition and past experience and thus may vary considerably from place to place. As actions and measures cannot be generalised (in order to respect local practices), they are not defined in this Technical Report, leaving their definition case by case to the local working group dealing with the crime prevention project."* (CEN/TR 14383-2:2007, p. 19)

Urban planning strategies:

- ↘ Considering existing social and physical structures
- ↘ Guaranteeing accessibility and avoiding enclaves
- ↘ Creating vitality (blending functions and activities, attractive layout)
- ↘ Providing mixed status (blending socio-economic groups, avoiding isolation and segregation)
- ↘ Creating adequate urban density to allow vitality and natural surveillance
- ↘ Avoiding physical barriers and waste land

Urban design strategies refer to environmental psychology and the effect of certain environmental elements on individual behavior. *"Good urban design can improve citizens' confidence and make public spaces more livable, while poor urban design can produce empty spaces, dreary environments, generate fear, attract incivilities and crime."* (Cardia, 2013, p. 61). For example, buildings, parks and shopping centers can be evaluated in terms of visibility and good overview, accessibility, territoriality, attractiveness and robustness. These factors are not strict design features, but help in creating the conditions for social control, natural surveillance, sense of ownership, and feeling of belonging. They are complementary to the planning strategies and unfold in the urban design strategies (TR14383-2:2007, p. 20).

Urban design strategies

- ↘ Layout and continuity of urban fabric.
- ↘ Location of activities.
- ↘ Time schedules coordination to guarantee natural surveillance.
- ↘ Visibility (overview, sight lines, lighting).
- ↘ Accessibility (orientation, alternative routes, limiting access to authorised personnel).
- ↘ Territoriality (human scale, public/private zones).
- ↘ Attractiveness (colour, material, lighting, noise, smell, shape).
- ↘ Robustness (material quality e.g. of street furniture).

Managing a site or area in terms of safety implies several tasks: target hardening, maintenance, surveillance, rules for conduct, providing suitable infrastructure for separate user-groups, and communication of rules of conduct and information about the local community. All these activities demand a complex interaction between the different stakeholders, in which the site managers play a key role, as do the other stakeholders with different responsibilities (see: *Safepolis* manual, p. 41ff).

Management strategies

- ↘ Target hardening/removal
- ↘ Maintenance
- ↘ Surveillance (patrolling, camera monitoring)
- ↘ Rules of conduct in public spaces
- ↘ Providing infrastructures for particular groups
- ↘ Communication of preventive messages and rules of conduct.

Management strategies are needed to create a comprehensive and effective set of measures since the selection of particular activities is not straightforward. Also, crime prevention strategies often conflict with other interests in the neighbourhood, such as traffic issues, ecological and economic priorities. Therefore, crime prevention needs to be integrated into the process of area management in a multi-agency approach.

4.2.3 Process - The implementation process based on ISO 9001

The European standard TR 14383-2 is not limited to practical recommendations for urban planning and design, but also gives advice on *how* to implement these guidelines. A considerable part of the standard is dedicated to the "*process to prevent and reduce crime and fear of crime by urban planning and management"*. A step-by-step process is set out, from conducting a crime assessment at the onset to a final outcome-evaluation of the particular crime prevention activity. This focus on the process seems necessary for two reasons.

1. The guidelines are not presented in the form of clear instructions as in the case of standards for security products. Instead, this particular policy-standard is composed as a starting point for elaborating decisions. It points experts into a certain direction and provides them with hints and clues, and encourages them to creative thinking in terms of crime prevention.
2. This standard is not directed at the design and building industry alone, but rather addresses a number of stakeholders. Hence, a form of cooperation in a process of deliberation is required for making clear decisions to put the guidelines into practice. A multi-agency approach is suggested, which includes *"owners and contracting authorities, specialists who bring their expertise to the project, and residents and users"* (see the list of stakeholders above). This includes professionals with a planning or design background, police, social services, representatives of local institutions (e.g. schools, museums, leisure-centers, etc.), commercial representatives, neighbourhood associations, and political responsible bodies (local authorities, municipal government). This composition of stakeholders in working groups makes crime prevention by urban planning and design a multi-disciplinary process. At the same time, it becomes a trans-disciplinary subject-matter as it transcends all disciplinary boundaries. Therefore a clear commitment of all stakeholders is required, but also the standardisation of the concepts and the working processes are vital since every discipline uses its own approaches, terminology and processes.

Management structure and a management process

The standard suggests both a management structure and a management process. The management structure shall first of all feature a "responsible body", which is defined as *"authorities responsible for granting permission for developments in new and/or existing environments"* (p. 22). In most cases, this will be the task of local or regional authorities[34]. Local and regional authorities (the responsible body) shall take the lead in the process and are expected to fulfill certain tasks:

- Communicating and disseminating the importance of meeting safety and security requirements.
- Establishing a safety and security policy.
- Conducting crime reviews in existing environments and crime assessments in proposed new environments[35].
- Ensuring that general safety and security objectives, related to the relevant rules if they are established.
- Defining the areas which are subjected to the procedure of this document.
- Providing a technical support for safety and security policy.
- Ensuring the availability of resources.
- In addition, the local/regional authorities (responsible body) have to prepare the "preliminary questions" of "where?", "what?", and "who?" in order to set the scene for a crime prevention project. Only when the location is identified, the problems of (potential) insecurity are detected, and the key stakeholders are selected, the planning process can commence.
- The local/regional authorities (responsible body) shall initiate the process by issuing a "mission statement" that defines the main objectives to be pursued in quantifiable form, the composition of the working group and the phases of design and implementation which require audits to be carried out.

The management structure also includes a multi-disciplinary "Working Group" with the necessary skills, which has to execute the "mission statement". Its general tasks are:

- establish a mission programme;
- identify and study the crime and safety problems in the specific area;
- give guidelines for the designers and developers (public or private), in order to meet the mission statement (also called "terms of reference");
- transmit to the local/regional authorities (responsible body) an evaluation on how the objectives are met and how the project is proceeding;
- implement and execute the "mission statement" defined by the local/regional authorities (responsible body).

Note 34 Actually in the first draft texts for the ENV 14383-2 only local authorities were mentioned (or: a representative democratically elected body). Referring to the huge building developments in Britain (e.g. The London Docklands) the UK representatives suggested to change the wording from local authorities to 'responsible body' since the builders of the London Docklands (LDDC) were actually almost a private company and furthermore the term 'responsible body' was not scale specific; it could be a planning committee, a council, mayor or even a minister. The ENV 14383-2 stated at page 6: "Hence by adopting this Pre-standard the process described in clause 6 is adopted while the definitive choice of strategies and measures (see clause 5 and Annex D) is left to the stakeholders and in the end to a **responsible body** (most often local and regional authorities issuing rules for urban planning, building/planning codes and permits) involved in a concrete plan for building, reconstruction or the management of an area."

Note 35 Note the difference: **assessments** for new (greenfield and brownfield) developments and **reviews** for exiting neighbourhoods. The distinction of different names and methodologies is too often overlooked

A good “management plan” shall outline the work-steps and single tasks, responsibilities (who does what?), a clear time frame and communication activities. Moreover, all steps in the process, including decisions, rejections, consultations, implementations, performances and failures shall be monitored and documented to facilitate audits and evaluations.

