A EUROPEAN STANDARD FOR THE REDUCTION OF CRIME AND FEAR OF CRIME BY URBAN PLANNING AND BUILDING DESIGN: ENV 14383-2

EU Commission Hippokrates programme (2001)

Organisation	**European Working Group 2: Urban Planning**
Location	The Netherlands
Trigger	• Need for further European integration • Formation of European Community • Development of standards for products and processes across Europe • Desire for standardisation in designing out crime
Objectives	• To develop a standard for the reduction of crime and fear of crime by urban planning and building design
Causes of crime	• Failure to comply with CPTED principles • Failure to address crime issues/risk factors in design and planning process
Interventions	• Voluntary compliance with a European standard by various stakeholder groups
Tools/techniques	• Process tools • Matrix of crime problems and strategies for crime prevention • Working groups • Stakeholder participation • Guidance materials • Evaluations
Enablers	• Establishment of working groups
Tensions	• European countries differ in terms of language, culture, etc., which can make it difficult to define and attain shared goals • There is potential conflict between national interests and a European standard (e.g. countries prefer their national standards to be adopted) • The timescales involved in establishing a standard • Resources required to investigate and collate examples of good practice
Impact	• A European standard has been developed and can now be implemented.
Lessons	• Standards will help urban planners and designers address crime issues • A clearly defined process helps stakeholders work together in an effective manner • The incorporation of CPTED principles into process should help reduce crime

Synopsis

This case study focuses 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—the *Comite Europeen de Normalisation*. General information about Europe is provided, with consideration given to the European built environment and the large physical, social and cultural differences within the continent. One answer to this diversity is standardisation. Working according to well-known and specified official standards facilitates both communication and co-operation. This case study discusses a European initiative that until now has received relatively little attention—a new European standard on CPTED[1]. This standard encourages countries across Europe to adopt a defined process for designing out crime in the built environment.

[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

Background

Europe and standardisation

Europe is an extremely diverse continent—not just physically, socially, culturally and linguistically, but in nearly everything. More than 40 countries, each with their own governments, language, currencies, laws and borders make up a continent with plenty of diversity, but unfortunately a history of struggle and war too.

Historically, Europe's patchwork structure made the free flow of people, goods and knowledge difficult. After World War II, however, a solution this problem 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 member countries. The fundamental goal of the Union is to create an ever-closer bond between the people of Europe.

Due largely to the success of Europe's economic integration, there are now fifteen EU member states (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain Sweden and the United Kingdom). In the years to come, however, membership will increase to more than twenty countries, and so will soon be a community of close to 500 million citizens. The EU ideal is the free flow of people, capital and goods between member countries in order to increase trade, improve employment opportunities and raise standards of living. In short: one market.

Realising the ideal of one huge European market will progress greatly if products, processes and services are synchronised. Voluntary agreements between countries, institutes and people on what a product or process is, what it must look like, what it should do or accomplish is thus 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 the fifteen to twenty European countries. The same situation and ideals also exist at a higher level, at the global scale.

A few examples of this are:

- *Products*
  It would be most efficient if, for example, door or window locks had 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 produced in 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. That is to say, first a problem is analysed and all stakeholder are identified, and finally all implemented strategies, measures and actions are tested and evaluated to learn how to do it better next time.
- *Services*
  Since architects, urban planners, landscape designers, town planners and technicians are more and more working on a world-wide basis, it would be easier for them to follow the same guidelines, procedures and meet clearly specified requirements.

In short, standardisation facilitates communication between different participants or stakeholders working on a process or implementing a project, such as a crime prevention intervention. By enabling better co-operation and collaboration, standards make 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."

It is important to note that *"compliance is not compulsory"*. Following a standard is therefore something individuals and organisations do 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 (for example, paper sizes, computer operating systems, the symbols on a motor vehicle dashboard, credit card sizes, photographic film speeds, weights and measures, etc.). There are also standards for services and processes. Most well known is probably the worldwide standard on quality management, ISO 9000 (International Standardisation Organisation; ISO). The ISO 9000 standard defines and explains a step-by-step process for the quality management of an organisation, company, process or project (such as 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 (for further information, see http://www.cenorm.be/aboutcen).

