

Prevention of crime — Urban planning and building design

Pat 7: Design and management of public transport facilities

ICS 03.220.01; 13.310; 91.040.20

National foreword

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Vorbeugende Kriminalitätsbekämpfung - Stadt- und
Gebäudeplanung - Teil 7: Planung und Management von
Anlagen und Einrichtungen des öffentlichen
Personennahverkehrs

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Foreword

This document (CEN/TR 14383-7:2009) has been prepared by Technical Committee CEN/TC 325 “Prevention of crime by urban planning and building design”, the secretariat of which is held by SNV.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The status of Technical Report (CEN/TR) was proposed to give all countries the opportunity to compare experiences and to harmonise procedures.

This Technical Report is one of a series for the “Prevention of crime by urban planning and building design”, that consists of the following Parts:

- Part 1: *Definition of specific terms*
- Part 2: *Urban planning*
- Part 3: *Dwellings*
- Part 4: *Shops and offices*
- Part 5: *Petrol stations*
- Part 8: *Protection of buildings and sites against criminal attacks with vehicles*

Introduction

The public transport system has to meet the citizen's mobility needs under the most advantageous economic, social and environmental conditions for the community. It is an instrumental factor in national unity and solidarity, national defence, economic and social development, in balanced strategic land use planning and sustainable development, and in driving international exchanges, particularly towards European partners.

In meeting these needs, it is equally important to comply with objectives on minimising or reducing risks, accidents, nuisance (particularly sound pollution), pollutants and greenhouse gas emissions by implementing measures designed to reinforce the application of the legal right of all public transport users, including disabled or handicapped people, to move freely and to choose the means they wish to use, and to exercise their legal entitlement to transport their property themselves or to commission the services of a company or institution of their choice to do so.

The success of this kind of service hinges on:

- the strength of social ties in public transport areas, which are in fact a community resource (respect for others, for community values, voluntary sharing of community resources, respect for rule of law, etc.);
- the efficiency of the production facilities (integrity of the technical and financial assets, the physical protection provided by the transport, a regular and reliable quality service, etc.), which are by definition a source of regular contact with the population and are thus embedded in the urban fabric.

Any unruly, aggressive or assaultive behaviour will by its very nature have a negative knock-on effect on public trust in the service. More generally, public trust can be eroded by an environment left to degrade (dirt, poor lighting, graffiti, etc.) and by repeated unruliness. The erosion of public trust can foster avoidance behaviour from customers (drop in traffic) and staff (strikes, skipping ticket checks, etc.) alike. Crime often also targets the production facilities (equipment, buildings, infrastructure, information systems, etc.), thus causing financial losses, equipment breakdowns, service delays, malfunctioning customer service devices, or even generating traffic safety risks (accidents, derailments, etc.).

Hence, crime, whether carried out or perceived, threatens the fundamental policy issues of any public transport system, i.e. public trust and efficient production facilities, with significant economic and social consequences.

Crime problems require action, on the individuals involved, on the organizations and structures that manage community activity, and on the locations housing the activity.

Pre-planning for, or “designing-out”, crime and disorder often adds little or no additional cost to the project, but can save large amounts of money in the long run. Returning to a location to “retro-fit” crime prevention measures is always more expensive than designing the location properly in the first place.

All public transport systems in industrialized countries face these same issues. There are numerous examples of where public transport companies have undertaken crime prevention actions, many of which have entailed heavy funding. We can now draw upon a significant pool of experience and best practices. Indeed, public transport facilities are fast developing towards intermodal services and expanding out to European scale. This has prompted the need to draft a set of risk analysis procedures complete with guidelines.

Developments in problem orientation

Recent trends in mass transport project characteristics have to be taken into account, before identifying appropriate recommendations for the design, the management and the planning process.

Below, four trends in mass transport project characteristics are discerned.

Trend 1: More and more huge and multifunctional mass public transport projects

Railway stations in big cities and at airports, in order to fulfil their desired function as “multiservice areas” often become “mega structures” where all kind of functions are integrated: transport, shopping and leisure. The transport function is just one of the other present functions of the whole structure.

In order to emphasize its huge size and importance, architects of these mega structures often propose impressive, challenging forms and constructions. These structures become regional or even national icons.

However, to structures of this kind, special points of attention apply for security design and management.

These points are:

- their huge size make people feel get lost soon if the concept of the structure is complex, the orientation on passenger routes towards the goal is limited, and the signage is incomplete;
- different functions in the same structure mean different proprietors and different managers; if the demarcation of the areas (what belongs to whom) is not clearly defined, if managers use different rules for the public, different security systems (every function its own surveillants and CCTV system) the management of the total structure will not as effective as it could be and should be;
- big structures are more difficult to connect to their environment properly; there is a greater danger that they become and remain isolated, internally oriented blocks, which often make an unfriendly impression to their direct environment. From the outside, you mainly see blind walls and huge car parks;
- different functions mean different opening times when it is not possible to close off the not-in-service parts (for example the shopping mall in the late evening) and offer alternative routes to transport passengers, the latter will have to walk long routes through scary, unsurveilled corridors
- different functions have different peak hours; but if more functions have a peak at the same time of the day and all corridors have to be designed on this maximum flow of visitors, these corridors will be far too big for the silent hours and the visitors will feel lost there.

