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**Chapter 5:**

**Standardisation and multidisciplinary processes in urban crime prevention**

**The only Crime Prevention Standard in Europe since the Roman Empire: from the CEN 14383 series to the worldwide ISO standard 22341:2021**

## Contents of the book Urban Crime prevention (Springer, 2022)

Index

Editorial

Miguel Saraiva

Section I – Multidisciplinarity in Theory and Education

1. Plural security: diverse disciplines, multiple actors

Francesc Guillen

2. Third Generation CPTED – Integrating crime prevention and neighbourhood liveability

Gregory Saville, Mateja Mihinjac

3. Social Work and Policing: Multidisciplinary Vocational Trainings for Urban Security

Günter Stummvoll

4. From the borders and edges: Youth cultures, arts, urban areas and crime prevention

Paula Guerra

Section II – Multidisciplinarity in Policy and Planning

5. Standardisation and multidisciplinary processes in urban crime prevention. The only Crime Prevention Standard in Europe since the Roman Empire: from the CEN 14383 series to the worldwide ISO 22341:2021

Paul van Soomeren

6. Local Safety Contracts: profiling a multi-disciplinary and multi-level cooperation for crime prevention

Ana Amante, Miguel Saraiva

7. Beyond simplicity – urban security as a diverse and transdisciplinary approach

Anke Schroder, Melani Schlueter, Maurice Illi

8. The Quarter as New Level of Urban Crime Prevention

Herbert Schubert

Section III - Multidisciplinarity in Research and Practice

9. Multidimensionality in Geospatial Urban Crime Prevention Modelling and Decision Support: the case of Porto, Portugal

Miguel Saraiva, Ana Amante, Teresa Sá Marques, Diogo Ribeiro

10. Incivilities in public spaces and insecurity. A Case Study in Bologna, Italy

Gianguido Nobili

11. The role of the perception of fear in the disintegration of neighbourhoods and the appearance of crime

Melissa López

12. CPTED Evolution, from Latin America to the World

Macarena Rau Vargas

13. Make the world yours! Arts-based research in action in the Cerco do Porto neighbourhood

Paula Guerra, Sofia Sousa, Ricardo Lopes

14. 'A revolution without death'. Hip-hop as a weapon against violence

Carles Feixa, Fulvia Márquez, Nele Hansen, Jeison Castaño, Jeihhco

# **Standardisation and multidisciplinary processes in urban crime prevention**

## **The only Crime Prevention Standard in Europe since the Roman Empire: from the CEN 14383 series to the worldwide ISO standard 22341:2021<sup>i</sup>**

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### **Key words**

Crime Prevention

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Crime Prevention through Urban Design, Planning and management (CP-UDP)

Standardisation

Urban design

Urban planning

Urban management

Partnership approach

Multi-disciplinary working

Multi agency approach

### **Summary**

Crime, as well as fear of crime/feelings of insecurity, can be reduced by Crime Prevention through Environmental Design (CPTED); a multidisciplinary approach by which a partnership of different stakeholders/actors tackle crime problems in existing environments and prevent crime problems in new to be designed environments. In such a very diverse partnership, all participating disciplines speak a different professional language. Hence, reaching a consensus becomes difficult, and the situation resembles the design and building of the Tower of Babel. Nevertheless, a consensus between the stakeholders – from architect and urban planner to resident, police officers, local [politician and city manager - about the chosen approach is crucial. Consensus about the definition of problems, goals and solutions, important social and physical features of an environment, ethical and aesthetic issues, the step-by-step approach to be taken together: scan-prioritise/analyse/respond/assess-evaluate (or: plan-do-check-act).

Voluntary following a standard on the principles and process of CPTED might help in such a situation. This chapter describes the history and content of such a standard, its theoretical background, and the use of the CPTED standard in Europe and worldwide.

## 1. Introduction: let's all unite and work together .... make our cities safe again!

Urban planning, architecture, design, engineering and urban (place) management can prevent<sup>ii</sup> crime and fear of crime. Over the last 60 years<sup>iii</sup> several researchers have demonstrated the relation between design, urban planning and urban management characteristics and the occurrence of crime and fear of crime. The EU COST-action TU 1203 (Cooperation in Science and Technology; see [www.costtu1203.eu](http://www.costtu1203.eu)) and the EU Horizon 2020 project Cutting Crime Impact ([www.cuttingcrimeimpact.eu](http://www.cuttingcrimeimpact.eu)) also show that Crime Prevention through Urban Design, Planning and Management is a feasible and effective approach to reduce crime and fear of crime in new to build/design environments as well as in existing environments.