The CEN members are the national standards bodies of:

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

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 or other vested interests in making sure their own national standard becomes a European one. Though 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

With regard to crime and crime prevention, there are several relevant European standards. These include European standards on:

- Alarm systems (EN 50130-501136)
- Bullet resistance of doors and windows (EN 1522/1523)
- Burglary resistance of windows, doors and shutters (ENV (a pre-standard) 1627-1629)
- Glass in buildings (EN/ISO (a European/world-wide standard) 12543)

- Secure storage units like safes and strong rooms (EN 1143)

These standards are mainly product standards, in that they define the physical structure, dimensions and performance of a product. For example, 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. However, the content of these product standards is rather technical and often very detailed.

The essence of good crime prevention, however, is often found in the relationship between different products and processes. For example, a fast and reliable alarm system signalling a burglar, followed as soon as possible 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 (the alarm), a strong building envelope and well-organised control (the police) that does the trick—preventing the crime.

Knowing that these interrelationships are of enormous importance for CPTED, it was decided to attempt to draft a more general type of standard—in part a process standard. This standard was to focus on the opportunities 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.

The making of a European CPTED-standard

CEN (Comite Europeen de Normalisation) is the official body ruling the arena in which a new standard is made. Looked at from a distance, the process appears rather easy. All one has to do is write a short text—of approximately 25 pages—in which is explained how one shall reduce crime and fear of crime by urban planning and building design. Most individual CPTED experts would be able to write such a text in a few days.

In Europe, however, because 100% consensus and agreement from all European countries and all European stakeholder organisations is essential (police, architects, planners, security, and insurance companies), this work takes at least 5 years. As was remarked earlier: a standard is a voluntary agreement.

The political agreement is reached in an official committee (the 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 was defined as:

"The 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 layout, application of construction elements roads and paths and crime preventive lighting."

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

1. *WG 1: 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 on by France (AFNOR)
2. *WG 2: Urban Planning.*

The Netherlands (Paul van Soomeren, DSP-groep) chairs this Working Group and the secretariat is NEN.

3. *WG 3: Building Design*
   This Working Group is concerned with the design of buildings, including dwellings, shops and offices. It is chaired by the UK (Tim Pascoe, Building Research Establishment) and the secretariat is BSI.

As an example, this case study will concentrate here on the draft standard made by Working Group 2 on Urban Planning.

The scope of this Working Group was defined as:

"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 regarding the effective multi-agency action needed to minimise the risk of crime and fear of crime.

The new standard on Urban Planning (ENV 14383-2)

Contents
The text of this standard must be used in a concrete situation. For example, 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 actors 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: Identification of 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. An example would be a mainly residential area with some schools, a youth facility, some shops and a small park.

Another important factor is whether the area under consideration is new or existing. In the case of a new area, there is clearly nothing there yet—only the plans exist. In an existing area, the people, buildings, streets, etc. are already there.

What: Identification of problems

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 subdivided into three categories. Note that the standard focuses on crimes and fear of crime in so far as they (may) take place in public or semi public space.

Six types of crime may be distinguished, with fear of crime as a specific category:

- 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 car
- Theft
  - Shoplifting
  - Pick pocketing
  - Theft of bikes, mopeds, etc.
- Arson
- Fear of crime

Regarding fear of crime, there are three broad categories of urban locations and situations 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 that are neglected or badly maintained*
   Such locations can give an impression of danger, because lack of occupancy can be a signal for a socially disorganised neighbourhood.

[2] Including motorcycles, scooters, etc.

3. *Locations with problematic urban design*
   The design of such locations may result in a lack of surveillance, isolation or lack of visibility by others, poor lighting or the lack of possibilities for orientation and, last but by no means least, a lack of possible alternative routes

Who: Identification of stakeholders

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

A Politicians/legislature *(Local, municipal, regional politicians)*
– Neighborhood, local, regional, councils
– Building and planning committees
– Committees for public safety/ security.

B Designers & planners
In public office and/or in private firms. Their working areas may differ (i.e. 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 associations, companies, cooperatives
– Property investors (pension funds, banks, etc.)
– (Big) 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 the cleaning/maintenance of different types of public space (parks, streets, parking areas, etc.).

G Social workers
– Community workers
– Social workers.