This document give recommendations for not only regular and simple transport facilities, but also recommendations that take into account the specific design and management attention points as mentioned for the complex multifunctional mega structures.

Trend 2 : More and more underground structures

In former times, underground structures formed a minority and existed only in huge metropolises. Nowadays, underground projects become more and more common.

In existing urban areas, only very little space is available for expansion of buildings and railway facilities. The space required is only available under the surface. Engineers and architects have to look more and more to underground solutions. Underground structures, however, are critical to safety. This applies to fire safety (escape routes are longer and carry on more in the vertical dimension) but also to security. Especially the perception of security is at stake: “the deeper, the more sensitive” one could say. To reach the same level of security perception in underground structures, designers have to perform twice as well as in normal buildings.

Trend 3 : More and more stations and transfer points in the outskirts of town

With the expansion of the public transportation networks in urban areas (train, metro, tramway, buses) more and more stations, not only simple metro stations but also important regional transfer points, are being located in the outskirts of town.

These are often unpleasant areas: in the middle of an industrial zone and/or near a noisy highway.

Designers have to look to special solutions to make people feel comfortable in these kind of places, when walking to and from the station/bus station, or when waiting for the connecting train/bus.

Trend 4 : More and more separation between public and private space

Historically, the spaces devoted to transport facilities have been open spaces: train and bus stations, regular lines for road, maritime stations, etc. In practice, all those facilities that did not have the role of international border were of an open and public character. Today, some of these spaces still belong to the field of the public space, but the standard becomes more and more to establish two distinguished spaces: the public area and the private area. The public area serves as an area of access for the control (public space) and the private area serves as 'safe area'. From a point of view of formal surveillance and effective support in emergency cases, this separation may be a favourable condition. The separation between public and private areas has, however, also negative consequences.

The most important consequence is the limitation of the individual rights of the users. Only allowed persons (in the possession of the travel ticket) have right to the restricted safe areas. Thus, these private spaces are not contributing any more to 'urban integration' (= all spaces for all functions for all people). From this former consequence, another consequence, very relevant for the crime prevention subject, follows: persons without allowance to enter the private zones, all have to be concentrated in the (little) space remaining public. In addition, a third consequence, related to the former: not all functions, like restaurants and shops, are suitable for both types of space (the private or the public). That means: separation of functions has to be made. This separation may lead to a lower degree of 'urban integration'.

The fact that spaces become more and more separated, influences the design of safe transport facilities related to the prevention of conventional criminality:

- It supposes the restriction of use of the restricted private space
- It means the transport facilities spaces are seen as spaces of risk
- It adds technical and technological problems in the design
- It introduces new security questions and new challenges for the pursuit of the same degree of 'urban integration' as before the separation.

Trend 5 : More and more concerns for poorly staffed or unstaffed stations in the countryside

In the period the European train systems were built (1850-1900), trains were the only available long distance travelling facility. Every small village along the line was connected and got its own staffed station.

For several reasons the transport authorities have reduced or totally taken away the staff. The buildings are relatively expensive to maintain and may also be neglected by the transport authorities who are inclined to concentrate on maintenance and problem solving in bigger stations.

Result is often an increase in feeling of insecurity of the passengers (still) using these small stations.

Worst-case scenario is the total closing down of the station due to further reduction of the passenger amount and/or increasing maintenance cost.

This document deals with measures to be taken in order to guarantee the long-term maintenance and security of small countryside stations. This is especially important in respect of the revival of the regional train systems, which can be seen already in some of the European countries.

The growing concerns push the European countries to different solutions depending on the political context: restaffing, CCTV, alarm system, etc.

1 Scope

This document sets out guidelines to the methods of assessing the exogenous and endogenous risks of crime and/or perceived insecurity and proposes measures designed to preclude or reduce these risks. The objective is to strengthen the overall security of land-based public transport, such as : bus stop, bus station, train station, train stops/halts, modal interchanges, open access underground and tramway systems, controlled access underground and tramway systems, taxi ranks, station car parks, river bus terminals, bicycle parking facilities.

This document does not cover terrorism or the revenue vehicles themselves. It covers the areas that are dedicated to mass transit and open to the public.

The core document focus is on the security of passenger spaces, in respect also of security aspects.

The document applies to existing public transport facilities as well as new public transport facilities.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14383-1:2006 — *Prevention of crime — Urban planning and building design — Part 1: Definition of specific terms.*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14383-1:2006 apply.