The standard offers two operational approaches for the functioning of the Working Group:

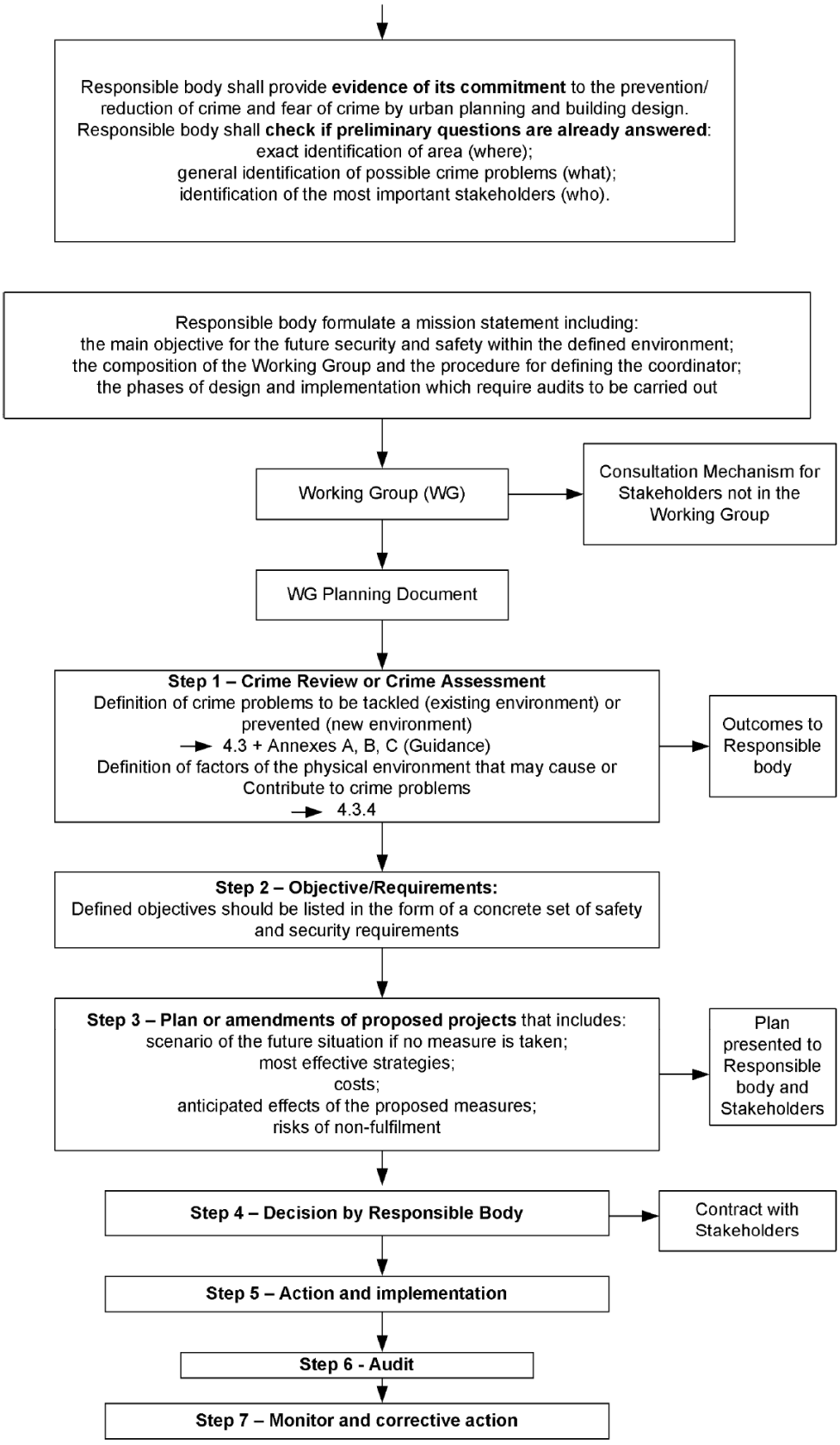
A	**The integrated approach** The Working Group of a regular planning process for new or existing area should be expanded with some experts specialised in safety, security, crime prevention/reduction: police officers, security risk professionals, social workers or some residents.
B	**The specialised approach** A separate Working Group specialised in the prevention/reduction of crime and fear of crime by urban planning, design and maintenance should be set up to advise (and influence) the planners/designers, developers/builders and/or services. (CEN/TR14383-2:2007:24)

This particular process-approach to crime prevention by urban design and planning shows a clear resemblance with international standards on quality management (ISO 9000) and sustainability (ISO 14000) which are nowadays widely used on a worldwide scale. This focus on process oriented standards can also be found in the world of engineering (e.g. the ISO 15288 on Systems and Software engineering). All these standards follow a process approach[36] and are widely used and sold by the national standardisation institutes.

The process for crime prevention by urban planning and design is presented in the flow-chart below.

Note 36 “The application of a system of processes within an organization, together with the identification and interactions of these processes, and their management to produce the desired outcome, can be referred to as the “process approach“. (ISO 9000 Introduction and Support Package: Guidance on the Concept and Use of the Process Approach for management systems. ISO 2008:3; ISO/TC 176/SC 2/N 544R3).

Figure 2: summary of process



4.2.4 Annexes

Recommendations in the standard on Crime Prevention by Urban Planning and Building Design are further devised in four (informative) Annexes. Annexes A and B provide a blueprint for crime assessments in cases of new planning proposals and crime reviews for existing areas respectively. Annex C is dedicated to the problem of fear of crime, and Annex D presents a check-list to specify the particular planning-, design- and management strategies given in the main part of the text.
Annex A gives examples of elements to take into account when conducting a crime assessment. At first, "three general aspects" are described, distinguishing aspects relating to offenders, guardians and victims or targets (Felson 2002). This line of argument is reflected in the Standard to propose a crime assessment, considering three general aspects:

A Aspects relating to offenders

- The presence and number or concentration of offenders
- The physical and psychological accessibility and possibilities for offenders to escape

B Aspects relating to guardians (formal: police; informal: residents)

- The presence and number of guardians able to exercise surveillance and control
- The physical possibility for guardians to see what is happening: visibility (factors like lighting, layout, sight lines, use of CCTV).
- The physical and social/psychological ability and willingness of guardians to react
- Reaction time of the guardians

C Aspects relating to victims/targets

- The ability of victims to react (lighting, surveillance, orientation)
- Possibilities to escape for potential victims
- Attractiveness of a target
- The physical vulnerability of a target

A second section in Annex A specifies these general aspects according to *six types of crime* (burglary, vandalism, street violence, theft and arson) and *fear of crime*. For example, "factors that influence burglary" include "risk of detection (technical or by people)"; "accessibility of an area, e.g. distance to motorways, railway and underground stations, large public buildings/places/functions, the number of entrances to a neighbourhood and physical and psychological barriers"; and "street activities" – to mention just a few.
"Factors that influence vandalism" include among others "maintenance (quick repair after attack, painting over after graffiti)"; "divert interest (by providing children with alternative sources of entertainment or challenges such as climbing walls)"; "presence and number or concentration of young people (<18) especially males in an area".
"Factors that influence assault/robbery" are: "vulnerable groups e.g. tourists, elderly"; "rewarding targets in vulnerable locations, e.g. all-night shops, petrol stations, staircases in blocks of flats" and others.
Annex A lists a great number of cues in relation to these and other offences such as car crime, theft, arson. In addition, fear generating factors are identified: "Functions like prostitution, drug abuse or certain types of entertainment"; "bad maintenance", "poor lighting, dark areas"; "reputation of the area" and others.