H Education
– Educational facilities for the 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 and teachers.

After the *where*, *what* and *who* questions have been answered, there remain two important issues to be resolved:

- What *guidelines* can be given for CPTED strategies, measures and actions that 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?

Urban planning and design guidelines

The text of ENV 14383-2 identifies several guidelines on what measures and actions may be taken. These measures are presented in a framework using the eight types of environment identified earlier (see *Where: Identification of type of area*, above).

On eight pages—one page for each type of environment— are presented the seven specific types of crime problems listed earlier (see *What: Identification of problems*, above), together with fifteen broad strategies. Three categories, fifteen strategies, and more than one hundred measures.

In the standard, three categories of strategies are elaborated:

1. *Planning strategies*

- Respecting existing social and physical structures
- Creating liveliness (blending functions and an attractive street layout)
- Mixed status (blending socio-economic groups—avoiding isolation and segregation)
- Urban density (creating sense of neighborliness—avoiding wasteland and desolate areas).

2. *Design strategies*

- Visibility (ease of surveillance, overview, lighting)
- Accessibility (orientation, space to move, alternatives routes, limiting access for non-authorized people)
- Territoriality (human scale, clear zoning, compartmentalisation)
- Attractiveness (color, material, lighting, noise, smell, street furniture)
- Robustness (doors, windows, street furniture).

3. *Management strategies*

- Target hardening/removal
- Surveillance (patrolling, camera monitoring)
- Rules (for behavior 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 the types of crime that are relevant in their case, they can look for the appropriate strategies in the list that is specific to their type of environment. These lists—in the form of matrices (i.e. *strategies* against *crime problems*) for all eight types of environments—are included in an annex to the standard (Annex D).

Process

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

A project team, working team or *working group* is the platform for this discussion. This working group may focus on crime and crime prevention alone, or may also be the group responsible for the whole building or planning project (in which case integrating crime prevention in the project will be 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 working group will recommend definitive measures to the responsible body/authorities that take the final decision. This procedure will be explained further later on.

Possible conflicts with other goals (besides crime prevention) should be considered to make a balanced set of strategies. Crime prevention is part of the whole planning and design process, and so 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 in the international standards on Quality Management (ISO 9000 series), as well as standards on occupational health and safety management (such as 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 providing a general objective for the future security and safety situation
  - Within a specifically defined environment
  - 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. This 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 the nature and type of crime problems to be tackled (existing environment) or prevented (new environment)
2. Definition of the 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 of X% better”* or *“a maximum of 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*, above). 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 fifteen strategies summarised 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, concrete examples in different European countries and cities. However, the money to research, analyse and present this type of best (or worst) practice 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:

- What strategies and measures have to be implemented *or* the responsible body shall decide (on the basis of the plan)
- What 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.