4 Design and management processes for transport-dedicated areas

4.1 General

This section proposes that:

- the crime prevention input in transport related projects should follow a conventional “project management” approach, with a system of stages in which all effective stakeholders are identified and engaged;
- creating or refitting a transport location, and day-to-day transport facility management are considered as two separate projects, where the former leads on to the latter. However, it is essential that wherever possible details of the proposed usage and operational methods to be adopted at the location are made available during the planning stage. In this way, advice from crime prevention specialists is likely to be more effective when the transport location becomes operational.

Safety planning and safety assurance for a transport-dedicated area can be run through in conventional project management stages. However, the stakeholders involved, the questions posed and the available policy resources will be different according to whether the project is location design or location management. This is why the document goes on to cover the safety assurance process separately for these two project formats.

The present section details the stakeholders (4.2) and stages (4.3 and 4.4) of the respective processes, while the following sections focus on the content of these processes, i.e. diagnostic methods and guidelines in terms of an action plan.

The term **design** is understood to cover intelligence work, projecting ahead and producing the structures, functions and use patterns of the location to be created or, in the case of an existing location, revised. The design of transport-dedicated spaces has as much overlap with 'refurbishment' or re-engineering (location features, definition or redefinition of location uses, etc.) as with 'new' projects or projects that need to be created (meeting new expectations, advance planning for other uses, etc.).

The term location **management** is understood to cover location operation, maintenance and leverage and generally all the functions concerning the life and use of the location.

These two mutually complementary approaches together form a project sequence. Sustainable location design is centered on understanding how the location will evolve over time in order to ensure simple, efficient location management. In turn, location management provides the feedback necessary to fuel ideas for the developments that will need to be planned.

4.2 Organization of the contracting authority and the stakeholders

4.2.1 General

Transport-dedicated locations are complex environments, which means that project sponsorship and the stakeholders need to be defined from the outset.

Generally speaking, the contracting authority expresses functional needs (or surveys their customers on the subject), releases resources, defines the project and selects project managers. The contracting authority also monitors that there is consistency and continuity in the choices and decisions made. The contracting authority shall be set up and organised so that it can fulfil these responsibilities, and shall be clearly identified by all partners in the operation. It may be led to evolve to fit project needs and (or) if the stakeholders so required, at some stage between the early project drafting phases (preliminary study, business analysis) and the initial project definition.

The topic dealt with here, namely the security of public transport facilities, is a multidimensional issue that raises a number of complex problems. It therefore ties in multidisciplinary cross-sector approaches, and with this kind of project that requires end-to-end partnership-based work efforts, one of the conditions for success is system consistency throughout. Indeed, these approaches enrol a large number of parties. The families of stakeholders are listed below.

4.2.2 Contracting authorities

The redesign of a transport location will inevitably involve a range of participants. This will include (but not be limited to) the principal contracting authority (national, regional or local government or transport authority), along with private or public sector contributors (including commercial partners and operators).

4.2.3 Contract partners

The main partners involved in the decision process are:

- the decision-maker, who is the contract partners;
- national, regional or local government authorities, private or public sector business, including commercial partners and private or public transport operators.

These partners shall meet as a project group, where each partner has a specific role.

4.2.4 Specialists who bring their expertise to the project

One of the keys to the success of the project relies on the confrontation of several approaches and professional expertise. It is therefore important to build around the project a multi-disciplinary team of

specialists able to address the both the legal, technical, economic, architectural issues and the political, psycho-sociological and social issues.

On the other hand, it may be difficult to manage a large team of experts over the planning of a project of moderate size and complexity.

The project leader should thus analyze beforehand the specific implications and stakes of the project in order to build the team of experts around a minimal core group including at least the responsible body, the customers, the designers and the security specialists, intervention forces (e.g. firefighters, medical emergency services, etc.)

For large projects or complex locations (e.g. difficult social environment), the project leader is strongly advised to ask for the contribution of other experts, a non-exhaustive list of which being:

- designers and urban planners: urban planners, architects, landscape architects, transport/traffic engineers, civil engineers;
- police and security professionals: crime prevention officers, private security firms and consultants, insurance companies;
- conflict mediators, child care workers;
- sociologists, psychologists, research consultants.

At such an early stage of the project, one should avoid restricting the expertise to technical or defensive methods, and should open the analysis to creative and behavioural approaches.

Furthermore, one should be able to reconcile competing interests or regulations (e.g. large exits for rescuers, access control for security purposes, etc.).

Therefore, if the core group is a minimal basis, a broad initial scope of contributions is a useful investment in order to find the most relevant and economically sensible solutions.

4.2.5 Customers, commercial partners and staff

Careful consideration has to be given to the dialogue with customers, commercial partners, and staff, whose advice is sought, as they constitute the end users of the operation.

Customers may be associations or they may be individuals.

4.2.6 The project managers

The persons contracted to perform the work can be of external or internal competency and according to the project concerned either a creation of a location or the management of an existing location.

