Annex 15 – The European standard for the reduction of crime and fear of crime by urban planning and building design: ENV 14383-2

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1 Introduction

In this paper we will focus on a new European standard for the reduction of crime and fear of crime by urban planning and building design: ENV 14383-2 as issued by CEN.

We will first look at information about Europe in general, its built environment and the large physical, social and cultural differences within Europe.

One answer for this diversity is standardisation. Working according to well-known and specified official standards facilitates communication and co-operation. Therefore we will discuss in the second half of this paper a European initiative which until now has received relatively little attention: a new European standard on CPTED[1].

2 Europe and standardisation

Europe is an extremely diverse continent. Physically, socially, culturally in speech, in ….. nearly everything. More than 40 countries all having their own governments, language, currencies, laws and borders created a continent with lots of diversity but also a lot of struggle and war. Furthermore it made free flow of people, goods and knowledge difficult. After World War II the solution was found in the creation of the European Union: a treaty-based, institutional framework that defines and manages economic and political co-operation among its fifteen European member countries. The fundamental goal of the Union is to create an ever-closer union among the people of Europe.

Due largely to the success of Europe's economic integration, there are now 15 EU member states (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain Sweden and the United Kingdom).

Membership will increase to more than 20 countries in the years to come. The EU will thus soon be a community of close to 500 million citizens. The EU ideal is the free flow of people, capital and goods

1 CPTED: Crime Prevention Through Environmental Design which equals the more European concept of 'Reducing crime and fear of crime by urban planning and building – or architectural – design' or Designing Out Crime (DOC) or Design Against Crime (DAC). For major websites we refer to; www.e-doca.net, www.designagainstcrime.org, www.cpted.net, www.doca.org.uk

between the countries in order to increase trade, improve employment opportunities and raise standards of living. In short: one market.

The ideal of one huge European market will benefit greatly if products, processes and services are synchronised. Voluntary agreement between countries, institutes and people on what a product or process is, what it must look like, what it should do or accomplish is therefore important. For that purpose standards are a key component of the united European market.

But one can also take a broader perspective. Increasing the free flow of people, capital, goods and knowledge is not only important on the scale of 15–20 European countries. On a higher level the same situation and ideals do exist on world scale.

Let us examine a few examples:

- **Products**: It would be most efficient if e.g. door or window locks have standard measures. This way a door would always be connected to a doorframe in the best possible way; even if the door is made in Amsterdam, the lock comes from Tokyo and the doorframe is a product from the USA.
- **Process**: It would be a good thing if every quality management process or CPTED process followed more or less the same step-by-step method in which first a problem is analysed and all stakeholders are identified and finally all implemented strategies, measures and actions are tested and evaluated to improve the procedure for next time.
- **Services**: Since architects, urban planners, landscape designers, town planners and technicians increasingly working on a world-wide basis it would be easy for them to follow the same guidelines, procedures and meet well known requirements.

In short: standardisation facilitates communication between different participants or stakeholders working in one process or implementing a project; e.g. crime prevention projects. Standards thus facilitate co-operation and collaboration making processes more transparent.

What is a standard?

A standard is defined as:

> "a technical specification approved by a recognised standardising body for repeated or continuous application, with which compliance is not compulsory, and which is one of the following: (…) an international standard, (…) a European standard or (…) a national standard."

Note the sentence saying "compliance is not compulsory". Following a standard is thus something people and organizations comply with on a purely voluntary basis.

Standards define the characteristics of a product, process or service. These characteristics usually determine the design, performance or safety requirements that are voluntarily agreed upon by interested parties. Standards exist for a wide variety of products, e.g., paper sizes, computer operating systems, the symbols on a motor vehicle dashboard, credit card sizes, film photo speed (such as 100, 200, 400), weights and measures. There are also standards for services and processes. Most well known is probably the world-wide standard on quality management ISO 9000 (International Standardisation Organisation, ISO). This ISO 9000 standard defines and explains a step-by-step process for the quality management of an organisation, company, process or project (like a crime prevention project or a CPTED-project).