Worldwide this approach is known as Crime Prevention through Environmental Design or CPTED (pronounced as Sep-Ted; see also [www.cpted.net](http://www.cpted.net)). In Europe, sometimes other terms prevail – security by design<sup>iv</sup>, designing out/against crime – but CPTED is the name most used in the America's, Australia/New Zealand, Africa and Asia. Exhausting and time-consuming disputes over the terms of the concept are possible – and fierce academic wars are indeed fought over it (Armitage & Ekblom, 2019). But here, we will use the internationally most accepted term: CPTED. There is a worldwide ISO standard on this issue now that uses the term CPTED (ISO 22341:2021).

CPTED is defined ([www.cpted.net](http://www.cpted.net)) as: *“a multi-disciplinary approach of crime prevention that uses urban and architectural design and the management of built and natural environments. CPTED strategies aim to reduce victimization, deter offender decisions that precede criminal acts, and build a sense of community among inhabitants so they can gain territorial control of areas, reduce crime, and minimize fear of crime.”*

Nowadays, there is consensus about the main principles and the main process of CPTED:

1. CPTED implies two concepts:

- **physical** CPTED (or first generation CPTED)
- **social** CPTED (or second generation CPTED)

Hence CPTED should consider physical CPTED strategies as well as social strategies. As we will show below, 'social' and 'physical/technical' are in fact as inseparable as two sides of the same coin, though the distinction may be useful.

2. CPTED always includes all stakeholders/actors that are involved in - or connected to - a specific environment (neighbourhood, place, area) and CPTED is thus always about **participation**.

3. CPTED is a standardised **circular learning process**, like the plan-do-check-act circle, or the SARA model Scan-Analyse-Reduce-Assess. The central aim in these approaches is to learn from practice in the real world. From projects, programmes and policies on what works and what doesn't work, and use that as evidence base.<sup>v</sup>

4. CPTED always focusses on a **specific type of environment** (residential area, city centre, transport hub, schools/campus, etc.).

Therefore, architects, urban planners, urban designers and urban managers, but also police, social workers, residents and users can – and should – play an important role in the prevention and reduction of crime and fear of crime. However, successful actions and results require a well-orchestrated approach from private and public institutes with residents and users. Terms like partnership process (Schubert et al, 2016), multi-disciplinary working or multi agency approach are often coined in this respect. In short: *“let's all unite and work together .... make our cities safe again!”*

This may sound easy, but in reality, it often proves to be complicated. Often, the professional disciplines involved differ too much in knowledge, budgets, culture, information, priorities and power. When this is the case, standardisation is a helpful tool. Certainly in a highly diverse continent like Europe, where not only the professional languages vary but also the country languages<sup>vi</sup>.

## **2. Standardisation**

In the previous century, several countries already had their own standardisation in CPTED on a national level. These countries had guidelines, schemes, codes and manuals. But by the end of the century, there was a call for more and better European cross border cooperation in CPTED. The idea of standardisation was born. This wave started at the beginning of the nineties in North-Western Europe (Denmark, UK, and The Netherlands). This group of countries, following a Danish initiative, started to work on a European standard on 'Prevention of (fear of) crime, Urban planning and building design'; CPTED, as we call it nowadays. About 25 years later, this has resulted not only in a complete series of European standards including updates and a handbook (CEN 14383 series and Safe Polis) but also in a worldwide ISO<sup>vii</sup> standard on CPTED (ISO 22341:2021).

### **What is a standard?**

Standards define the characteristics of a product, material, process or service. These characteristics usually determine the design, performance or safety requirements voluntarily agreed upon by interested stakeholders or actors. Standards exist for a wide variety of products, from paper size and computer operating systems via the symbols on a motor vehicle dashboard to credit card size, weight, measures and boxes making up most of the present world trade. This trade in standardised boxes – called containers – accounts nowadays for most seaborne trade, valued at trillions of dollars. Hence, standardising a simple box/container and standardising the logistical processes changed the world! In the case of CPTED, standards for processes are important. Process standards can be very successful; the best-known example is the worldwide standard on quality management ISO 9000. This ISO 9000 standard defines and explains a step-by-step process for the quality management of an organisation, process or project. Like integrating crime prevention in a plan, design or management process. The ISO standard for Sustainability (ISO 14000) and Risk Management (ISO 31000) are similar standards for processes. The Risk management standard is, of course, also important for CPTED and the latest European standards - CEN EN 14383-1 and CEN TS 14383-2:2022 - are formatted according to this general worldwide Risk Management standard.

CEN, the European Committee for Standardization based in Brussels ([www.cen.eu](http://www.cen.eu)), is responsible for developing and defining standards at European level<sup>viii</sup>. ISO has the same function worldwide. CEN provides a platform for the development of European Standards and other technical documents in relation to various types of products, materials, services and processes. Its membership includes every national standards institution in Europe.<sup>ix</sup>

### 3. Standardizing Crime Prevention through Environmental Design

Following a Danish initiative in 1995, CEN started a Technical Committee (TC 325) with the main scope:

*“Preparation of European standards on urban planning and building design to provide methods of assessment and performance requirements for the prevention of crime in residential areas at new and existing housing”.*

They organised the work into three lines of work, or Working Groups (WG):

- WG 1 on Terminology.
- WG 2 on Urban Planning with the aim to provide a general ‘umbrella’ standard for urban planning, design and management.
- WG 3 on a series of standards for specific buildings (dwellings, shops and offices, petrol stations, schools, public transport facilities and the ram raiding of buildings).