4.3 The core stages of a project

The aim of this section is to describe the core stages of a project, as groundwork for sections, 4.4, 4.5, 5.4 and 5.5. These sections outline the specific differences in public transport-dedicated location design and management in terms of organization and the questions that need to be resolved.

Regardless of how complex a location may be, the project can be broken down into a handful of fundamental stages from the contracting authorities' initial wishes to the final project implementation and management. These key stages can be listed as follows:

- **A preliminary phase** (project initiation document, business analysis, initial schedule) which concludes in project specifications (objectives, issues and constraints, etc.) before the contracting authorities' commission an order (see 5.2).

- **A feasibility phase** repeated between the contracting authorities and the project manager or project management support who will work with the preliminary studies and a joint business analysis to detail a schedule and choose a preliminary design.
- **A design phase** including preliminary project and project stages that serve as a basis for drafting a finished project schedule, which can be transposed into project specifications, which can in turn be submitted for bids from enterprise.
- **An execution phase**, where work is contracted out and monitored, leading to deliverables and project acceptance before being commissioned into service.
- **A project assessment and monitoring phase**, which is designed to adjust the project via additional actions resulting from the analysis of the expected functionalities of the location (see 5.2).

The achievement of these different phases follows an iterative process integrating overall security requirements (see Annex B).

4.4 Creating a new location

In a project to create a new location, safety issues are raised in:

- the preliminary phase, analysis will analyze in term of safety the location's impact on the environment, the environment's impact on the location, and project weak points¹. It is also during this stage that a project group is created, associating experts from the contracting authorities and all the necessary partners.
- the feasibility phase, which includes project scheduling, i.e. initial and joint project definition by the general contracting authorities.
- the design and execution phases, where a multidisciplinary 'project team' (the delegated contracting authorities) is formed.
- the assessment and monitoring phase, for which a contract monitoring committee may be formed, generally from the delegated contracting authorities.

4.5 Location management

In a project to manage an existing location, safety issues are raised in:

- the preliminary phase, via a safety analysis that will study results generated by the observation and tracking of location use trends;
- the feasibility phase, which includes project scheduling, i.e. the definition of an action plan (partnerships, roles and responsibilities, decisions made for specific actions, setting priorities, etc.);
- the assessment and monitoring phase, based on management indicators and product assessment via a new analysis.

5 Analysis, actions and assessment: question-asking methods

5.1 General

A useable, overall safety problem analysis method for mass transit areas is one of the expected deliverables of the approach launched by the present process.

The general framework of this analysis features the measurement of observed or feared safety issues (paragraph 5.2) alongside discussions on the numerous interactions where these issues cross into the target location (paragraphs 5.4 and 5.5 relating to location design and location management, respectively).

¹ For example, the SWOT (strength, weakness, opportunities, threats) or PESTELGO methods can be used.

Actions of fighting against crime and fear of crime shall lead to:

- A definition of quantitative and qualitative objectives to achieve or a definition of problems to be solved;
- The definition of the preventive measures;
- the implementation of these measures;
- An assessment of the results in conjunction with the previously defined objectives.

5.2 Crime, antisocial behaviour and fear of crime

The sense of insecurity shall be gauged constantly in order to continuously adapt the response measures being taken:

- for a new location project, this will involve analysing the level of insecurity within the environment of the future location, either based on the existing crime rate figures or extrapolating the figures for a similar location (such as a new station built in a rural environment). Discussions should also be led on potential interactions between the future location and its environments, and a tracking tool should be created that is able to monitor shifts in the levels of insecurity at the location and in the location's environment;
- for a project to manage an existing location, this will involve tracking trends in insecurity at the location, in the location environment, and their interactions, using the tracking tool designed for this purpose when the location was created/refurbished.

The analysis and the tracking of the location and its environment can be done using the following indicators:

- type of crime (see Annex A) obtained from data recorded by the police, the companies present in the public transport facilities, etc.;
- level of insecurity as perceived by customers or passengers (e.g. enquiry about customer satisfaction, etc.);
- level of insecurity as perceived by staff (e.g. data collected by the social departments of the companies and/or qualitative enquiry conducted by the companies or the social partners);
- assessment of the tendencies of the criminality and fear of crime obtained from a follow-up of the indicators defined in the tools listed above.

5.3 General principles on security-related questioning

Safety and security-related considerations and specifications form an integral part of project design and management.

Every project manager is expected to draft a question-based checklist devised to fit the project context. The checklist works as a whole, although some individual questions may prove poorly suited to the case in hand.

Both the design stage and the management stage can be led independently. It is for this purpose, and to offer independent management templates, that two question checklists have been proposed, one for project design and the other for location management. These two checklists share certain core items but also have their own specific features.

The operational and technical matters put forward here to guide project delivery are grouped into four strands of analysis (location management, space usage, legibility, and how the spaces are liable to fit with safety initiatives).

