Standardisation in crime prevention can be effective and fun

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Authors:

Paul van Soomeren
pvansoomeren@DSP-groep.nl

Vivian Gravenberch
viviangravenberch@disss.eu

Content

Introduction	3
A definition of CPTED	3
Working together like an orchestra	5
What CPTED standards should focus on	5
Work in progress	6
A standard useful for local and regional authorities	7
Making standards practical and fun	10

This article is based on an annex in the final PACTESUR report [1] entitled 'Safe and inclusive public spaces: European cities share their experience'.

Introduction

It is common knowledge that the prevention of crime, incivilities and feelings of insecurity require an approach in which local authorities and law enforcement agencies work together with social managers, urban/regional planners and designers and local residents and businesses. The same goes for Security by Design (SbD), Crime Prevention through Urban Design, Planning and Management (CP-UDP), and Crime Prevention through Environmental Design (CPTED). In this article, we will use the term CPTED.

A definition of CPTED

The ISO 22341:2021 standard – combined with new European standards by CEN (CEN/TS 14383-2:2022; see page 8) - define CPTED as [2]:

- aims at crime (including terrorism) + fear/feelings of insecurity; main aim: quality of life, safe/secure living/liveability;
- a mix of social and technical-physical measures (building & living);
- an eclectic concept with diverse theoretical roots;
- always time-place specific; the neighbourhood level, as a geographical social-physical entity, can structure the approach;
- very different groups of stakeholders have to be included: partnership approach (multi agency, multi-disciplinary, multiple-helix);
- working together in a step-by-step process in a specific national and local environmental context: planners, architects, engineers, police, residents, city management/maintenance, youth/social workers, neighbourhood manager, local businesses, etc.;
- plan-do-check-act, hence learning in practice, evaluate and work evidence based/evidence informed;
- an organic approach adapting to the local situation and the participating stakeholders including residents/end-users.



An abbreviation soup

The array of names in Europe and the abbreviation soup (SbD, CPTED, CP-UDP, CP-UDPM, DAC, SCP, DfS, DOC, DS UPDM-US, etc.) [3] prove that some standardisation might be useful especially for designers, architects, planners and consultants who often work on a trans-national scale or even worldwide. In this respect the recent ISO [4] standard has been a blessing in disguise: ISO 22341:2021 explains and defines CPTED: Crime Prevention through Environmental Design. A term regularly used in all continents outside Europe.





What is a standard?

A standard is a text prepared by experts on which there is a consensus, whether on a test method or procedure, a product, a service, or a process (like quality or risk management, or a regular CPTED step by step process). CEN makes European standards and ISO makes worldwide standards.

[1] The EU (ISF) funded PACTESUR project was led by the city of Nice. The consortium included the city of Liège (Belgium), the city of Turin (Italy), the National Association of Italian Municipalities (ANCI) Piemonte (Italy), the European Forum for Urban Security (Efus) and the Métropole Nice Côte d'Azur. See also the PACTESUR publication series: https://efus.eu/wp-content/uploads/2022/01/2019-2021-Publication-Series-EN-2.pdf

[2] A presentation by Paul van Soomeren was given at the International conference Urban environment - security threat or opportunity for prevention? Prague, Czech Republic, October 2022. The figures in this article are taken from that presentation.

[3] SbD: Security by Design or Secured by Design (UK scheme), CPTED: Crime Prevention through Environmental Design, CP-UDP: Crime Prevention through Urban Design and Planning (also Planning and Design or Planning, Design and Management), DAC: Design Against Crime, SCP: Situational Crime Prevention, DfS: Design for Security, DOC: Designing Out Crime, DS: Defensible Space, UPDM-US: Urban Planning, Design and Management for Urban Security. And not to forget CEN using (without abbreviation): Crime Prevention through building design, urban planning and city maintenance.

[4] ISO = International Standardisation Organisation issuing worldwide standards.

Working together like an orchestra



Working together as a partnership sounds rather straightforward: a fine-tuned orchestra where urban planners, designers and managers (the violins) synchronise their action with law enforcement agencies (drums and basses), the school/youthwork (flutes) and residents/businesses (celli). An orchestra needs a conductor, a boss. Local authorities could play this role; the mayor is an option, but other stakeholders or an outside expert may in specific cases also play that role. But different organisations implies different languages and cultures, approaches (hard/soft, quick/slow, preventive/reactive), management styles, planning systems and financial options. In short, working together in partnership is a challenge.