Annex B gives advice on conducting a crime review in order to identify security problems in existing areas: "The aim of the crime review is to make a brief and compact report on an area / neighbourhood and the crime within that area". This outline reminds us of the ecological principles of "social area analyses" founded in the classical works of Shevky and Bell (1972). Similar to these classic studies the Standard suggests collecting quantitative and qualitative information about the local area. This information is structured according to "physical information", "socio-economic and demographic information", "crime data" and "information from safety audits".
Information on the location shall present the size in square meters, distance to city centre(s), the function of buildings (dwellings, schools, offices, shops, traffic, etc.) and refer to risk factors outlines in the standard (lighting, visibility, access, layout of streets, etc.).
Socio-economic and demographic data shall include the following information:

- Demographics: age distribution, prosperity, poverty, education, family composition (single household, etc.), employment etc;
- Ownership (of dwellings / buildings / land);
- Employment structure: who works in the area (women working evenings, etc.)?
- Use: who uses the area, travels through, tourists?
- Specific conditions (drug addicts, prostitutes, etc.)?

Crime data should cover the type and frequency of crime problems in an area. The police are the first to be consulted for further information such as telephone requests for police service, victim surveys, self-report data, hotspots of crime, victims, modus operandi and offenders. However, a lot of other sources are given:

- Opinions of relevant professionals, working in the area (e.g. teacher, youth worker, medical doctor, etc.);
- Opinions of other people with local knowledge (residents, shopkeepers);
- Opinion of independent experts;
- Other specific data sources (e.g. repair registration for vandalism, first aid/hospital info for street violence);
- Fear of Crime Surveys: the frequency of people feeling unsafe, on the streets and at home; (see e.g. the International Crime Victim Survey[37]); ICVS questionnaire 2000 (question 300/301);
- Types of security precautions taken (see e.g. ICVS 2000, Appendix 4, Table 26).

Specific "Safety Audits" can be conducted together with small groups of residents and / or stakeholders to identify and evaluate the area according to lighting, maintenance, frightening places using crime-maps from the police. A comparison with other areas or the relation to the total city or district may be helpful to assess the seriousness of the problem.
More recently Clara Cardia (chair COST action TU 1203) has developed "indicators for a qualitative area study" in which she proposes to collect data concerning very specific issues related to crime opportunities. This not only includes descriptive data on land-use, density and building typologies, but also points out the relation of the buildings to public space; "hidden activities" that tell us how much activity there is inside buildings, the function of the plinth in terms of infrastructure, pedestrian flow, deterioration; crime reviews with police, residents and shop assistants, and many other features.

Note 37 Van Dijk en Van Kesteren, 2008; see also all other ICVS publications (by UNICRI and/or WODC)

Annex C is dedicated to the problem of fear of crime. The separate attention to fear of crime in this standard shows that the topic of crime prevention should not be limited to a rational choice perspective of offenders, but also should take the view of potential victims.
It may be called a particular feature of this standard to highlight fear as different from actual facts, and to maintain that “frightening and fearful places are not necessarily places where actual crimes occur (p. 36)”. Nevertheless, fear of crime is taken seriously as a problem. In this sense, planning guidelines are oriented towards the more vulnerable groups in the population. So-called “unsafe locations” shall be amended by good lighting, a mix of functions for vitalisation, regular maintenance and cleanliness, and by offering alternative walking-routes. Moreover, a “sense of ownership, or territoriality is often considered a vital factor in making a place more safe. … Urban design should therefore adopt measures to increase the sense of territoriality." (p. 37).
Fear of crime is an emotion that may be caused by the feeling of lack of control, isolation and lack of orientation. “Ability to see and understand what is happening in an environment is important in ensuring a feeling of control in any given situation." (p. 37). Thus, the standard first suggests good lighting, clear sightlines and the elimination of hiding places for offenders. Secondly, the standard alerts planners to the fact that “some locations are quiet and isolated during particular times of the day or night, such as industrial estates, large office complexes, public transport stations, underpasses, shopping centres, city parks, multi-storey car parks, or semi-public spaces within dwellings and blocks of flats”. (p. 37) A diversity of functions to increase vitality at all times as well as good visibility from private to public space (e.g. windows facing car-parks, entrances and passages) both increase informal, social control. Closing off places at night-times should be a measure of last resort. Finally, providing for good orientation is often neglected in urban planning, but in cases of personal danger a good overview and additional signage of escape routes becomes important. Installations of signposts that show maps of the area or of the housing estate not only support orientation, but also contribute to developing identity and territoriality.

Annex D is constructed as a check-list that reflects the contents of the standard. After listing “basic principles” (see below), 108 questions are arranged in three chapters, reproducing the structure of the Standard: “Urban planning strategies”, “urban design strategies”, and “management strategies”. This Safety Audit Framework can be used separately as a guideline in all urban development projects. In each section a number of control questions are asked to specify the general recommendations.
The examples below present a selection taken from each chapter.

Annex D (informative)
Safety audit framework of an urban project

D.1 The basic principles

D.1.1 Strengthening the user’s **identification** with the place and the user’s **sense of belonging** to the place enhances perception of safety and prevention of crime because people develop a sense of respect and protection for the places they belong to.

D.1.2 **Vitality of streets and public areas** is a major factor for crime prevention, because the use of public spaces produces spontaneous surveillance. Mixed uses (commercial, residential, recreation etc.) and diversified activities imply different users at different times, thus providing constant spontaneous surveillance.

D.1.3 Every measure concerning safety should take into account the most **vulnerable population**.

D.1.4 Urban developments based on creating safer areas opposed to the outer world (perceived as a source of insecurity) are to be **avoid**ed because they will lead to **exclusion** and **residential enclosure** or inward oriented spaces.

D.1.5 **Places** mainly **used by temporary users (stations, interchange points, etc.)** are generally more **vulnerable** to crime than other areas, due to the scarce sense of belonging to the place of the users. These places should be carefully considered.

D.1.6 To improve crime prevention, planning and design should **avoid** creating **deserted spaces** (without vitality), **as well as undefined or hidden places**, because vandalism and other criminal acts tend to concentrate in these places. If un-avoidable, these places should be managed in term of safety.

D.1.7 A continuous urban grid and a clear layout of public places improve users' **self-orientation** and their feeling of being safe. Visibility of pedestrian spaces and routes from surrounding buildings and streets improves crime prevention and the perception of safety.

D.1.8 **A clear delimitation between public and private space** facilitate the management of the spaces.