European Standards Bodies

There are several major European standardisation agencies. The *Comite Europeen de Normalisation (CEN)* is the organisation responsible for planning, drafting and adopting technical standards in various fields, except for Electro-technology and telecommunications. Its membership includes 22 national standards institutions from Europe (see for more info: *www.cenorm.be/aboutcen.*

The Members are the national standards bodies of:

Austria	Germany	Luxembourg	Spain
Belgium	Greece	Malta	Sweden
Czech Republic	Hungary	The Netherlands	Switzerland
Denmark	Iceland	Norway	United Kingdom
Finland	Ireland	Portugal	
France	Italy	Slovakia	

A European standards body like CEN *does not* develop standards; it provides the arena in which firms and organisations designated by different national standards bodies negotiate an agreed upon standard. The process is time-consuming and complex, as most organisations, firms and countries have financial investment or vested interests in making sure their own national standards become European ones. Although firms are the dominant players in standardisation activities, trade associations, consumers and labour unions can also participate.

Increasingly, the European standards bodies are becoming the focal point for standards activity. Over 5,000 standards are now available as European standards. It is expected that eventually European standards will substitute for all national standards.

Standards for crime prevention and CPTED

Looking at crime or crime prevention there are several relevant European standards, for example, the European standards EN 50130-501136 on alarm systems, EN 1522/1523 on bullet resistance of doors and windows, ENV (a pre-standard) 1627-1629 on burglary resistance of windows, doors and shutters, EN/ISO (a European/world-wide standard) 12543 on glass in buildings and EN 1143 on secure storage units like safes and strong rooms.

These standards are mainly product standards. They define the physical make up, dimensions and performance of a product e.g. the number of minutes a door must be able to resist clearly defined forces and manipulations (from a burglar). These product standards are most useful for the industry and security firms but the content of these product standards is rather technical and often very detailed.

However, the essence of good crime prevention is often found in the relationship between different products and processes e.g. a quick and good alarm system signalling a burglar as soon as possible followed by a swift response from the police or a security guard while strong doors, windows, locks and burglary resistant glazing keep the burglar busy. In this example it is the clever combination of an electronic device (alarm), a strong building envelope and well organised control (police) which that does the trick: preventing a crime.

Knowing that these interrelationships are of enormous importance for CPTED it was decided to try to draft a more general type of standard – in part a process standard. This standard had to focus on the possibilities urban planners, architects and building engineers have to reduce crime and fear of crime together with the police, security firms, insurers and residents. Denmark took the initiative and the UK, France and the Netherlands backed it.

3 The making of … a European CPTED-standard

CEN is the official body ruling the arena in which a new standard is made. Looking at it from a very long distance the process is rather easy. All one has to do is write a short text – of say 25 pages – in which is explained how one shall reduce crime and fear of crime by urban planning and building design. Each individual CPTED expert would be able to write such a text in a few days.

However, in Europe this work takes at least five years because 100% consensus and agreement from all European countries and stakeholder organisations (police, architects, planners, security, and insurance) is essential. As was remarked earlier: a standard is a voluntary agreement.

The political agreement is reached in an official committee (Technical Committee or TC) set up for the purpose of making a standard. Experts in Working Groups (WGs) do the real work. In January 1996 the Technical Committee 325 of CEN (TC325) held its first meeting in Denmark.

The scope of TC325 is:

> "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, including local activities in order to ensure safety and comfort and to minimise fear of violence. Standards on building products and security devices are excluded.
>
> The standards will include their area of application, the corresponding security strategy, security levels, building lay-out, application of construction elements roads and paths and crime preventive lighting".

It was decided to organise the work into three Working Groups:

1 WG 1 on Terminology. This Working Group concentrates on terms and definitions and is 'fed' by the other two WGs. It was first chaired by Denmark but later by France (AFNOR)
2 WG 2 on Urban Planning. The Netherlands (Paul van Soomeren, DSP-groep) chairs this Working Group and the secretariat is NEN.
3 WG 3 on building design of e.g. dwellings, shops and offices is chaired by the UK (Tim Pascoe, BRE), secretariat BSI.