**Table 1: The CEN 14383 series of standards on ‘Prevention of Crime - Urban Planning and Building Design’ (CPTED)**

1. Terms and definitions (EN 14383-1:2006; will be superseded by a new re-edited version 2023)
2. Urban planning (ENV 14383-2:2003 superseded by TR 14383-2:2007 and TS 14383-2:2022)
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 (TS 14383-6)
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 ‘umbrella standard’ on Urban Planning made by Working Group 2 is relevant for urban planners, designers and managers, police, justice officials, social workers, shop owners and residents (Cardia, 2013).

The work on this standard started in 1995 and was finished in 2003. This document was revised in 2007 including the explanatory Handbook ‘Safepolis’ (2008). The second revision was issued in 2023 (following the ISO Risk management standard 31000). This ‘umbrella standard’ follows a new design-led and environmental approach to crime prevention in combination with a managerial process-focused approach like the one used in other international standards on quality and risk management (ISO 9000 and ISO 31000 series). However, it also differs from these ISO standards. The umbrella standard focuses on the process as well as on a specific environment. Such an environment might be a whole city, neighbourhood, city centre, transport hub, campus or any time-space and physical-social specific environment.

The umbrella standard CEN/TR 14383-2 aims to combine questions of environment-specific "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*".

#### 4. Environment = physical, social and organisational (E = pso<sup>2</sup>)

An environment is not only a specific three-dimensional space; it also includes time, as Einstein teaches us. Every environment is always a four-dimensional manifold: time-space.

Furthermore, an environment is not only a physical entity but also a social one. Every urban environment is a human-made environment and thus a mix of objective physical features and social features: people, actors, interactions and also offenders, victims, guardians. Bruno Latour (1994) showed this philosophical idea in a simple way: a man alone without a gun cannot shoot someone. The same goes for a gun. A gun needs someone to pull the trigger. But together, the man + gun form a new entity: the gun-man. In a human-made environment, it is impossible to separate the physical and social environment. Or, as Bruno Latour (1994, page 64) states: *“We are sociotechnical animals, and each human interaction is sociotechnical. We are never limited to social ties. We are never faced with objects. [...] At the very least, I hope to have convinced you that, if our challenge is to be met, it will not be met by considering artefacts as things. They deserve better. They deserve to be housed in our intellectual culture as full-fledged social actors. Do they mediate our actions? No, they are us”*.

Bruno Latour uses the Actor-Network Theory (ANT), which is rooted in science and technology studies. ANT can be defined<sup>x</sup> as a research method focusing on the connections between both human and non-human entities. It describes how these connections lead to creating new entities – like the ‘gun-man’- that do not necessarily practice the sum of characteristics of constituent entities. ANT is like what happens if a chemist puts together two chemicals, or the gunman example. Hence, the social-technical/physical dualism is a false dualism.

When talking about a social and a physical/technical environment, we are in fact talking about a four-dimensional (time/space) sociotechnical – or social-physical – space. Envisage for example a community (=social) in a physical environment, e.g. concrete houses, brick lanes and metal lampposts (all physical) where people live together and interact in a neighbourhood/community (social). And of course this social-physical entity evolves over time. It cannot be seen and studied ‘timeless’ it is one huge interactive process. Changing, influencing and engineering such a process is thus both physical engineering and social engineering. The same goes for urban design, planning and management. And since every urban environment also implies design, planning and management, each environment is also a governance and organisational environment, a design (planning/management) process.

This philosophical exercise also puts an end to the internal CPTED discussion about 1st and 2nd generation CPTED. We might use that distinction introduced in 1998 by Cleveland and Saville (see also Saville, 2018), but Latour and ANT teach us that there is only one generation of CPTED: the socio-physical time-space one.



## 5. A standard is born

The publication of the European CEN-standard on CPTED in 2003, the CEN ENV 14383-2:2003, represents the achievement of an important milestone. Following a French/Italian initiative, the ENV from 2003 was slightly revised and issued anew in 2007 as a Technical Requirement (TR; see CEN TR 14383-2:2007). Thanks to EU funding in 2006 (AGIS; Directorate-General Justice, Freedom and Security), the revised standard was issued together with an explanatory manual called Safepolis (published in English, French, Italian and Spanish).