5.4 Design strategies

5.4.1 General

The project designer's job is to look closely at the following factors before putting forward any urban planning strategy.

5.4.2 Anticipation on location management

5.4.2.1 General

Specific future transport production needs have to be systematically factored in from the outset, as soon as the location design process begins. This is also the ideal point at which to plan ahead for the various dimensions of space management involved. This mission is to design spaces that are as easy to service and keep in shape (including against theft and vandalism) as to deploy formal surveillance.

5.4.2.2 Specific location of activities and access control

- a) Are passenger services (including toilets, left luggage offices, lost property, ticket machines and change machines, etc.) and sales activities (reception points, information centres, ticket counters, waiting areas, shops) mapped out in such a way as to foster a feeling of security?
- b) Do the internal or institutional (police) security services have rooms fitted for monitoring public traffic flows and activities throughout the location?
- c) Does the project provide access control or restriction to problematic spaces and zones at risk (crime targets)?

5.4.2.3 Robustness and maintainability (doors, windows, equipment, street furniture, fencing, etc.)

- a) Do the design and architecture allow for durable construction which minimises deterioration and maintenance?
- b) Is the equipment (benches, bins, signage, etc.) sufficiently robust to resist against vandalism and is it arson-proof?
- c) Are the materials, equipment and furniture used on the location of standard use, making it easy to quickly replace or repair in the event of breakdown, damage or deterioration?
- d) Would robust materials fit with the aesthetics of the premises and the needs of the people using the premises?
- e) Have the location's key infrastructural networks (lighting, telephone, passenger information, fire safety, etc.) been given specific protection measures (compartmentation, fallback networks) designed to prevent a complete location shutdown?

5.4.3 Space usage

5.4.3.1 General

Over and above the rules on general location running, which are implemented by the location controllers (passenger carrier, location manager), quality of life in public transport spaces hinges on the way the public actually takes ownership of the location and its functions. This positive ownership includes informal surveillance (by passengers), occupancy rates, individual empowerment and the information control of incidents, natural respect for the spaces themselves and the functions offered by the location.

Key points to hone in on include how lively the spaces are, where they are positioned, whether they are relatively isolated from the rest, making it equally important to check whether they are exposed to safety problems (repeated vandalism, perceived insecurity, etc.) and to look into the options for physically or visually drawing the public spaces together in order to improve the potential for informal surveillance.

5.4.3.2 Time schedules coordination to guarantee continuous natural surveillance

- a) Are there any specific actions planned to provide safety during downtime in location occupancy?
- b) Are there specific activities which can be introduced/relocated to improve the time-span of natural surveillance?
- c) Do specific spaces need activity and lighting during nighttime?

5.4.3.3 Accessibility and passenger traffic management

- a) Are bus stops, entrances to train and underground stations and parking facilities located close to lively areas to cut down the potential for crime? Are there safe routes to reach them?
- b) Are the access ways to public facilities located in lively areas so that their surveillance is enhanced and so that the flows they generate contribute to natural surveillance?
- c) Are there safe access ways (under either formal or informal surveillance) to spaces that are accessible for disabled people?
- d) Does the location layout provide naturally obvious access ways and routes, or is specific signage needed?
- e) Have pedestrian routes and walkways been designed taking into account pedestrian risks and fear of crime?
- f) Are parking lots located keeping safety criteria in mind?
- g) Were passenger flows factored into a decision on whether to separate public access from staff access (for facilities, sales outlets, and recreational facilities)?
- h) Have the connections between buildings (routing, passageways) or between public transport spaces (stations, stops) and public highways been designed taking into account safety factors?

5.4.3.4 Attractiveness (colours, materials, lighting, noise, smells, street furniture)

- a) Have the public spaces been made passenger-friendly, as commonly understood, to enhance the degree of passenger ownership?
- b) Does the project create attractive and useful places for passengers to enhance responsibility and a sense of belonging?
- c) Does the project avoid creating nuisances that undermine the attractiveness of the area?
- d) Does the location enable and foster the development of spontaneous activities that are compatible with transport services while at the same time improving the overall passenger environment?

5.4.4 Legibility

5.4.4.1 General

Legibility, here, is defined as a logical consistency between the status, function, use patterns and management approaches of the spaces and sub-spaces making up the location. It implies that the roles of these spaces are instantly understandable with clearly ranked levels of importance. Legibility translates as a kind of implicit communication that encourages passengers and location users to feel ownership of the premises, and to instantly understand where they need to go, despite the complexity of the location. This legibility instils a certain familiarity with the premises, even for first-time users, thus reducing any feeling of insecurity or having to be on the lookout.