What CPTED standards should focus on

For CPTED, the most urgent standards should focus on:

- **products:** there are several product standards that are relevant for crime prevention: burglary-proof doors and windows, safe/secure glazing, anti-ram-raiding systems [5], public lighting, anti-theft vehicle 'Engine Immobilisers' [6], etc.;
- **terminology/definitions:** this work had been started already and will be finished by 2023-2024 (the new CEN EN 14383-1 standard);
- **principles and process:** see the new CEN TS 14383-2:2022 standard.

Because standards often make difficult reading, it is indispensable to accompany them with manuals/handbooks as well as training programmes. In this respect, the training manual developed through the Efus-led Secu4All project can be considered a prototype. [7]

[5] For the protection from vehicle-ramming incidents by using barrier systems, see also Karlos, V., Larcher M., Solomos G. (2017). Review on vehicle barrier protection guidance and Karlos V. Larcher M., Salomon G. (2018). Guideline: Selecting proper security barrier solutions for public space protection. Also the publication 'Security by Design: Protection of public spaces from terrorist attacks' (European Commission, Joint Research Centre (JRC). jrc-public-spaces@ec.europa.eu ; https://counterterrorism.jrc.ec.europa.eu.

[6] Van Ours, J.C. & Vollaard, B. (2014). The Engine Immobiliser: A Non-starter for Car Thieves. The Economic Journal, Volume 126/593, June 2016, pp.1264-1291. https://doi.org/10.1111/ecoj.12196 See on dwellings/houses also van Ours, J.C. and Vollaard B.A. (2011) "Does regulation of built-in security reduce crime? Evidence from a natural experiment". Economic Journal, Volume 121, Issue number 552, page 485-504.

[7] Efus, Secu4All (2021). Training Manual: Training local authorities to provide citizens with a safe urban environment by reducing risks in public spaces. See also the earlier Safepolis manual in English, French, Italian and Spanish: http://www.costtu1203.eu/downloads/other-documents/.

Work in progress

In Europe, the CEN-work on standardising CPTED started as early as in 1995. It has been a long and sometimes tiresome route to reach a European consensus, made even more difficult as a growing number of countries were joining this collective effort. Over the years, a series of standards were issued. The most recent is CEN TS 14383-2:2022, which was published in December 2022 [8]. The work continues like building and restauring cathedrals; it is always a "work in progress".

1. Terms and definitions (EN 14383-1:2006). Work on a new superseding standard has started in 2022 by CEN TC 325 (WG1)	**5. Petrol stations** (TR 14383-5: 2010)
2. Urban planning (ENV 14383-2:2003 superseded by TR 14383-2:2007 and in 2022 again superseded by TS 14383-2:2022 [9])	**6. Safety in schools** (TS 14383-6:2022)
3. Dwellings (TS 14383-3:2005)	**7. Facilities for public transport** (TR 14383-7:2009)
4. Shops and offices (TS 14383-4:2006)	**8. Protection of buildings and sites against criminal attacks with vehicles** (TR 14383-8:2009)

[8] See: https://standards.cencenelec.eu/dyn/www/f?p=205:110:0::::FSP_PROJECT:68813&cs=19AE413EED841D8789ACB215A3881969B

[9] The new CEN TS 14383-2:2022 supersedes the old TR. It builds on ideas from risk management (ISO 31000 series), Quality management (ISO 9000 series), CPTED (ISO 22341:2021) and new approaches, new types of crime and UN/EU standards/documents (like the ICCS).

A standard useful for local and regional authorities

This new European CPTED standard CEN TS 14383-2:2022 is particularly useful for local authorities in their effort to improve urban security. It explains the main principles of CPTED and how to apply them:
Process oriented, Contributing to urban development, Inclusive, Scientific, Evidence based, Pro-social, Focused on changing Human Behaviour. The main aim: reduce crime and fear of crime to enhance quality of life.