This 'Mediterranean-initiative' showed that the main interest in Europe by that time had shifted from the North-Western European countries to the Mediterranean countries. The experiences from North-Western European countries that started the CPTED-standardisation process has, in that respect, paved the way for other European countries. EU COST research ([www.costtu1203.eu](http://www.costtu1203.eu)) that included 22 EU-countries and their 'output' of CPTED documents (guidelines, policy docs and academic work) sketches a kind of CPTED wave rolling over Europe from the North-West to the South and then to the East:

*"After a start in the US in the 1960s and early 1970s, the wave first arrived in the UK in the late 1970s, moving to the Netherlands and Denmark in the 1980s, and then to Austria, Belgium, France, Germany, Norway, Sweden and Switzerland in the 1990s.*

*In Southern Europe, the wave came to Spain, Italy and Portugal in the 2000s and to some degree also to Greece. In eastern Europe, the wave did not arrive until the 2000s or later, with the Czech Republic and Hungary being early exceptions. Finland has shown some interest in CP-UDP (PvS = CPTED) since about 2005."* (Grönlund et al, 2014, page 13)

The process of making the standard (between 1995-2003) definitely helped this wave because several European countries participated – and still participate – in this standardisation process work. The first issued 2003 version (ENV), the 2007 (TR) and 2023 revisions were exceptional because these CPTED standards were based on a consensus from all European countries forming CEN. The process to reach this consensus was often tiresome and sometimes even resembled a cold war (Benbouzid, 2011, page 177: "...une guerre froide des paradigms au gouvernement"). Reaching consensus – like multidisciplinary working – sounds easy, while often decades of cold wars are necessary to reach consensus. No wonder that the standard CEN/TR 14383-2 is said to be *"the only Crime Prevention Standard in Europe since the Roman Empire"* (Grönlund et al., 2014) and the same goes for the superseding CEN/TS 14383-2:2022 revision.

### Content of the design guidelines

To support the standard in 2008 a handbook/manual entitled 'Safepolis' was produced (LabQUS, 2008) explaining the possible measures and approaches in various urban contexts. The core of the Safepolis-manual consists of the explanation (in text, clarified with many maps and photos) of 20 guidelines:

**Table 2: Content of the Safepolis-handbook**

PREFACE	
FOREWORD	URBAN DESIGN STRATEGIES
	Continuity of urban fabric
THE LINK BETWEEN URBAN PLANNING AND SAFETY	Location of activities
The concept of urban safety	Time and calendar of activities
Historical development of environmental crime prevention	Visibility
Environmental crime prevention theories	Accessibility
CEN Technical Report: Prevention of crime by Urban planning	Territoriality
How to use this Handbook	Attractiveness
	Quality of materials to prevent decay
URBAN PLANNING STRATEGIES	MANAGEMENT STRATEGIES
Considering existing social and physical structures	Maintenance
Guaranteeing accessibility and avoiding enclaves	Surveillance
Creating vitality	Rules governing conduct in public spaces
Providing mixed status	Receiving particular groups
Creating adequate urban density	Communication with the public
Avoiding physical barriers and waste land	Target-hardening

The Safepolis-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 in the manual but is presented in more depth in the standard CEN/TR14383-2.

### **Content of the process standard**

The process part of the European CPTED standard outlined an almost universally applicable 7-steps model for structuring and monitoring a design, planning, management and development process to include CPTED in a regular urban planning, design and management process.

The 2007 process standard contained a flowchart for the structuring and monitoring of the planning process. In this flowchart, a Working Group responsible for including crime prevention in the urban planning, design and management process plays a central role. The standard offered two operational approaches for the functioning of this Working Group (CEN/TR14383-2:2007, page 24 and clause 7.2.2 in the superseding CEN/TS 14383-2:2022):

#### *A. The integrated approach.*

The Working Group of a regular planning process for the new or existing area should be expanded with some experts specialised in safety, security, crime prevention: police officers, security risk professionals, social workers or some residents.

#### *B. The specialised approach.*

A separate Working Group specialised in preventing crime and fear of crime by urban planning, design and management should be set up to advise (and influence) the planners/designers, developers/builders and services.

This particular process approach shows a clear resemblance with international standards on risk management (ISO 31000), quality management (ISO 9000) and sustainability (ISO 14000) which are nowadays widely used on a worldwide scale. This type of process-oriented standards can also be found in the world of engineering (e.g. the ISO 15288 on Systems and Software engineering) and other social science methods and innovation tools from the design industry like the well-known 'design-thinking' approaches. In the CEN standard, experts on the work floor (planners, architects, designers, police, transport, management) together with the residents and users are important actors or stakeholders. Hence, the approach is human-centred instead of pure physical-technical. In short the chemical 'gun-man approach' as elaborated by Bruno Latour.