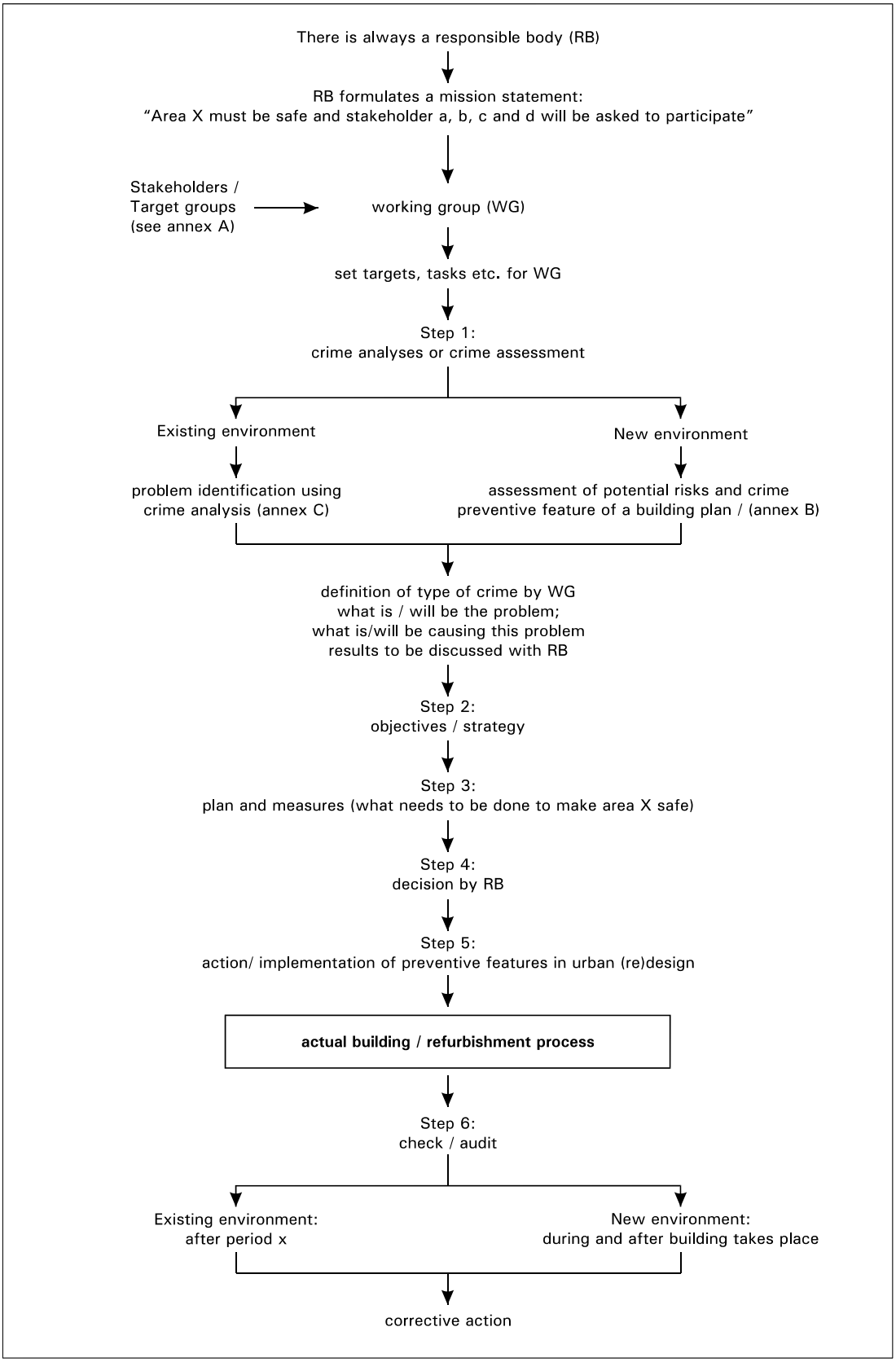
When a final decision on the measures is taken, this will be laid down in a contract between all stakeholders.

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

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

If crime problems and/or fear of crime occur or stay at an unacceptable level (the reference point for this being the objectives formulated earlier in *Step 2*), the authorities (local or regional) will 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 this table local or regional authorities are included as the 'responsible body' (RB).


There is always a responsible body (RB)
RB formulates a mission statement:
"Area X must be safe and stakeholder a, b, c and d will be asked to participate"
Stakeholders / Target groups (see annex A)
working group (WG)
set targets, tasks etc. for WG
Step 1:
crime analyses or crime assessment
Existing environment
New environment
problem identification using crime analysis (annex C)
assessment of potential risks and crime preventive feature of a building plan / (annex B)
definition of type of crime by WG
what is / will be the problem;
what is/will be causing this problem
results to be discussed with RB
Step 2:
objectives / strategy
Step 3:
plan and measures (what needs to be done to make area X safe)
Step 4:
decision by RB
Step 5:
action/ implementation of preventive features in urban (re)design
actual building / refurbishment process
Step 6:
check / audit
Existing environment:
after period x
New environment:
during and after building takes place
corrective action

Conclusions

In summary, this standard on CPTED by urban planning presents the user with:

- Ideas on how to tackle and prevent crime by urban planning
- A procedure on how to organise the CPTED process in the best possible way.

It is worth reiterating that such a standard is *not* a law—it is not obligatory to use the standard. However, if a group of stakeholders or local/regional authorities are in charge of a specific building project, they can agree on using this standard. From that moment on, the standard becomes a voluntary 'law' followed by all the stakeholders involved 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

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http://www.e-doca.net

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