D.1.9 Planning and design of **circulation routes** to services and housing should carefully consider safety and accessibility for all kinds of population. If a circulation route cannot provide the sufficient safety or feeling of safety an alternative route should be offered.

D.1.10 Decayed or abandoned buildings and areas, as well as dreary places communicate fear of crime and attract antisocial behaviours and crimes. **Maintenance** and other actions should be undertaken to prevent decay; once decay has started, these areas should be carefully monitored and treated.

D.1.11 In some cases, to improve crime prevention it is necessary to **support spontaneous surveillance** (mixed uses, vitality etc.) also by organized surveillance, to be implemented in many different ways. The organisation of spaces should be conceived in order to facilitate this type of surveillance and emergency intervention.

D.1.12 **Electronic surveillance** (CCTV etc.) **is not an answer** to bad planning or urban design. It is useful only when it is a part of a general security plan.

Excerpt from the Standard CEN/TR14383-2:2007:38.

D.2 Urban planning strategies

D.2.1 Taking into account the existing social and physical structures

a) Does the project function as an integrated part of the whole urban structure?

b) Does the project take into account the needs and demands of the local population?

c) Does the project take into account the existing social networks?

d) Does it encourage local sociability?

e) Does the new built form integrate well with its surroundings?

f) Does the project fit in with the organization of the existing neighbourhoods?

g) Will the project affect the social balance?

h) What measures are taken to manage the impact of changes?

i) Is the new area connected to the existing city structure or does it break the existing pattern?

j) Do the edges of the project take into account the character of the existing urban fabric or do they create a gap in the vitality of the urban system?

k) Does the project take into account the existing crime problems of the area and its surroundings?

Excerpt from the Standard CEN/TR14383-2:2007:39.

D.3 Urban design strategies

D.3.6 Territoriality (human scale, clear public/private zoning, compartmentalization)

a) Is the difference between public, semi-public, semi-private and private spaces clear to users, in order to bring them into legitimate uses?

b) Is the separation between public and private spaces materialized, physically or symbolically?

c) Does the design of a space make clear the purpose of the space?

d) Have the spaces been thought for different target groups according to their needs?

e) Does this territoriality create feeling of ownership and responsibility among the users?

f) Is the scale of the new designed space in accordance with its purpose and uses?

Excerpt from the Standard CEN/TR14383-2:2007:42.

D.4 Management strategies

D.4.2 Maintenance

a) Are maintenance and management strategies and measures planned? Do the design and layout facilitate these?
b) Are maintenance measures planned so that spaces will be attractive and lively and generate a sense of responsibility and security?
c) Does the management strategy provide for stakeholders, steps to be taken and regular monitoring and assessment measures?

d) Does the maintenance strategy ensure quick, responsive and prompt responses to reduce the risk of vandalism, repetition of offences as well as to reduce feeling of derelict or unused spaces?

e) Are the different spaces within the area equally maintained to prevent the risks of crime to focus on some?

f) Does the management strategy provide for a partnership between the stakeholders to ensure homogeneous measures and implementation (regular meetings, specific document)?

g) Does the maintenance strategy ensure specific measures for lighting, electricity and telephone systems (regarding protection and quick repairs if needed)?

Excerpt from the Standard CEN/TR14383-2:2007:43

5 From process standard to checklist approach

5.1 Type of standards

Three main types of standards exist. The question to be answered is: which type is the most suitable for the standardisation of activities concerning the crime prevention through urban design and planning?

The three main types of standards are (CEN/CENELEC, 2013):

- Process standards, offering guidelines or requirements for a *process.*
- Product standard offering guidelines or requirements for a *product.*
- Service standard offering guidelines or requirements for a *service* offered by a company or organisation.

Apart from these three main types, there are other types, such as: definition standards, testing standards and communication standards.

Standardizing CPTED/CP-UDP services was - and still is - an option. If a sophisticated body of knowledge exists on what CPTED/CP-UDP is and how it can be effectively implemented, a standard could be made on 'good CPTED/CP-UDP education and practice' (content + implementation). A person which is able to prove that he or she has this knowledge can thus be certified as a 'Certified CPTED/CP-UDP practitioner'. The International CPTED Association (ICA) is delivering such a 'certification scheme', but this route was never taken in Europe.

Early in the process of the elaboration of the CEN/TR 14383-2 (see chapter 2), the participating countries in the working group agreed on the choice for a process standard as the most appropriate type of standard for CP-UDP projects and activities.
The choice could theoretically also have been made for a product standard. The 'product', in this case, would have been a crime prevention plan for a distinct area, a design for a building, a public space, etcetera.
The variation of products in the field of urban design, however, is enormous. There is a huge variety of local cultures, urban situations, design concepts and planning philosophies within EU countries.
In order to cover all possible situations, the instrument needed to check if Crime Prevention requirements are met, should have been of a very general character. It would contain guidelines that would leave too much to the phantasy of the professional who is charged with the task of applying the instrument on the plan.
The choice for a *process* type of standard, therefore, was a logical one. The standard regulates all checks and balances necessary from the crime prevention point of view during the process of developing of urban plans and the decision making on these plans.

5.2 Is CEN/TR 14383-2 potentially effective as a process standard?

In order to answer this question, we have to look to the heart of the ENV (2003) and the TR (2007). In both documents, this is 'clause[38]' – or chapter - 6.
In that chapter of the standard (title: Process to prevent and reduce crime and fear of crime by urban planning and management) the process for the support and monitoring of the planning process for an urban plan is constructed in 7 steps:

1 Crime review or crime assessment of the area or the urban plan.
2 Definition of objective or requirements.
3 Plan or amendments of proposed project.
4 Decision about plan/amendments by RB (=Responsible Body).
5 Action and implementation of plan/amendments.
6 Audit.
7 Corrective action (if necessary).

These 7 steps are illustrated by the flow chart presented in the ENV 14383-2 as well as in the TR 14383-2 (reproduced in figure 2 in chapter 4).

The flow chart more or less jumps into the process, assuming all preparatory work needed to understand the context of the area, the problems or the urban plan has been done already.
In order to ensure this preparatory work will not be forgotten and be done thoroughly, the standard requires that these 7 steps can only be taken after a trio of preliminary basic questions is answered (see also chapter 4 in this document[39]).

The seven-steps-scheme, if followed carefully, guarantees that all important aspects of a plan are considered by safety and security professionals and that a report about these aspects shall be presented to the decision makers (= the responsible body).
The implementation of the actions or amendments decided upon, are being monitored and corrective actions are proposed and decided upon, if necessary. Besides these basic qualities, the seven-steps-scheme is universally applicable. There is no dependency on local cultures, urban situations, design concepts and/or planning philosophies. The CEN/TR 14383-2 can, therefore, be considered as potentially effective as a process standard. This is true for the ENV (2003) as well as the TR (2007).
The main text (chapter 1-6) of the standard was changed only very little between 2003 and 2007. Most alterations aimed at a more strongly structured text; none of the alterations affected the general idea of the standard. Only one of the annexes (annex D) was changed fundamentally. This annex, 'Safety audit framework of an urban project' in the 2007 version, contains the instrument helping the professional reviewing urban plans and designs. This is the so called 'checklist part' of the standard.