As an example we will concentrate here on the draft standard made by Working Group 2 on Urban Planning. The scope of this Working Group is:

> "the preparation of a draft standard (…) which specifies the methods of assessment (méthode d'évaluation, Bewertungskriterien) and requirements (conditions d'execution, Anforderungen) for urban planning for new and existing environments, to minimise opportunity for crime and fear of crime".

Hence the aim of Working Group 2 is to provide those engaged in urban planning and environmental crime prevention as well as all other stakeholders – mainly local/regional authorities and residents – with advice, guidance and checklists on effective multi agency action needed to minimise the risk of crime and fear of crime.

4 The new standard on urban planning (ENV 14383-2): contents

Note that the text of this standard must be used in a concrete situation e.g. a new building plan at the outskirts of Paris, a plan for the renovation of an old harbour site in Amsterdam, or the planning of a shopping area in London. Although there may be a variety of players involved, in theory, the approach is always simple. It starts with answering three questions:

- **Where**: the identification of the exact location of the area (by co-ordinates, defining boundaries, postal codes, etc.) and the type of area;
- **What**: the identification of the (crime) problem or problems occurring in this existing area or the problem(s) that may in future occur in this new area;
- **Who**: the identification of the stakeholders involved in defining the problem and implementing / executing the measures to prevent and counteract the problem.

Where; type of area
The focus of the European CPTED-standard is on
- urban areas;
- urban planning scale; this includes small developments but in most cases refers to larger areas, for example parks, estates and whole neighborhoods.

Within this focus eight types of areas can be distinguished:
1 residential;
2 schools/youth facilities;
3 commercial/industrial/offices;
4 shopping/retail;
5 parks and public gardens;
6 leisure centers

7 public transport and parking facilities, stations, bus stops, parking garages etc.; but excluding the transport system itself;
8 city/town centers and public space.

Of course several mixed types are also possible, e.g. a mainly residential area with some schools, a youth facility, some shops and a small park. Of importance is that the area under consideration may be new or existing. In the case of a new area there is nothing there yet, only a plan exists. In an existing area the people, buildings, streets, etc. are already there.

What; problem identification
Having identified the area the next question is: what is the problem in this area or what problem(s) may in future arise in this proposed new build. The broad distinction in the standard is that between specific types of crimes and fear of crime. There are six types of crime to be distinguished while fear of crime may be sub divided in three categories. Note the standard is focussing on crimes and fear of crime in so far as it (may) take place in public or semi public space.

Seven types of crime and fear as a specific category may be distinguished:
- burglary (residential/commercial);
- vandalism (including graffiti);
- street violence; → assault/robbery;
  → fighting / assaults;
  → sexual or indecent assaults;
- car crime;[2] → theft of car;
  → theft from car;
  → arson of a car;
- theft; → shop lifting;
  → pick pocketing;
  → theft of bikes, mopeds etc.;
- arson;
- fear of crime.

There are three broad categories of urban places and locations generating fear of crime:

1 Locations with fear generating functions or features, such as streets or areas of prostitution, or locations with certain types of entertainment or activity that attracts individuals who also generate fear in other individuals. Crimes against the person are more likely to occur in such areas.
2 Locations, which are neglected or badly maintained, can give an impression of danger, because lack of occupancy can be a signal for a socially disorganised neighbourhood.
3 Locations with problematic urban design like lack of surveillance, isolation or lack of visibility by others, poor lighting or the lack of possibilities for orientation and last but not least the possible lack of alternative routes

Who; stakeholders
To prevent crime and fear of crime in new and existing areas it is inevitable to involve stakeholders – people and organisations having a stake or vested interest in the problem and/or solution. The table below presents an overview of possible stakeholders/target groups.