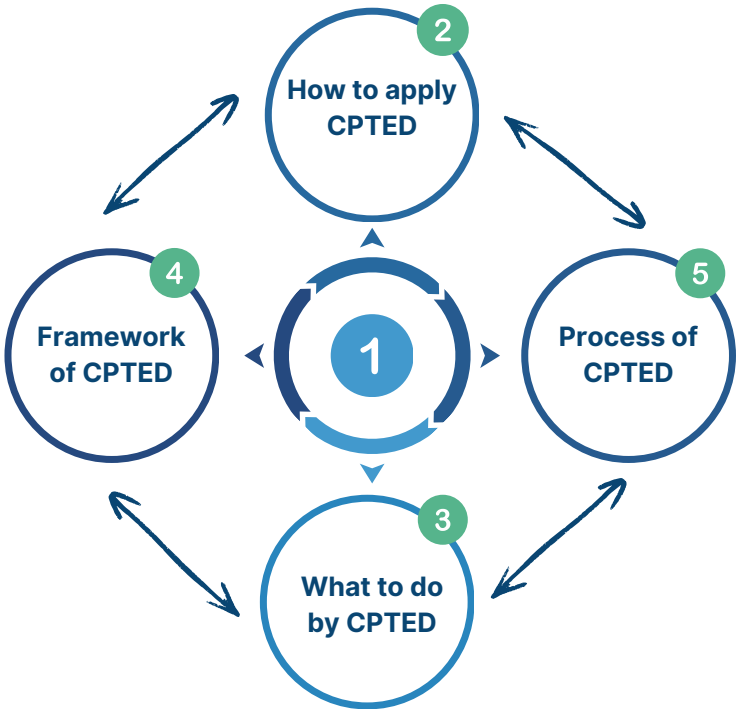
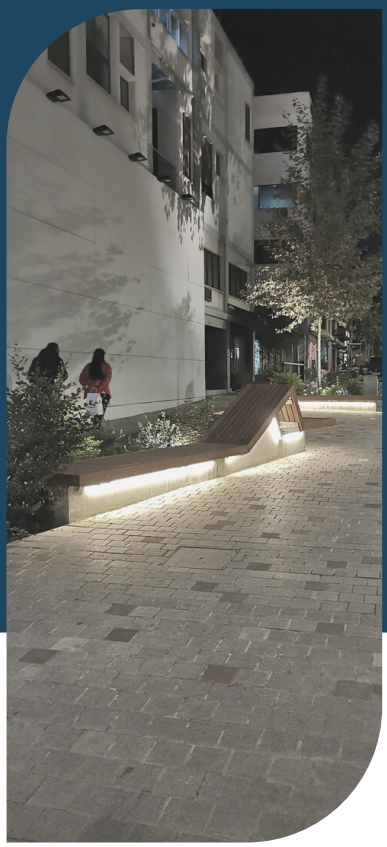


Figure 1 The new CEN CPTED standard'.
The following figures visualize the principals

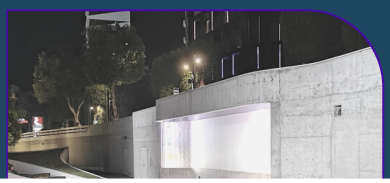


Figure 2 The 7 'How to apply CPTED principles'

The measures to be implemented are always a mix for a specific context, building or planning project. However, CPTED has a set of possible socio-physical/technical measures (see figure 3), such as:
Natural surveillance, Territorial reinforcement, Natural access control, Maintenance, Social cohesion, Community participation, Site/target hardening, Activity support, Social connectivity, Threshold capacity, Liveability, etc.









Each context will require a specific mix of measures. As such, the 'what to do principles' can be considered as the products in a 'CPTED supermarket', which the local partners in a specific building, design or management project can choose according to the specificities and context of their project.



Figure 3 A set of 'What to do CPTED principles'

The new CEN TS 14383-2:2022 also describes the general framework for a CPTED process at a higher scale level, that of the whole city/municipality, region, nation, and even the EU. This framework resembles the plan-do-check-act circle (PDCA-Demming circle): *Scan, Prioritise, Analyse, Task, Intervene, Assess, Learn.*