Note 38 'Clause' being the official word for 'chapter' in CEN-speak. We will use the word chapter.
Note 39 The text of the standard (page 8) states:
"Before the contents (…) and process (…) are presented, a preliminary set of questions is elaborated upon in Clause 4:
- the identification of the area (where);
- the crime problem (what) and;
- the stakeholders (who)."

The opening question in this paragraph was: is the standard *potentially* effective. The answer on this question is 'yes'. But this does not tell us anything yet about the standard being effective *in practice*.
In order to be *practically* effective, we should consider examples of its dissemination through Europe, its practical use and its implementation in the legal systems of several EU countries.

5.3 Did EU countries implement CEN 14383-2 in national law or standards?

France is, so far, the only country that implemented CEN/TR 14383-2 'look alike regulations' in the French national legal system. In France, a study preliminary to the start of the realisation of the urban project (Etude Sécurité Publique) is obligatory. This study has to be carried out parallel to the planning and design of major urban renewal projects, schools, railway stations and sport facilities such as a soccer stadium. The obligation exists only in cities with more than 100.000 inhabitants. This obligation is implemented in the French urban development act (article L. 111-3-1 and R. 111-48,49 of the ´Code de l'urbanisme´, 2007; website: www.legifrance.gouv.fr).
The 'responsible body' executing the law is, in this case, the regional administration (Department). According to the law, a special commission, responsible for security aspects, supervises the study. This commission is chaired by the 'préfet' (head of the regional administration), or a representative appointed by him.
The contracting authority of the building operation is the principal of the study, giving an assignment to an engineering consulting firm or to an officer in state control if there is one who has the necessary skills to carry out a satisfactory study. The obligatory chapters of the study are:

1. Description of the project and contextual analysis, diagnosis of existing crime problems
2. Risk assessment concerning the features of the planned operations
3. Proposed measures and/or amendments of plans, concerning
   a. Diminishing security risks
   b. Facilitating access for emergency services.

These three chapters are a general outline only. The contracting authority is expected to add crucial elements and questions to the study, specific for his building operation.
The special commission mentioned above is authorised to reject the study, if it does not meet the general and/or the specific requirements. The study has to be delivered at the regional administration before the start of building activities but it is not obligatory to integrate the recommendations mentioned in the study in the project plans. For public buildings, the building permit is only granted if the study is made. But again there is no obligation to integrate the recommendations in the project.
Special trained policemen, participating in the special commission, are sometimes (not everywhere) auditing if and how the recommendations were realized and make a report. But there are no consequences (no 'corrective action' as mentioned in step 7 of CEN/TR 14383-2) if the recommendations are not implemented in the plans.

In **Italy**, the CEN/TR 14383-2 was translated in 2010, by the Italian standardisation institute (Ente Nazionale Italiano di Unificazione) as standard UNI/CEN/TR14383-2:2010. The website of the Italian standardisation institute states that this standard is an exact translation in Italian of the English text of the CEN/TR 14383-2:2007.

The Technical University of Milan (Department of Architecture and Planning) established a special 'laboratory' for crime prevention studies and the dissemination of knowledge about CP-UDP. This laboratory is called 'LabQus', Laboratory for urban quality and security.
An example of a study for the city of Milan, aimed at crime prevention and improvement of the living conditions in four urban areas, is: 'Security starts in the project phase' ('La sicurezza comincia dai progetti'). On the colophon page, this publication refers to the UNI/CEN/TR14383-2:2010: "This standard is related to criteria for the prevention of crime and anti-social behavior that should be applied to projects for the development of new urban areas or the renewal of existing urban zones" (Cardia, 2012).
An example of the dissemination of knowledge within the Italian professional world is a presentation held by LabQus in Bologna in 2011. In this presentation is stated that the CEN/TR14383-2 is 'only' a recommendation. France is, in the LabQus presentation, mentioned as example of a country, which implemented a crime assessment/crime review (step 1 in figure 2) as an obligation in national law.
The translation by the Italian standardisation institute of the CEN/TR 14383-2 as a national standard is, in the LabQus presentation, considered as a step towards the preferable situation: national legislation, providing for an obligatory preliminary security study parallel to urban planning and design projects, as existing in France already.

Already in 2002 in **Estonia** the CEN/ENV 14383-2 (which was then still a draft version) has been translated in Estonian and was issued as a provisional national standard EVS 809-1:2002[40]. In Estonia also training was and is given to police, local municipalities and crime prevention institution. A recent EU project (the Prevention of Crime and Fight against Terrorism) made it possible to train approximately 160 officials in Estonia, Latvia, Lithuania and Finland in CPTED and CP-UDP. Estonia is a special case in respect to the dissemination and use in planning processes of knowledge about CP-UDP.

Also in **Sweden** the CEN/TR 14383-2 has been translated in the national language, but it has probably not been used for actual planning purposes. An early version of the ENV was to some degree used in the planning for Hammarby Sea City in Stockholm in the late 1990s / early 2000s. In 2010 the TR was used for a 'post' evaluation of the built result in this area, and it was concluded that area meets the TR annex D criteria. The Stockholm Police force wrote its own guidelines for safe housing in 2001 (revised in 2005), which are still 'state of the art' in Sweden and referred to in the later City of Stockholm official crime prevention programs. These guidelines focus both on the process and the product aspects and go further into the 'product' issue than the TR, but the basic principles are rather similar.

Note 40 Source: presentation Anu Leps, ministry of Justice Estonia, Tallinn, 2014

Photo: Hammarby Sea City (Stockholm) after redevelopment (photo by Bo Grönlund)

In **Denmark** the CEN/TR 14383-2 and the national Danish crime prevention standards have, in 2013-2014, been used for the first time as documents in two architectural competitions to improve 1950s and 1970s suburban housing areas and shopping facilities. The Danish Crime Prevention Counsel has started in 2012 a 3 year pilot project with 5 municipalities on implementing crime prevention in urban planning, based indirectly on the Danish standards and CEN/TR 14383-2

A rather unexpected effect was that the CEN/ENV 14383-2 was also translated in Korean and issued in **Korea** as standard KS A 8800:2008 (Korean Standards Association).
It might be the next step: issuing a worldwide standard on CPTED and CP-UDP: when worldwide standardization of quality management (ISO 9001) is possible and obviously successful and if ISO 14001 provides a foundation for sustainability, why not start working on the ISO 14383 on Crime Prevention Through Environmental Design (CPTED be it 1st, 2nd or 3rd generation), or Designing Out Crime (DOC), or Design Against Crime (DAC), or Defensible Space, or Crime Prevention Through Urban Design and Planning (CP-UDP) … the first task of the ISO working group meeting in Barbados could be to harmonize and standardize the name of the concept worldwide.