5.4.4.2 Territorial boundaries (human-scale location facilities, clear public/private zoning compartmentalisation)

- a) Is the differentiation between public, semi-public (sales outlets), and private (offices) spaces clear to users, and does it encourage the intended legitimate uses of the location spaces?
- b) Does the design of the space clearly signpost its purpose (waiting rooms, sales, boarding)? In particular, is there explicit differentiation between free access and conditional access (e.g. holding a valid travel ticket) areas?
- c) Is the boundary between public and private spaces physically or symbolically signposted?
- d) Has space design been adapted to different target groups and to their needs?
- e) Do these territorial boundaries create a feeling of ownership and responsibility among the users?
- f) Does the scaling of the newly designed space fit its intended purpose and uses? In particular, do these spaces provide for sub-spaces enabling location users with shared interests or roles to assemble together (waiting before train arrival, specific line information, waiting for connecting services, clearly recognisable meeting points, etc.)?
- g) Can users clearly identify these spaces?

5.4.4.3 Visibility

- a) Do the location facilities planned offer good visibility over building entrances?
- b) Do landscaping and vegetation allow sufficient visibility and potential for natural surveillance?
- c) Have bus stops and entrances to underground stations and parking facilities been located in such a way as to allow maximum visibility?
- d) Are the activities in public transport-dedicated areas have good enough visibility to allow natural surveillance and make it possible to ask for help where needed?
- e) Have plans been made to keep the use of long blank walls along pedestrian routes or footpaths to a minimum?
- f) Are the spaces well lit to reduce fear of crime?
- g) Do isolated areas have good visibility in order to reduce the risk of crime and perceived insecurity?
- h) Does the location design allow new users to know where they are and to find their way around easily, thus fostering a feeling of security?

5.4.5 Location compatibility with security measures

- a) Does the project or the space itself help the surveillance and intervention missions of officers and agents tasked with maintaining law and order? Are the spaces accessible and visible to patrols, or is the location configuration geared to islanding?
- b) Are security and safety services (public and private intervention services: police, firefighters, emergency ambulance services) guaranteed good accessibility?
- c) Can the location be quickly and safely evacuated (assembly areas, broad access ways, liaison with public highways)?
- d) Have crime prevention initiatives been factored into location or project design: if so, has equipment been planned for social education, outreach programs or community services, or on a broader scale, has the location perimeter been designed to blend in with the local environment or does it mark a clear boundary?

5.5 Management strategies

5.5.1 General

When dealing with safety issues, the location manager's role is to reassess the following factors in order to guarantee that the public transport-dedicated areas can offer a globally peaceful, reassuring environment.

5.5.2 Responsive location management policy

5.5.2.1 General

Specific future transport production needs have to be systematically factored in from the outset, as soon as the location design process begins. This is also the ideal point at which to plan ahead for the various dimensions of space management involved. This mission is to design spaces that are as easy to service and keep in shape (including against theft and vandalism) as to deploy formal surveillance.

5.5.2.2 Upkeep and maintenance

- a) Have maintenance measures and strategy been planned so that spaces will be attractive and lively and foster responsibility and a feeling of security?
- b) Does the maintenance strategy ensure quick, responsive and prompt responses to reduce the risk of vandalism and repeated offences and to reduce the feeling that the spaces are derelict or left unused?
- c) Do the materials used on location offer fast, easy servicing?
- d) Are the different spaces within the area equally well serviced to prevent certain spaces from becoming branded as conducive to fostering crime?
- e) Does the management strategy provide for partnership between stakeholders to ensure homogeneous measures and strategy implementation (regular meetings, specific documents)? Does the management strategy provide stakeholders with steps to follow and regular monitoring and assessment measures?
- f) Does the maintenance strategy feature specific measures for lighting, electricity and telephone systems (in terms of any protection and fast repairs needed)?

5.5.2.3 Formal surveillance (patrolling, CCTV)

- a) Does the management staff include safety specialists or people explicitly tasked with safety-related missions? Who are the different stakeholders in terms of safety and security issues? What are their responsibilities and skills fields?

- b) Have the various surveillance measures employed been studied and assessed (police, security services, all natural surveillance resources, CCTV)?
- c) Have specific surveillance measures been taken to cover public facilities approach routes and entrances/exits for both day and night?
- d) Does the project design feature liaisons between different surveillance systems, particularly as concerns clearly defined segregation of roles and responsibilities among location partners and the location's urban environment (passenger carriers, location manager, local traders, public authorities, and any other institutional stakeholders such as schools, etc.)?
- e) Do specific places in the area require the deployment of CCTV coverage (even if it is not a legal requirement)? If so, does the CCTV system include regular monitoring and assessment measures? Have the links between the surveillance professionals and the location management stakeholders been organized in such a way as to synergize the effectiveness of both parties?

5.5.3 Regulating space usage

5.5.3.1 General

Over and above the rules on general location running, which are implemented by the location controllers (passenger carrier, location manager), quality of life in public transport spaces hinges on the way the public actually takes ownership of the location and its functions. This positive ownership includes informal surveillance (by passengers), occupancy rates, individual empowerment and the information control of incidents, natural respect for the spaces themselves and the functions offered by the location.