## **6. Diffusion and implementation of the standard**

As a follow up of making this CEN standard academic researchers, practitioners and designers from 26 countries have worked together in a European COST Action for safe urban planning and design from 2012 till 2018 (COST, 2012; <http://costtu1203.eu>).

In this network, the question about the diffusion and implementation of the standard and manual was raised. All network members were convinced that both documents (standard + manual) have played an important and valuable role and contribute to the safety and security of the urban environment. But there was also severe doubt about the diffusion and implementation of the standard and manual. Are they widely known and have these documents been widely distributed and disseminated? Are they being used on a large scale by planners and designers in urban projects?

From the 26 participating countries in the COST network, 13 countries<sup>xi</sup> carried out a SWOT-analysis in 2012/13 on the standard and the manual. The SWOT analysis was based on interviews with urban planners and desk research. The 2012/2013 results from the participating countries may be considered representative for all European countries. The detailed results of the SWOT analyses are presented in the next two paragraphs, one from a pessimistic perspective and the other from an optimistic one (see also Grönlund et al 2014, Soomeren 2020 and Soomeren 2021).

## **7. Implementation; the pessimist view**

*Neither the standard nor the manual have been widely implemented in urban planning in 2012/2013.*

The dissemination and promotion of the standard and the Safepolis-manual have thus far been a weak point. The standard is available from every national standardisation institute in every country in the world. But the price is high – about € 400 for the complete CEN 14383 series and € 70 for the umbrella standard on urban planning. Furthermore, the European and national standardisation institutes never did any promoting or marketing. These institutes are used to produce and issue standards for the private market, not standards with a very diverse private-public audience that is not very familiar with standardisation documents. Copyright© issues strictly forbid publishing the standards on public websites.

Not very successful marketing

According to the 4P marketing mix model (McCarty, 2001), if one wants to sell a product, the best possible mix of 4P's is needed: product, price, place and promotion. In terms of 'selling the CEN standards to the market, 'two of the P's (prize and promotion) are not too good:

- the price is too high, especially for the mainly non-profit oriented market that wants or could use CPTED like neighbourhood/community organisations, residents and users.
- promotion has been almost non-existent.

The product (= the standard) is effective and good and moreover – since there is an obligation to review and re-edit each standard once in a while – always up to date (see the revised documents from 2007 and 2023). Also the ‘place’ where one can order and obtain the standard is perfect since the standard is available from every national standardisation institute in the world and can be bought online - thus, distribution is not a problem.

Table 3: The 4P marketing mix for the CEN 14383 standards

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

However, 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 urban managers, (local) authorities and politicians, citizen/resident initiative groups, housing associations and universities/students. The core target group should probably be political authorities (councils, parliament, aldermen, mayors) or 'top management' (to use ISO 31000 terminology). These top dogs can simply order the implementation and use of the CPTED-standards compulsory by saying, *"we all want a safe and secure environment; hence, use these CPTED standards and design me a safe environment!"* Or: *"shut up, unite and do it together .... make my cities safe again!"* This change in focus on the most important target group can be found in the new version of the standard that was issued by CEN in 2023: TS 14383-2:2022 (Crime Prevention through building design, urban planning and city maintenance - Principles and process).

## 8. Implementation; the optimist view

*The diffusion of the standard took place all over Europe, has reached several other continents and a worldwide ISO standard was born from it!*

The European standard helped - or was at least part of - the CPTED wave that conquered Europe from the North-West to the South and then the East. Also, within countries, there have been further developments. To present just a few examples (see also Soomeren, Davey and Wooton 2019/2022)

**France** is the only European country that implemented regulations on a national scale similar to CEN/TR 14383-2 in the French national legal system. In France, a study preliminary to the start of the realisation of an urban project (Étude de Sûreté et de Sécurité Publique; ESSP) is obligatory. This study has to be carried out parallel to the planning and design of major urban renewal projects, schools, railway stations and sports 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). For more

information, check: <http://costtu1203.eu/publications-on-urban-safety-in-french/> The city of Lyon has gained much experience with this approach (Corbillé et al. 2017).

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 disseminating knowledge about CPTED. This laboratory - called 'LabQUS', Laboratory for urban quality and security - conducted several studies. LabQUS became an independent research and consultancy group later on and still works on CPTED (<https://www.labqus.net/web/index.php/en/>). An example of a study for the city of Milan aimed at crime prevention and improvement of the living conditions in four urban areas perfectly shows the very sophisticated LabQUS approach (Barosso et al., 2014).