5.4 Added value of the Safepolis manual

5.4.1 History and content of the manual

Italy and **France** gave a boost to the further development and dissemination of knowledge in the field of CP-UDP. In a project[41] with the working title '*SAFEPOLIS*' a project group produced a manual 'Crime prevention guidelines for urban planning and design' (source: www.labqus.net). The partners in the project group were:

- Technical University of Milan (Project manager and coordinator of the work)
- Regional administration of Emilia Romagna
- Regional administration Ile-de-France

The manual has been issued in 4 languages: English, French, Italian and Spanish and can be downloaded for free from the internet site www.e-doca.eu. Apart from the manual a CD-ROM has

Note 41 The project was developed under the AGIS Programme, co-financed by funds from the European Commission and ran from December 2006 till July 2008.

been issued containing a collection of case studies presented in seminars and other materials. The purpose of manual and CD ROM is to provide technical support to both professionals (architects, planners, engineers, etc.) and to clients (local authorities, city administrations, crime prevention officers, residents), for their work aimed at making cities more safe and secure. The Safepolis manual is mainly an explanatory document of Annex D of the standard CEN/TR 14383-2.
The guidelines presented in the manual make direct reference to this Annex D and follow the three main categories: urban planning, urban design and management.

The core of the Safepolis manual consists of the explanation (in text, clarified with many maps and photos) of in total 20 guidelines:

Section URBAN PLANNING STRATEGIES
- Considering existing social and physical structures
- Guaranteeing accessibility and avoiding enclaves
- Creating vitality
- Providing mixed status
- Creating adequate urban density
- Avoiding physical barriers and waste land

Section URBAN DESIGN STRATEGIES
- Continuity of urban fabric
- Location of activities
- Time and calendar of activities
- Visibility
- Accessibility
- Territoriality
- Attractiveness
- Quality of materials to prevent decay

Section MANAGEMENT STRATEGIES
- Maintenance
- Surveillance
- Rules governing conduct in public spaces
- Receiving particular groups
- Communication with the public
- Target-hardening

In essence the manual is a well documented and illustrated checklist and the emphasis is on the 'content part'. The 'process part' is dealt with only very briefly. The flow chart of the 7-steps-working-process from the CEN/TR 14383-2 is included, but without any explanation (in the CEN/TR 14383-2, the explanatory text accompanying the flow chart covers at approximately 5 pages).

5.4.2 How do experts from EU countries evaluate the CEN/TR 14383-2 and the Safepolis manual?

In December 2012, COST Action TU 1203 was launch (see chapter 1). This COST Action gives a boost to the further development and dissemination of knowledge in the field of CP-UDP. The COST Action is also a platform for practical research. At the Manchester meeting, May 2013, the participants agreed that all countries would produce a SWOT analysis,[42] including an evaluation of the CEN/TR 14383-2 as well as the *Safepolis* manual. Twelve countries responded to the request: UK, Italy, Poland, Belgium, Ireland, Portugal, Denmark, France, Germany, Serbia, Austria and Hungary. The contribution of The Netherlands was to summarise all SWOTs.

Note 42 SWOT: Strength's, Weaknesses, Opportunities and Threat's

Table 5: summary SWOT analysis CEN/TR 14383-2 and Safepolis manual

Strengths (internal):	**Weaknesses** (internal):
• An important state of the art and easy accessible text on CP-UDP knowledge for people new in the field (practitioners as well as scientists). • Together (standard + manual), the documents provide for content (what to do) as well as process (how to do it). • The documents are available not only in English, but also in other important languages (manual: French, Italian, Spanish; Standard: German, French, Estonian, Swedish; even Korean!) • The documents can be obtained via the internet (although the standard not for free).	• Both documents are generic in character, i.e. not specific for different types of crime. • The use of the manual is mainly limited to traditional block-built cities. It is only partly applicable to modernist city developments. • The 'process' part as summarised in the manual is poor. There is only a flow chart without any explanatory text. • The standard and manual are too urban-focused. They do not suit villages and small towns, and refer mainly to large towns (e.g. guidelines for mixed-uses and for social mix don't fit medium and small towns). • Social mix. The standard and manual say a social mix of people has a positive effect on crime prevention. In reality, this depends on the context. • The standard focuses too much on movement and flow of people (dynamic public places). This is based on the "promote the movement" idea of security. There is less discussion about static public places—such as a squares or outside terraces—which welcome the broadest spectrum of social activities. • The manual is mainly based on 'old school' authors such as Jane Jacobs and Oscar Newman (recommending natural surveillance, territoriality, lively streets, human scale). 'New school' authors, (recommending regulation of accessibility, as well as mechanical and organizational surveillance) are omitted.
Opportunities (external):	**Threats** (external)
• A chance to teach Europe (and the world with an ISO-standard) more about Crime Prevention through Urban Design and Planning (CP-UDP & CPTED), if standard and manual are really used and implemented by (local) authorities, police, planners, residents and other stakeholders.	• National standardisation institutes do not invest in marketing and selling of the standard. • There has been hardly any marketing, distribution and dissemination of the standard and the manual by national or regional institutes, such as ministries, crime prevention institutes, police forces, or universities. • The lack of quantification in the standard is a threat for its use. Public authorities need 'physical' laws, norms, quantified guidelines. • Some countries (e.g. Germany and Austria) do not want to work with a standard exclusively dedicated to crime prevention; it sounds too negative. Integration of the crime prevention guidelines into other subjects, such as sustainability, is a more effective alternative.

5.5 To disseminate or not to disseminate? … that's the question

In 2012 COST Action TU 1203 started with the main objective to make a substantial advancement towards the goal of building "safe cities" and bringing together the local and undiscovered research and know-how of different European countries and developing innovation of knowledge and practices in CP-UDP (see also chapter 1). This EU COST action (European cooperation in science and technology) started in 2013 and will run until the end of 2016. Meetings as well as field trips resulting in specific case studies have been organised for representatives of 25 participating countries in Manchester, Milan, Barcelona and Amsterdam.
One of the main conclusions of the meetings, as well as a survey carried out by the chair of the working group 2 is, that there has been hardly any interest in purchasing standard CEN/TR 14383-2 since the publication on the internet sites of national standardisation institutes. There are two reasons given by the respondents for this lack of purchase:

- There have never been any marketing activities organised by the standardisation institutes and/or others.
- The price of a (set of) standard(s) is high; the standards can only be ordered on the internet sites of national standardisation institutes and may not be photocopied for other users due to strict copyright regulations.

As for the *marketing* issue, the national standardisation institutes do not have the obligation to undertake marketing activities; their only obligation is to make the standards available (as they did in most countries). Other institutes at a national or regional level, such as ministries of Justice, crime prevention institutes, police forces and educational institutes could develop marketing activities. However, in most EU countries, no institute feels obliged to fill in this gap; the only two exceptions thus far being France and Estonia. In **Estonia**, the ministries of Justice and Interior have been active since 2002 in the implementation of crime prevention principles into urban planning, organising training for architects and planners in 2002, 2003, 2006, 2012 and 2014/15 (Leps, 2014). In **France**, the Safepolis manual (or adaptations of it, all in French) have been published in 4 versions, of which 2 have been widely distributed (4000 free copies) by the Ministry of Ecology to local authorities, government departments, universities and architecture schools[43].

People interested in the CEN standards in the 14383 series have to be rather prepared to invest a relatively large sum. Though prices in the internet shops of the standardisation institutes in EU countries differ considerably, taking The Netherlands as an example, the cost of acquiring the whole series total more than 400 euros, as is shown in the table below. The series consist of 7 parts (1,2,3,4,5,7,8; part 6, on schools, is not available yet in all countries).