After the 'where, what and who' questions have been answered two important issues remain to be solved:
- what *guidelines* can be given for CPTED strategies, measures and actions which are necessary and feasible to make an area more safe and secure;
- how will these CPTED strategies, measures and actions be implemented and executed; what will the *co-operation process* in which all stakeholders participate look like?

[2] Including motorcycles, scooters, etc.

A Politics/legislature (Local, municipal, regional politicians):
- neighborhood, local, regional, council;
- building and planning committees;
- committees for public safety/ security.

B Designers and planners:
In public office and/or in private firms; their working area may differ: neighbourhood, local, regional, national or even international:
- urban planners;
- town planners;
- architects;
- landscape architects;
- civil engineers;
- transport / traffic engineers

C (Semi) private or public developers / builders:
- housing association, company, cooperative;
- property investor (pension fund, bank, etc.);
- (large) contractors (building for own risk): project developers;
- small contractors.

D Police
- crime prevention officers,
- victim support officers;
- data analysis and processing units;
- management.

E Security/risk professionals
- private security firms and consultants;
- insurance companies.

F Services
- municipal/regional/national companies or services for the delivery of goods like lighting, transport, waste management and cleaning, maintenance of different types of public space (parks, streets, parking).

G Social workers
- community workers;
- social workers.

H Education
- educational facilities for education of all stakeholder-groups mentioned above.

I Population (individual and/or organisation)
- residents;
- building owners (shops, offices)
- users;
- shopkeepers and shop employees
School managers, teachers.

Urban planning and design guidelines

The text of ENV 14383-2 identifies several guidelines on what measures and action one may take. These measures are presented in a framework using the eight types of environment distinguished earlier (see 'Where; type of area'). On eight pages – each focussing on one type of environment – the seven specific types of crime problems identified earlier (see 'What; problem identification') are presented together with 15 broad strategies.

Three categories, 15 strategies, more than 100 measures. In the standard, three categories of strategies are elaborated on:

1 Planning strategies
- respecting existing social and physical structures;
- creating liveliness (blending functions and attractive street layout);
- mixed status (blending socio-economic groups, avoiding isolation and segregation);
- urban density (creating sense of neighbourliness, avoiding waste land and desolate areas).

2 Design strategies
- visibility (overview, lighting);
- accessibility (orientation, space to move, alternatives routes, limiting access for non-authorized people);
- territoriality (human scale, clear zoning, compartmentalization);
- attractiveness (colour, material, lighting, noise, smell, street furniture);
- robustness (doors, windows, street furniture).

3 Management strategies
- target hardening / removal;
- surveillance (patrolling, camera monitoring);
- rules (for behaviour of the public in object or public space);
- maintenance;
- providing infrastructure for particular groups (youth, homeless, drug addicts);
- communication (of preventive messages and behavior rules to the public).

How to choose the strategies:
- Not all strategies are effective in all environments and in all circumstances.
- Some strategies help only in specific environments or only help to prevent specific types of crime.
- For this reason, the strategies have to be chosen according to their expected effectiveness in certain types of environments and against certain types of crime.
- If the stakeholders responsible for the choice of strategies know from the crime analysis or risk assessment which types of crime are relevant in their case, they can look for the eligible strategies in the list specific for their type of environment.
- These lists (in the form of matrices >strategies x crime problems') for all 8 types of environment are included in an annex by the standard (annex D).

5 Process

The central idea of this standard is that looking at a concrete plan for building or refurbishment in say London, Paris or Athens, the stakeholders will discuss the list of eligible strategies.

A project team, working team or working group is the platform for this discussion. This working group may focus only at crime and crime prevention or may as well be the group responsible for the whole building or planning project (in which case integrating crime prevention in the project is only one of their tasks).

A definitive set of strategies, elaborated in concrete measures, will be chosen according to space, time, budget and personal preferences; the definitive measures will be recommended by the working group to a responsible body of authorities taking the final decision. We will elaborate this procedure later.

Possible conflicts with other goals (apart from crime prevention) should be considered to make a balanced set of strategies. Crime prevention is a part of the whole of a planning and design process and cannot be considered in isolation.