In 2002 in **Estonia**, the CEN/ENV 14383-2 - which was then still a draft version - was translated in Estonian and was issued as a provisional national standard EVS 809-1:200240. Also, training was and is given to police, local municipalities, and crime prevention institutions in Estonia (Leps, 2014). The training included four counties (Estonia, Latvia, Lithuania, and Finland) and the main aims were: 1) the development of existing CPTED methods in partner countries; 2) raising the levels of professional knowledge for CPTED participants; 3) the creation of a network to improve cooperation and the exchange of best practice; 4) the preparation of learning materials and a specific manual for police officers. The CPTED manual that resulted from the training is "*a practical CPTED handbook specifically for police officers who are taking part in the planning processes, and also for other officials who are responsible for ensuring a safe living environment.*" (<https://eucpn.org/document/cpted-manual-for-police-officers>). The training was later on elaborated in the EU H2020 Cutting Crime Impact project (CCI): Building Safer Cities Together (Supporting the effective planning, design and development of safe urban environments). See: <https://www.cuttingcrimeimpact.eu/toolkits/building-safer-cities-together/pjp/>

In **Sweden** the standard CEN/TR 14383-2 was also translated into the national language and an early version of the standard was used in the planning for Hammarby Sea City in Stockholm in the late 1990s (Grönlund, 2012).

**Finland** used the Swedish experiences around 2000. In Tampere the neighbourhood Muotiala was build (approximately 2000 residents) following the ideas laid down in de standard ENV 14383-2: "*Muotiala was the first and only CPTED neighbourhood in Finland*" (Kyttä, 2011/348). In 2008 the outcomes of the approach were evaluated by the Helsinki University of Technology (Kyttä et al., 2008). Overall the results were very positive: residents considered Muotiala as very safe, and they used the public space a lot. Planning solutions focusing on facilitating social interaction proved to be successful, well-designed lighting promoted a sense of safety and active use of spaces, and the building costs were not different from other projects.

In **Denmark**, the CEN/TR 14383-2 and the national Danish crime prevention standards were used for the first time in 2013-2014, as documents in two architectural competitions to improve the 1950s and 1970s suburban housing areas and shopping facilities. Denmark was also the organiser of a summer school on CPTED in 2015. This brought young students from all over Europe to Denmark to learn in a very practical environment (the Copenhagen neighbourhood Norrebro) how to tackle crime and

support safety by producing practical analyses and proposals for improvements in the district with the best methods available (Wolterbeek et al, 2016)

In **The Netherlands**, the European standard was developed more or less at the same time that Dutch crime prevention experts developed a general Safety Assessment for buildings, complexes and neighbourhoods (Safety Effect Report; Soomeren and Woldendorp, 1997; comparable with the Crime Impact Statement as used in Greater Manchester) as well as the Police Label Safe and Secure Housing (Jongejan and Woldendorp, 2013). The Safety Effect Report/Crime Impact Statement instrument was revised several times and is still used:

<https://hetccv.nl/fileadmin/Bestanden/Bestellen/PKVW/ver-engelstalig.pdf> and

<https://hetccv.nl/onderwerpen/veiligheidsbeleving/praktijkvoorbeelden/alle-praktijkvoorbeelden/veiligheidseffectrapportage/>

The Police Label Safe and Secure Housing is also used till this day and proved to be very effective (e.g. burglary risk minus 80%). See Soomeren, Davey and Wootton 2019/2022 and see <https://www.politiekeurmerk.nl/>.

In the **UK**, schemes like Secured by Design (SbD) were already available when the European standards were made. Based on SbD in Greater Manchester (approximately 3 million inhabitants), the police (GMP) and Salford University (Davey and Wootton, 2018) developed a GMP Design for security consultancy service: Design for Security (DfS; [www.securedbydesign.com](http://www.securedbydesign.com)). This scheme was developed without very much influence from the European Standards. The knowledge was – like in The Netherlands – already available. DfS makes a Crime Impact Statement (CIS) obligatory for a regular planning application. The CIS process involves identifying, predicting, evaluating, and mitigating the crime and disorder effects of a development proposal early in the design process—before planning decisions and commitments made. A CIS is a report that has to be submitted with planning applications and includes a Crime Impact Assessment (crime pattern analysis, risk assessment relating to type of building and its uses and a police site visit and site-specific risk assessment) and Crime Prevention Recommendations. The process is embedded in the obligatory regular process of getting a planning application ("Yes, we allow you to build this building"). Hence, the client pays for the application and the embedded CIS. The process yields enough money to pay for a small Design for Security office within the GMP. The CIS's purpose is to ensure that design decision-makers consider crime, disorder, and fear of crime before determining whether to proceed with new projects.