Note 43 Source: SWOT analysis delivered by the French representative in COST Action 1203. Note that in a few cases also regions and/or institutes helped with dissemination. E.g. the Emilia Romagna Region (Italy) together with the Italian Forum for Urban Safety have been very active in this respect and have sent copies of the manual to most local authorities in de region and have organised seminars for training.

Table 6 Price of standards CEN 14383 series (The Netherlands, 2014)

Price of 14383 standards at NEN (website: nen.nl)		
no	Subject	Price €
1	Terminology	48,80
2	Urban planning	73,80
3	Dwellings	44,80
4	Shops and offices	44,80
5	Petrol stations	73,60
6	Schools	Not available
7	Public Transport facilities	48,80
8	Attacks of buildings with vehicles	73,60
	Total	**€ 408,20**

The price is certainly high for a series of 7 documents, but this might not be a problem for established or larger institutions such as city administrations, building contracting firms and engineering companies. In such cases, several hundred euros is probably 'peanuts' compared to other engineering and consulting costs that have to be met by stakeholders in the process of designing and building urban projects. However, the price could be a barrier for uptake amongst smaller organisations, such as citizen/resident initiative groups or local political parties. The price will also be a barrier for use by students.

Furthermore, the pricing system adopted by standardisation institutes seems a little outdated in the age of internet, Wikipedia and free available knowledge. The prices are obviously a barrier to buying and using the standards. In this respect, it appears that no one ever full considered that making standards for public spaces, public goods and for all types of stakeholders—and not only the big business—also needs to be fully thought out, as part of a modern marketing strategy.

According to the 4P marketing mix model (McCarty, 2001), if one wants to sell a product, the best possible mix of 4 Ps is needed: product, price, place and promotion. In terms of 'selling the CEN standards to the market' two of the Ps (prize and promotion) are clearly not optimal: the price is too high, especially for the mainly nonprofit oriented market that exists; and promotion has been nonexistent. As analysed in section 5.2, the product was potentially effective and good. This might also be said for the 'place', since the standard is available from every national standardisation institute and can be bought on line—thus distribution is not the problem.
In table 7, the marketing mix for the standard is summarised:

Table 7 4P marketing mix for the CEN 14383 standards

Product	++
Price	--
Place	++
Promotion	--

We may also include the *Safepolis* manual as a supporting product. The manual has a much better chance of becoming a 'bestseller', since the price is better (it is free[44]) and the promotion in some countries (e.g. France) has been intensive. While the standards have sold only a few copies in each European country, the manual has done better. However, the combination of standard + manual (for one standard only) is definitely not the ultimate marketing success in Europe. It would appear that a 'profit like product'(the standard) is being made available for a mainly nonprofit market, and is being sold for too high a price, without any promotion. The current situation thus represents something of a marketing challenge! The target group seems to be above all architects and planners. However, selling standards on crime and crime prevention that contain difficult requirements is bit also difficult. The approach and content and approach of a standard is not welcomed by the majority of architects and planners.

Note 44 Though marketeers also know that giving a product away for free is often perceived by the market/public with some reluctance: "if its free it can't be really good'.

6 Conclusion and Discussion

6.1 Conclusions

Standards and manuals on CPTED and CP-UDP are still badly needed

The original founding idea of a (series of) standard(s) on Crime Prevention Through Environmental Design (CPTED) or Crime Prevention through Urban Design and Planning (CP-UDP)—the CEN 14383 series and especially the umbrella standard CEN/TR 14383-2:2007—was that it is vital to achieve a European consensus on: (i) a synthesised generic theoretical framework (the **contents**); and (ii) a standardised and well-structured **process.** This is because in terms of content, the roots of CPTED/CP-UDP are so different. In addition, very different groups of stakeholders have to be included in the process to make the approach work in a specific national and local environmental context. Interestingly, a recent deconstruction of CPTED by Paul Ekblom (2011) and a meta analysis of about 200 CPTED books and documents by Victoria Gibson:

"confirmed that theoretical and structural development of CPTED is, and to some extent remains confused as CPTED has evolved through successions of disciplines and fields of practice, subsequently developing a rather unclear representation of the whole of place based crime prevention (…), all packaged together under a focal heading of CPTED." (Gibson and Johnson, 2013, p. 16).

The authors go on to say that:

"Acknowledging the history and development of CPTED allows the difficulties that have developed alongside it to be understood. Original ideas and beliefs were never fully synthesised in original writings (…), and ideas were extracted from a number of competing studies, to amalgamate into what is now known as CPTED. Individually, supporting theories and drivers of CPTED were shown to contain an evidence base often with valuable deterrent effects (…), but without efficient synthesis, a lack of structure, direction and organisation. The real values of CPTED seem to have been overlooked." (Gibson and Johnson, 2013, p. 16 – 17).

In her conclusions, Victoria Gibson[45] not only highlights the overall importance of the concept of 'territoriality', but she stresses even more the importance of one common language—an holistic framework … a standard maybe?[46]. Hence after 25 years since the first attempts to start standardising Crime Prevention Through Environmental Design, Designing out Crime, Defensible Space and Crime Prevention through Urban Design and Planning, we have come full circle to conclude that standards on the contents and the process of CPTED and CP-UDP are badly needed in Europe.

Great European standards and manuals: the contents

In relation to the 'content part' of the CEN TR 14383 standards and the *Safepolis* manual, a practical body of knowledge is now available on Crime Prevention Through Urban Design and

Note 45 See Victoria Gibsons presentation for the ICA in Calgary (Gibson, 2013)

Note 46 Victoria Gibson did not look into the CEN 14383 standards: "*I could safely say didn't come across these standards in the analysis I did, however this did focus solely on academic material therefore quite conceptual in its content.*" (personal mail Gibson-Van Soomeren April 3th 2014).

Planning. Furthermore, the standards and the manual on urban design and planning are available in several languages. Hence, there now exists a set of well-developed ideas on how to prevent crime, fear of crime and incivilities/anti-social behavior through urban design and planning. Moreover, Europe-wide consensus has been achieved in relation to these texts, ideas and approaches. As one of the respondents in a SWOT commented, it is: *"The only Crime Prevention Standard in Europe since the Roman Empire"*. This is not to say that these standards—and especially the umbrella standard on urban planning—are completed product that require no further revisions. On the contrary, a more 'synthesised' theoretical framework is still an important goal to achieve for both academia and the community of CPTED/CP-UDP practitioners. The standardised procedures followed within CEN anticipate that a constant process of re-editing existing standards will take place.[47]

Process

The 'process part' of the standard CEN TR 14383-2, is a useful document, outlining an almost universally applicable 7-steps-model for the supervision of a planning process from the CP-UDP point of view. This document can be obtained via the internet sites of the national standardisation institutes in many countries, also outside the EU. This is not to say the process part of the existing standard CEN/TR 14383-2 is perfect. The world had had changed in respect to process-approaches. We will elaborate upon this issue in our conclusion below on the need to update the process part.

Promotion – A wonderful failure!