Key points to hone in on include how lively the spaces are, where they are positioned, whether they are relatively isolated from the rest, making it equally important to check whether they are exposed to safety problems (repeated vandalism, perceived insecurity, etc.) and to look into the options for physically or visually drawing the public spaces together in order to improve the potential for informal surveillance.

5.5.3.2 Coordinating time schedules to provide continuous natural surveillance

- a) Are there any specific actions planned to provide safety during downtime in location occupancy?
- b) Are there specific activities which can be introduced/relocated to improve the time-span of natural surveillance?
- c) Do specific spaces need activity and lighting during nighttime?

5.5.3.3 Code of conduct in public spaces

- a) Does the location operations plan include drafting and publishing a clear code of conduct governing the public spaces?
- b) Has it been made easy for users to clearly understand the rules defined by location managers?
- c) Do these rules increase the sense of responsibility towards the public space?
- d) Do managers and surveillance officers check that these rules are applied, and do they issue timely reminders?
- e) Is it necessary to plan communication initiatives between managers, surveillance officers and users of the space?
- f) Is it necessary to issue a document (personnel regulations policy) to clarify the rules in terms of controlling conduct, maintenance, and crime prevention?

- g) Does the project plan to issue guidance documents explaining the rules to users of public transport-dedicated spaces?
- h) Will users be able to easily get information and to ask managers for help or assistance?
- i) In order to enhance the feeling of security for users and reduce the risk of crime, is it necessary to communicate on prevention measures?
- j) What public awareness-raising initiatives targeting potential users will be implemented to increase the sense of responsibility towards the public transport-dedicated spaces?
- k) How will current users from the local neighbourhood be integrated into the project so that they are encouraged to use the location without vandalizing it or committing violence?

5.5.3.4 Deploying initiatives tailored to specific populations (community support policy)

- a) Does the project take into account the whole population, both on location and those likely to come on location (homeless, drug-dependents)?
- b) Does the project include assistance for the disabled and for socially vulnerable groups?
- c) Have plans been made to create an effective partnership between welfare workers and location managers?

5.5.4 Legibility and orientation

5.5.4.1 General

Legibility, here, is defined as logical consistency between the status, function, use patterns and management approaches of the spaces and sub-spaces making up the location. It implies that the roles of these spaces are instantly understandable with clearly ranked levels of importance. Legibility translates as a kind of implicit communication that encourages passengers and location users to feel ownership of the premises, and to instantly understand where they need to go, despite the complexity of the location. This legibility instils a certain familiarity with the premises, even for first-time users, thus reducing any feeling of insecurity or having to be on the lookout.

5.5.4.2 Implicit and explicit signposting, lighting

- a) Does the design of the space clearly signpost its purpose (waiting rooms, sales, boarding)? In particular, is there explicit differentiation between free access and conditional access (e.g. holding a valid travel ticket) areas?
- b) Is the signposting system regularly reviewed, and if necessary updated, to give users an immediate and reassuring understanding of where they need to go?
- c) Has the lighting system been designed in such a way as to provide location users with a reassuring level of visibility? Are the visual design criteria applied to the lighting system compatible with the level of lighting needed to reassure the various publics using the spaces?

5.5.5 Location compatibility with security measures

- a) Does the project or the space itself help the surveillance and intervention missions of officers and agents tasked with maintaining law and order? Are the spaces accessible and visible to patrols, or is the location configuration geared to islanding?

- b) Are security and safety services (public and private intervention services: police, firefighters, emergency ambulance services) guaranteed good accessibility? Have fast, efficient communication channel been provided? Are they regularly tested?
- c) Can the location be quickly and safely evacuated (assembly areas, broad access ways, liaison with public highways)? Have evacuation procedures been drafted and issued? Have public awareness initiatives and (or) drills been scheduled?
- d) Have crime prevention initiatives been factored into location or project design: if so, has equipment been planned for social education, outreach programs or community services, or on a broader scale, has the location perimeter been designed to blend in with the local environment or does it mark a clear boundary?

Annex A
(informative)
Types of crime against people (including staff) and buildings

A.1 Offence against person

A.1.1 Assault with physical violence (without theft)

A.1.2 Assault without physical violence (without theft)

- a) Threat , threatening behaviour
- b) Term of abuse, insulting behaviour
- c) Spittle

A.1.3 Sexual assault

- a) Rape
- b) Attempted rape and/or fondle
- c) Exhibitionism

A.1.4 Theft against person

- a) Robbery with violence
- b) Robbery with threat
- c) Picking pockets

A.2 Assault against companies, properties and plants

A.2.1 Assault against properties and plants by damage and /or destruction

- a) Projectile throw
- b) Tag, graffiti
- c) engraving
- d) Arson
- e) Other vandalism