In the standard a step-by-step method is presented to help and support an effective and efficient process of implementation, execution and evaluation. This (process) part of the standard resembles procedures elaborated on in the international standards on Quality Management (ISO 9000 series) as well as standards on occupational health and safety management (like BS 8800) and standards on environmental systems (ISO 14001). A flow chart is presented including essential steps like:

- The issuing of a general mission statement for a plan or project by the responsible authorities. They must initiate a process aimed at preventing crime and fear of crime in a new or existing environment by:
  - giving a general objective for the future security and safety situation;
  - within a specifically defined environment;
  - and with involvement of certain stakeholders.

  This 'mission statement' may be of a rather general and vague nature.

- If not yet in operation a multi-disciplinary working group will be set up which should include representatives of the stakeholder organisations involved in this particular design/planning process. The working group will follow a procedure including six well defined steps:

Step 1: Assessment or analysis
The working group will analyse the present or assess the future crime preventive and fear reducing performance of the environment specified in the mission statement.

The analysis/assessment shall include:
1 Definition of nature and type of crime problems to be tackled (existing environment) or prevented (new environment),
2 Definition of factors – especially design features – that may directly or indirectly cause such problems or contribute to them.

Step 2: Objectives
The working group shall define more precisely the objectives being pursued and the time by which they should be attained (project plan, milestones). It shall establish the objectives in more specific quantifiable figures. To choose realistic anchor points, the working group may use values, taken from a similar city, area or neighbourhood serving as a reference. The working-group could indicate the objective values as "equal to", "a minimum X% better" or "maximally Y% worse" than the reference area.

Step 3: Plan
The working group shall draft a plan containing:

- a proposal of what most probably will happen in the near future if no measures are taken to prevent crime and/or fear of crime (thus extrapolating the crime analysis or assessment mentioned under step 1), the method of drafting scenarios might prove to be a useful tool in this stage;
- strategies probably most effective to reach the safety and security objectives formulated in step 2; for possible strategies see the 15 strategies summarized earlier
- measures and actions to be taken including costs and anticipated effects (assessment of performance). The ideal would be to present in the standard – or on a separate website – ideas about possible measures taken from real and concrete examples from different European countries and cities. However, the money to search, analyze and present this type of best – or worst – practices is not yet available.

The working group shall present the plan to the responsible body of authorities and all stakeholders.

Step 4: Decision by (local or regional) authorities

The authorities shall decide:
- which strategies and measures have to be implemented
  or the responsible body shall decide, on the basis of the plan;
- which aspects have to be elaborated further by the working group
  or the responsible body shall decide ;
- on the measures to be taken, including procedures, responsibilities and costs.