The dissemination of the CEN 14383 standards is a weak point. National standardisation institutes do not undertake any promotional marketing activities and the price is high. Only a few EU countries, such as France, Italy and Estonia, undertake activities for the dissemination of CP-UDP knowledge. In this respect, the CEN 14383 series on Crime Prevention Through Urban Design and Planning may be characterized as a 'wonderful failure!'. CPTED and CP-UDP are good approaches and much needed, but are hampered by serious failures in dissemination—namely, demanding too high a price for a product, whilst completely neglecting to promote the product (see table 7 in chapter 5.5). Moreover, the target group for the standard, which has always implicitly and explicitly been defined as 'architects, designers and planners'—might be the wrong one. It might be a better strategy to consider focusing on (local) authorities and politicians, citizen/resident initiative groups, housing associations and universities/students.

Updating the process part

Experts (see SWOT analyses) worry most about the 'content part': is it entirely 'state of the art'? Is it complete? Is it universally applicable? Thus far, experts have not yet asked questions about the 'process part'. This may be because there is a lack of knowledge in the academic world of criminology, sociology and planning/design about new developments in that field. We would be interested to consider why, when asked for feedback, experts ask 100 questions about content, but do not ask the same type of questions about the process part of the CEN TR 14383-2 standard. There are a number of interesting questions that could be raised, for instance:

- Is the process part of CEN TR 14383-2 state of the art regarding all (upcoming) changes in the ISO 9000 (quality) and ISO 14000 (sustainability) series?
- Would a broader inventory of all type of process-oriented standards be feasible? It might be possible, for instance, to develop standards on System Engineering (e.g. ISO 14288,

Note 47 See the quote from CEN in paragraph 3.3.: "No time limit is specified for the lifetime of TR's, but it is recommended that they are regularly reviewed by the responsible Technical Body to ensure that they remain valid."

System and Software Engineering) that could also open the door to a new dimension of CPTED by including virtual space (3th generation CPTED!).

- Might new developments in risk management be relevant to the standard? E.g. the growing attempt to quantify the different aspects of sustainability, like in the German DNGB[48]

A standard on risk management like ISO 31000:2009 provides a list in order of preference on how to deal with risk, which covers:

- ↘ Avoiding the risk by deciding not to start or continue with the activity that gives rise to the risk
- ↘ Accepting or increasing the risk in order to pursue an opportunity
- ↘ Removing the risk source
- ↘ Changing the likelihood
- ↘ Changing the consequences
- ↘ Sharing the risk with another party or parties (including contracts and risk financing)
- ↘ Retaining the risk by informed decision

This list resembles early work in the tradition of Situational Crime Prevention (see Clarke, 1983 and Clarke 1997). Even more interesting is that the newest developments in risk management define a risk no longer as only a negative effect, but also open the door to positive risks.

Instead of other theories and new standards, one could also focus on the practice. What has been the result of working with CPTED and CP-UDP? Then questions arise like: which examples do we have of a safety/security working group supervising a planning process for a major urban project? Which recommendations came from this group for alterations of the plans? Did planners and decision makers listen to them? Was the outcome satisfactory for the quality of the created environment?

The process as described in the standard CEN 14383-2 is an ideal type of a planning process. In the real world design, planning and maintenance processes are often rather piecemeal and discontinue. There are several reasons for this.

- In the public sector there are many different offices, office leaders, and governmental/political stakeholders involved combined with frequent changes of priorities and also often change of organizational structure;
- the CP-UDP praxis is still dependent on a rather limited number of qualified professionals - one person changing place of work might disrupt a CP-UDP process;
- the most frequent disruption of processes are the result of the EU and national bidding systems for design -, planning - and consultancy work and building contracts. Larger projects are split into several parts. For each part exhaustive bidding procedures are obligatory sometimes resulting in sudden changes in the participating partners

As a large building project takes at least 5 years from the first ideas, designs and plans until the project is built and ready while in some cases, the time frame is more than 20 years, it would be interesting to evaluate if standards like the CEN 14383 series are able to bridge this discontinuity in time, knowledge and participating stakeholders.

Note 48 See: http://www.dgnb-system.de/en/system/certification_system/

6.2 Recommendations

Within the COST Action 1203, the participating countries were able to agree about a strategy to cope with the challenges arising from the conclusions above. These are as follows.

Work on dissemination

Better thought out and more professional dissemination is the first recommendation. The EU COST Action TU 1203 is a start, in this respect. More effort is needed in every country, and in the EU institutes involved, such as the Council of European Municipalities and Regions (CEMR), the European Police College (CEPOL[49]), the European Crime Prevention Network (EUCPN) and the European Forum for Urban Security (EFUS). These institutes do not only disseminate knowledge on CPTED and CP-UDP but also help to organise training and initiate research on the issue. In this respect, we believe that research should be undertaken to collect examples of two types of planning processes:

- Processes that have been finished recently, in which the 7-steps-model was more or less followed
- Future processes, in which the 7-steps-model seems to be applicable.

Make and publish a better process model

After collection and selection of these examples, the selected examples could be worked out in the form of case studies.
These studies will be useful as illustrations to the as yet rather abstract 7-steps-model. The 7-steps-model, with explanatory text and examples, could be published as a new 'Process manual' and made easily accessible via internet.

Examples of a correct application of the standard or, more generally, the correct application of CPTED principles in planning processes, could be published as 'good practices' on crime prevention websites like the internet site of the EU COST Action TU 1203, on CPTED oriented websites (like www.cpted.net and www.e-doca.eu and other chapters of the worldwide CPTED umbrella organisation ICA). They might also be disseminated on websites like that of CEMR, EFUS, the EU Crime Prevention Network (www.EUCPN.org) and/or national websites.

For the selected processes in category 2, i.e. the *future* processes, a marketing campaign, supported by the whole COST Action group, could be started, aiming at convincing authorities that in each country a national working group for security should be established, with the supervision of the planning process as its mission. So far, for the everyday and 'every country' process practice. However, it would also be important to learn from 'process theory' in other disciplines like quality management (ISO 9000), sustainability (ISO 14000), system engineering (ISO 14288) and risk management (ISO 31000) and use or even integrate the practical knowledge on the implementation of crime prevention in these broader and often newer bodies of knowledge.

Develop a better CPTED/CP-UDP theory

Several experts have showed time after time again that CPTED/CP-UDP theory has several limitations. It is not yet a real theory, but more of a conglomerate of ideas, practices and theories. The discipline would benefit from a better generic theory.

Note 49 See the Draft Council Conclusions on encouraging Crime Prevention Through Environmental Design (CPTED). (2011). Brussels: General Secretariat (8094/11, ENFOPOL 75) available from: http://www.veilig-ontwerp-beheer.nl/publicaties/draft-council-conclusions-on-encouraging-cpted/view?searchterm=cepol

The shared goal … start working!

COST Action on European Cooperation in Science and Technology (transport and urban development) TU 1203 is a great opportunity to try to work on these ideas for the next few years. Europe needs safe and secure cities and the European Urban Charter asserts the basic right for citizens of European towns to *"a secure and safe town free, as far as possible, from crime, delinquency and aggression".* This basic right to a safe community has been enshrined into many national and local programs all over Europe. Let's work on it …

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