A.2.2 Theft against companies

- a) Theft
- b) Robbery with violence and /or threat
- c) Burglary

- d) Swindle
- e) Other theft

A.2.3 Threat

- a) Alarm (neutralized or hoax offences)
- b) Unattended object (neutralized or false alert)

A.2.4 Trespass

A.3 Other offence relative to public transport rules and antisocial behaviour

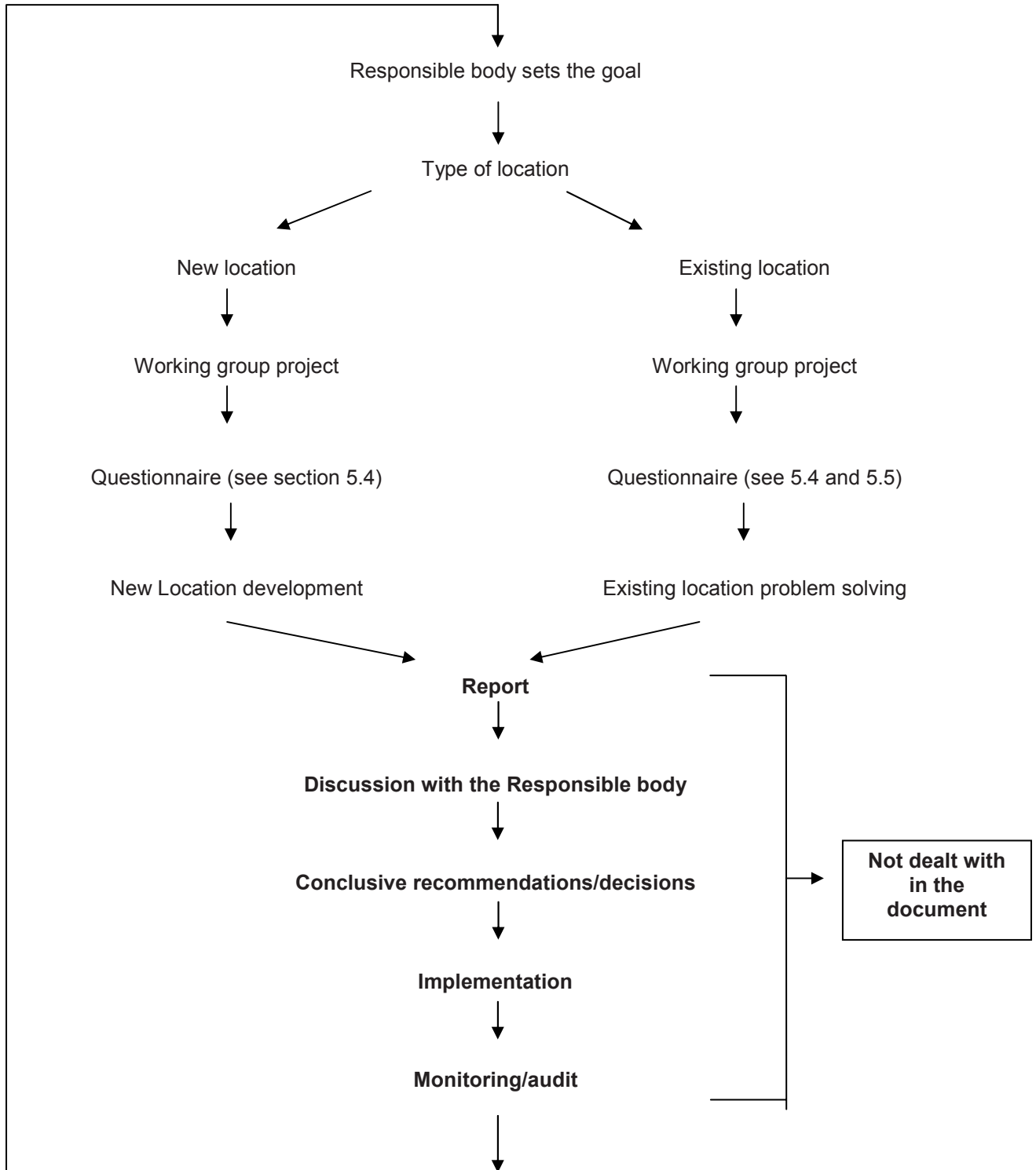
A.3.1 Behavioural offence

- a) Teargas jet without victim
- b) Crossing railway
- c) Crossing ticket barrier
- d) Other behavioural offence
- e) Introducing pets
- f) Resonant devices or instruments uses
- g) Street hawking
- h) Drug consumption
- i) Smoking inside prohibited areas
- j) Drunkenness
- k) Begging
- l) Other

A.3.2 Traffic offence

- a) Hindrance to vehicles traffic with people
- b) Hindrance to vehicles traffic with object
- c) Security system handling
- d) Alarm handling
- e) Drain the hydraulic system of bus doors
- f) Other handling

Annex B (informative) Summary of the process



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