### **Worldwide – from Korea to ISO**

A rather unexpected effect was that the CEN 14383-2 standard was also translated in Korean and issued in **Korea** as standard KS A 8800:2008 (Korean Standards Association). Based on this Korean Standard, Dr Hyeonho Park took much effort to develop a worldwide ISO standard on CPTED as Project Leader of the ISO committee of experts that developed the standard with the Swedish-held secretariat - Security and resilience - held by SIS. The result was published in 2021 as ISO 22341:2021. Hyeonho Park<sup>xii</sup>: *"When well-planned and wisely implemented, CPTED improves community safety and industrial security in a cost-effective manner. What's more, some jurisdictions have introduced requirements to meet specific security standards in building regulations, for example, so it is important for CPTED stakeholders and practitioners to clearly understand the fundamental principles, scope, roles of institutions, elements, strategies and processes."*

### ... and back to Europe

The fusion of knowledge, expertise and consensus that kicked off in 1995 to make the European CPTED standard (“*the only Crime Prevention Standard in Europe since the Roman Empire*”) in the end resulted in the publication of a worldwide ISO standard on CPTED.

But the work is never done.

In 2019 CEN/TC 325 chaired by Czech experts started revising and updating the existing set of European CEN standards – CEN/EN 14383-1:2006 on terminology and definitions and CEN/TR 14383-2:2007 on principles and process. Almost 20 European countries as well as affiliated experts from the International CPTED Association ([www.CPTED.net](http://www.CPTED.net)) participated. The 2007 technical report (TR) was re-edited using the ISO standards on Risk management (ISO 31000) and CPTED (ISO 22341:2021). The result is the new CEN/TS 14383-2:2022 entitled ‘Crime Prevention through building design, urban planning and city maintenance - Principles and process’.

## 9. Conclusion

### *Aim of the standards*

In 1995, the original founding idea of publishing standards on Crime Prevention Through Environmental Design (CPTED) on a European level was that it was vital to achieve a European consensus on:

- A synthesised generic theoretical but practical framework on the **contents** of CPTED that somehow explains the basics of CPTED and establishes consensus about the main principles of CPTED. In short:
  - the social-physical combination (the CPTED gun-man) including also ethical aspects like the ones tackled in the preliminary declaration of CEN TR 14383-2:2007 (inclusive, no security for the rich, no gated communities, etc.),
  - the partnership/participation/stakeholder approach,
  - last but not least, the focus on specific environments (time/space & socio/physical).
- A standardised and **well-structured urban planning process**, in which the principles of CPTED are taken into account. This should also be rather generic since it must fit with national procedures and regulations (from laws on special planning to building codes). The 7 step model in the 2003 (ENV) and 2007 (TR) standard worked well as a kind of elaborated plan-check-do-act circle that became popular later on. Mind the fact that at the time the work was done on the early CEN 14383 standards, the ISO risk management standard did not yet exist. ISO 31000 was published in 2009. The history of the ISO quality management standards in the 9000 series dates back longer. However, only the 2000 version performed a radical change in thinking by focussing on the idea of process management (the monitoring and optimisation of a company's tasks and activities, instead of just inspection of the final product). The development of the CEN ENV 14383-2 (Summer 1995: Copenhagen: Launch of CEN/TC325: WG1+WG2+WG3) took place more or less parallel with the ISO 9000 way of thinking (process focussed) at the start (1995). In the new CEN/TS 14383-2:2022 version this structured process of including CPTED in regular participatory urban planning, design and management is fully integrated in the document including a sophisticated framework, a set of handy principles (how to do & what to do) and a specific CPTED process for one project/environment<sup>xiii</sup>.

### *Publication and diffusion of the standards*

The set of European standards on CPTED Design are on sale by all national standardisation institutes. Furthermore, the Safepolis manual explains in more detail the guidelines for planning and design. The Safepolis-manual is available online free of charge (<http://www.costtu1203.eu/downloads/other-documents/>).

For the National Standardisation Institutes, these standards on CPTED are a bit of a stranger in their midst. Standardisation institutes are usually focused on the big – mainly industrial and service-oriented - private market and ask a very high price for a relatively short text. The standardisation institutes did not invest in any marketing and publicity for the CPTED-standards. These standards are still not widely known nor used by planners and designers. The public sector – EU, governments and local/regional authorities – could have stepped in sooner to promote the use of these standards and the manual. Also, universities and other educational institutes could play an important role in the promotion activities. They hardly ever did so in Europe. The weird reality was that a worldwide ISO standard on CPTED (ISO 22341:2021) suddenly seemed to bypass its older and sophisticated European parents and predecessor, but the new work done on standardisation in Europe (CEN/TS 14383-2:2022) put Europe back in the innovation race although it might be still too early to judge the results of the ISO 22341 child and the newer European CPTED standards.