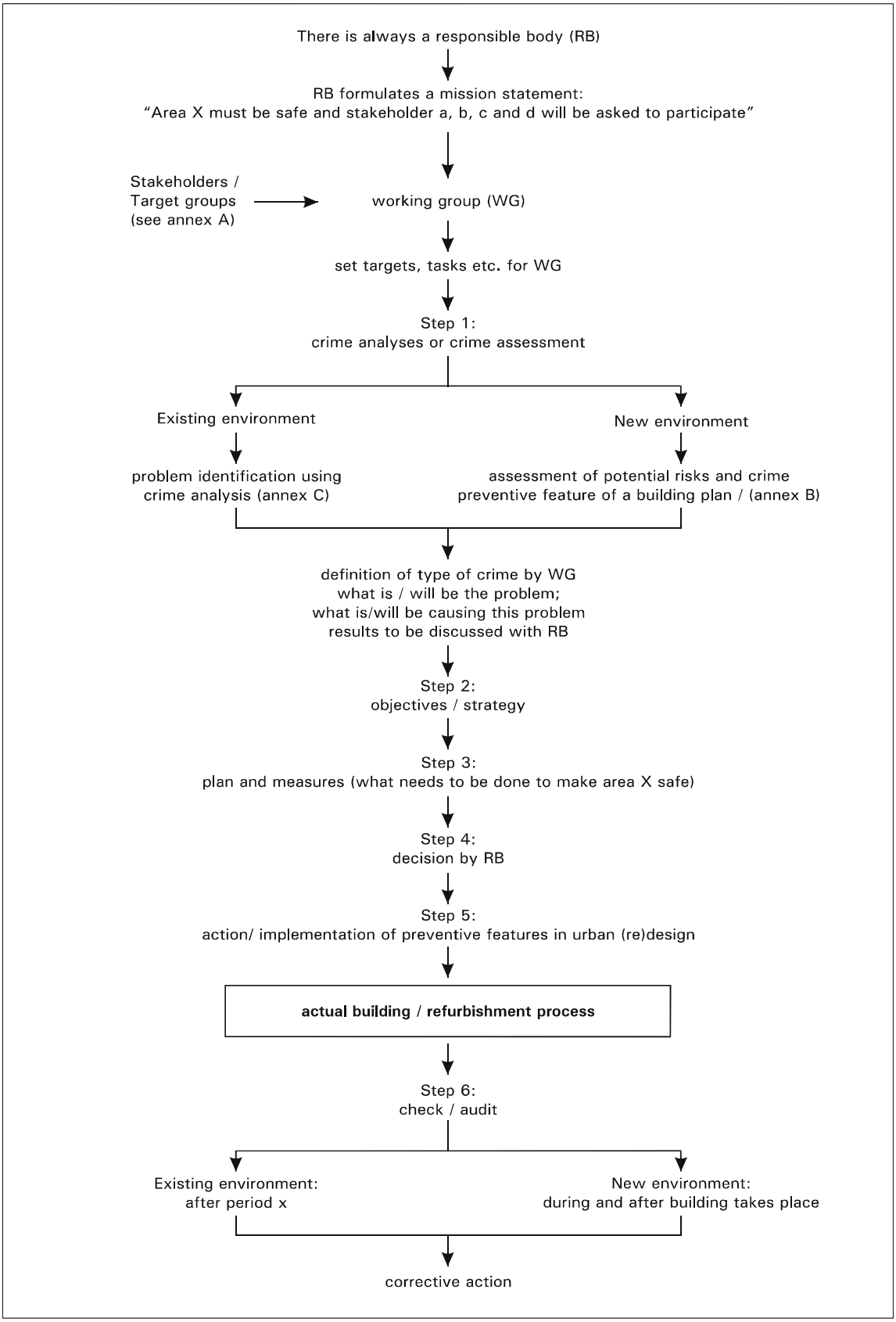
At the moment a final decision on the measures is taken, this will be laid down in a contract between all stakeholders.

Step 5: Action and implementation
The measures described in the contract (see step 4) are implemented.

Step 6: Checking and corrective action
The measures implemented in step 5 are evaluated.

In case crime problems and/or fear of crime occur or stay at an unacceptable level (reference point are the objectives formulated earlier in step 2), the (local or regional) authorities decide upon corrective action, such as taking additional crime preventive measures or (further) refurbishment of the area.

This procedure is summarised in the table below in which local or regional authorities are included as 'responsible body' (RB).



6 Conclusions

In summary this European pre-standard on CPTED by urban planning (ENV 14383-2) presents the user with:

- ideas on how to tackle and prevent crime by urban planning;
- a procedure on how to organise the process of crime prevention through environmental design (CPTED) in the best possible way.

Again… such a standard is NOT a law; it is not obligatory to use the standard. But if a group of stakeholders or local/regional authorities are in charge of a concrete building project they can agree on using this standard. From that moment on the standard becomes a voluntary law followed by all stakeholders in the project.

Since the number of professionals – as well as the number of languages spoken by these professionals – in most CPTED projects is enormous, standards might help to facilitate CPTED projects and processes.

Now there is an official standard available (ENV 14383-2) it would help if politicians and authorities in Europe advocate and push the use of this standard in urban planning and building/refurbishment schemes all over Europe.