Figure 4 General framework for a CPTED process

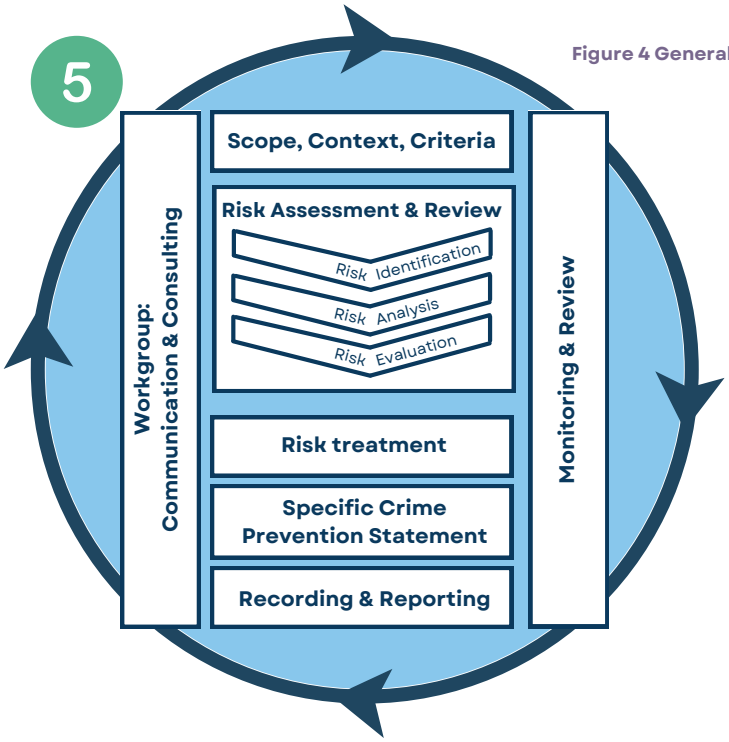


Figure 5 Risk management approach for one specific project/environment (CEN TS 14383-2:2022 based on ISO 31000)

Another level, much closer to the ground, is a specific building or planning project. It might be a block of houses, a new neighbourhood, a new sports or entertainment area, or the renovation of a square, boulevard or a thoroughfare. Here, we recognise the regular (ISO 31000) risk management approach with a few additions (see figure 5):

RISK
Identification

RISK
Analysis

RISK
Evaluation

Making standards practical and fun

In several local, national and also EU-level training sessions, we simplified the CEN TS 14383-2 approach and trained various participants – often a mix of police, designers, urban-managers, experts, local authorities – in a specific situation to follow a more or less standardised CPTED process using CPTED principles following the European standard CEN 14383-2:2022.



In practice: the experiences of Fano, Xàbia, Hannover, Riga and The Hague

The new CEN CPTED standard TS 14383-2:2022 has been tested in practice in several cities via the Efus-led Secu4All training programme. The aim of this programme was to train relevant stakeholders on how to incorporate evidence-based design, planning and management measures for the security of public spaces, anticipate potential undesired outcomes and assess ethical aspects.

Real examples have been used like a residential neighbourhood and sports facilities (Fano, Italy), a busy boulevard (Xàbia, Spain), a huge two-levelled city centre square, next to the central station (Hannover, Germany), an entertainment area (Riga, Latvia) and a governmental/parliament centre (The Hague, The Netherlands). In these cases, a mixed group of local stakeholders was trained to identify risks, threats and vulnerabilities. They were tasked with putting forward feasible and ethically sound solutions [10], as well as identifying the stakeholders needed to implement these solutions.

[10] As an addition also the cost-benefit approach was used in compliance to ISO 22341:2021 to check budgetary feasibility and a positive costs - benefits balance.

The training sequence is in fact simple, but very real:

Training sequence

1. A group of approximately 20 stakeholders comes together (preferably in a diverse partnership)
2. They go together to a specific (problem) area/spot and talk about the risks/threats (wear glasses with very dark lenses and be a pessimist) and values (light and optimistic glasses). We used 'risk stickers/icons (see below)' to be put on a map of the area/spot or a birds eye view photo (made by a drone).
3. All participants go to a nice venue, have a coffee and discuss the identified risks/threats and value/opportunity of the area/place. They write remarks on a big map/a real photo and use the risk/threat stickers (see stickers below). Find consensus in the diverse group. Try to add value by analysing other/more information (police figures, victim surveys, residents/housing associations, schools, etc.).
4. Prioritise (risk management: chance x seriousness consequences). Agree on the one or two high priorities.
5. Think/brainstorm/dream about possible solutions and write each solution on a sheet.
6. Think about the stakeholders needed for every solution and then also check for the feasibility of each solution and the ethical consequences (we often played a simulation game by dividing the group in extreme-pro and extreme no.
7. Summarise and make a definitive plan (problems-solutions-stakeholders) and start.



Understanding and applying crime prevention standards might seem at first rather technical and boring. But if local and regional authorities state that such an approach is really needed and standardisation is a helpful tool, all they have to say is "comply with CEN TS 14383-2:2022!" And with a bit of creativity, a human centred partnership approach of CPTED is possible in every city. Moreover, it can turn out to be actually quite fun.

Paul van Soomeren
pvansoomeren@DSP-groep.nl

See also https://www.dsp-groep.eu/
and https://www.disss.eu/

Vivian Gravenberch
viviangravenberch@disss.eu

See https://www.disss.eu/