### *Contribution of the standards to the quality of urban environments*

In the European CPTED standards and the Safepolis-manual, a practical body of knowledge is available on CPTED from the early millennium. Furthermore, the standards and manual are available in several languages: English, French, Italian, Spanish and others (e.g. Estonian and Swedish). A set of well-developed ideas on preventing crime, fear of crime, incivilities and anti-social behaviour through urban design, planning and management. Europe-wide, a consensus was achieved in relation to these texts, ideas and approaches. The CEN CPTED standards and the Safepolis-manual are not final products that require no further revisions. On the contrary, a more 'synthesised' theoretical framework is still an important goal to be achieved for both academia and the community of crime prevention practitioners. Also, the process flow chart of the 2003 and 2007 standards were updated according to new standards in risk management (the ISO 31000 family), sustainability (ISO 14000) and human centred design thinking and ISO 15288 on Systems and Software engineering. This update requirement was partly fulfilled with the publishing of ISO 22341:2021 and the serious and intense marketing of this new worldwide standard by the International CPTED Association. That also boosted regular procedures followed within CEN that anticipate a constant process of re-editing existing standards. Under Czech chair and secretariat (see CEN TC 325), work started on re-editing and revamping the European terminology standard (CEN EN 14383-1:2006) that indeed badly needed some elaboration and reconstruction as well as the CEN 14383-2:2007 on principles and process. As mentioned above this resulted in the new CEN/TS 14383-2:2022. This renewed standard included the 'old' TR 14383-2:2007 that was updated and remodelled following the very popular ISO 31000 on Risk Management.

Europe needs safe and secure cities. 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. Local authorities, urban planners, designers, managers and developers, all who take this message seriously, should use the existing and new CPTED-standards and the



available manuals. Just decide together, "Let's use that worldwide ISO standard on CPTED ISO 22341:2012 and let's work in compliance with the European standard CEN/TS 14383-2:2022 ...!"

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This standard is available from each National Standardization Institute. Such an Institute exists in every country in the world. Most institutes have an online shop to buy standards as Pdf and/or in paper version

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**Note i** This article is partly based on research done within the framework of the EU COST (COoperation in Science and Technology) action TU 1203. See: Grönlund, B., Korthals Altes, H.J., Soomeren, P. van and Stummvoll, G. (2014) 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. August 2014. See: <http://costtu1203.eu/downloads/cost-tu1203s-results/>

See also results of the Horizon 2020 EU funded project Cutting Crime Impact ([www.cuttingcrimeimpact.com](http://www.cuttingcrimeimpact.com)) especially the work done on CP-UDP (Crime prevention through Urban Design and Planning). An important source has also been the Webinar of the International CPTED Association ([www.CPTED.net](http://www.CPTED.net)) on Standardisation from March 26th 2021 .

**Note ii** Prevention of crime shall here be understood as reduction of crime and fear of crime. A reduction of up to 90% is possible depending on circumstances and selection of prevention methods.

**Note iii** See research carried out by (among others) Jane Jacobs (1961), C. Ray Jeffery (1971), Oscar Newman (1972), Timothy Crowe (1991 and 2013), Vollaard and Ours (2011), Ronald Clarke (1983 and 1997) Jan van Dijk (1991 and 2012), Cozens and Love (2015), Davey and Wootton (2017), Soomeren, Davey and Wootton (2019/2022).

**Note iv** See Franke, K. and Soomeren, P. van (2021) Security in Public Spaces; Action 6 of the Urban Agenda for the EU – 10 Rules of Thumb for the Security by Design approach (<https://futurium.ec.europa.eu/en/urban-agenda/security-public-spaces/library/action-6-10-rules-thumb-security-design-approach>).

**Note v** See also the practical way how police, local authorities, residents and entrepreneurs can do something about High Impact Crime together as prototyped, demonstrated and implemented in the Dutch ProHIC approach (problem-oriented approach to High Impact Crime): <https://prohic.nl/?lang=en>

**Note vi** 'Only' in the EU there are already 24 'official' languages!

**Note vii** ISO = the worldwide International Standardisation Organisation.

**Note viii** There are several types of 'standards' or 'standardisation documents'. In this article the following types of European documents issued by CEN are mentioned: EN, ENV (a pre-EN), TR and TS. International standards are issued by ISO. We refer to them as standards; whatever the 'type' may be.

**Note ix** CEN members are more than thirty national standards bodies - more than only the EU!

The current CEN Members are: All member states of the European Union; three of the EFTA members: Iceland, Norway, Switzerland; and other states: United Kingdom, North Macedonia, Turkey, Serbia. The current affiliates are Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Egypt, Georgia, Israel, Jordan, Lebanon, Moldova, Montenegro, Morocco, Tunisia and Ukraine.

**Note x** <http://ritskedankert.nl/publicaties/2010/item/using-actor-network-theory-ant-doing-research> (last consultation 27/04/2021).

**Note xi** . The participating countries: UK, Italy, Poland, Belgium, Ireland, Portugal, Denmark, France, Germany, Serbia, Austria, Hungary and The Netherlands.

**Note xii** Source: <https://www.iso.org/news/ref2620.html> (last consultation 27/04/2021)

**Note xiii** See in CEN/TS 1438-2:2022 Figure 1 – Principles (How to do CPTED and What to do by CPTED), framework and specific CPTED process for managing crime risks