

ICS 13.310; 91.020

English Version

**Prevention of crime - Urban planning and building design - Part
5: Petrol stations**

Prévention de la malveillance - Urbanisme et conception
des bâtiments - Partie 5 : Stations-service

Vorbeugende Kriminalitätsbekämpfung - Stadt- und
Gebäudeplanung - Teil 5: Tankstellen

This Technical Report was approved by CEN on 10 August 2009. It has been drawn up by the Technical Committee CEN/TC 325.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Historical background and design.....	6
4.1 General.....	6
4.2 The image of the petrol station – First source of prevention.....	7
4.3 Designing with regard to sociological and psychological factors	7
5 Risk assessment and management in petrol station.....	8
5.1 General.....	8
5.2 Local factors.....	8
5.3 Environmental and social risks.....	8
5.4 The site	9
5.5 Who are the potential offenders.....	9
5.6 Types of crime that occur most frequently.....	10
6 Security strategy for petrol stations.....	12
6.1 General.....	12
6.2 Risk analysis	13
6.3 Vulnerability of site and building	14
6.4 Security concept.....	14
7 Security recommendations for petrol stations.....	15
7.1 General.....	15
7.2 Identifying the grade of risk and protection required.....	15
8 Access to petrol station – perimeter protection.....	16
8.1 General.....	16
8.2 Requirements	17
8.3 Forecourt and its secondary activities	17
9 The main building	20
9.1 Risk analysis	20
10 Management.....	25
10.1 Staff and manager role.....	25
10.2 The part of oil companies and other partners	25
10.3 Management of the funds in transit in petrol stations.....	26
10.4 Maintenance	26
Annex A (normative) Recommended levels of security.....	28
Annex B (informative) Risk analysis of petrol stations vulnerability to the crime	29
B.1 Introduction.....	29
B.2 Risk assessment.....	30
B.3 How to fill in the questionnaire	31
B.4 Application example of the risk analysis	32
Bibliography.....	50

Foreword

This document (CEN/TR 14383-5:2010) 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.

CEN/TR 14383, *Prevention of crime — Urban planning and building design*, consists of the following parts:

- *Part 1: Definition of specific terms¹⁾*
- *Part 2: Urban planning*
- *Part 3: Dwellings*
- *Part 4: Shops and offices*
- *Part 5: Petrol stations*
- *Part 6: Schools²⁾*
- *Part 7: Design and management of public transport facilities*
- *Part 8: Protection of buildings and sites against criminal attacks with vehicles*

1) Published as EN 14383-1.

2) Published as prCEN/TR 14383-6.

Introduction

The nature, cost and scale of crime against petrol stations can be hard to quantify and there are many factors that can influence whether or not an offence is committed. For the purpose of this Technical Report, apart from the three basic criminological approaches already described in CEN/TS 14383-4, there should be a further examination of the vulnerability of petrol stations. This vulnerability can depend on multiple factors that can vary from country to country. The diverse nature of regulations that apply to petrol stations and the differences in management and trading relations should be accounted for in any risk analysis.

Petrol stations can be described as highly accessible trading sites (they can be reached by foot or by car and can be left immediately). They can be quite isolated in space (even for citizen urban petrol stations) sometimes because of their size, their small number of staff, and/or because they have a multiple and free service function (fuel, food shop, drinks, accessories, car maintenance, etc.), with a wide opening time to the public.

In addition, factors that do not depend directly on the location of the petrol station and its activities should be taken into account, i.e. the general physical and social environment, the retailer's commercial strategies, the power of reaction of law enforcement agencies (police, gendarmerie, local police department).

The result is that crime in petrol stations varies in rate and nature according to the accumulation of the described risk factors, which means that producing uniform modes of management and security equipments for petrol stations is very difficult. In practice, each petrol station should be subject to individual analysis in order to optimize the safety strategies and apply the most efficient tools to prevent crime.

1 Scope

This Technical Report gives guidelines for a recommended strategy for efficiently combating the different types of crime liable to be committed against petrol stations.

NOTE Crimes that are liable to be committed against petrol stations could include: armed robbery, violent theft, burglary (usually by breaking in at night), theft, fraud (failure to pay, use of stolen credit cards or cheques and other frauds), arson, vandalism and other crimes and offences.

This Technical Report is applicable to new and existing petrol station buildings that are open to and accessible by the public.

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 356, *Glass in building — Security glazing — Testing and classification of resistance against manual attack*

EN 1063, *Glass in building — Security glazing — Testing and classification of resistance against bullet attack*

EN 1143-1, *Secure storage units — Requirements, classification and methods of test for resistance to burglary — Part 1: Safes, ATM safes, strongroom doors and strongrooms*

EN 1303, *Building hardware — Cylinders for locks — Requirements and test methods*

EN 1522, *Windows, doors, shutters and blinds — Bullet resistance — Requirements and classification*

ENV 1627, *Windows, doors, shutters — Burglar resistance — Requirements and classification*

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

CEN/TS 14383-4:2006, *Prevention of crime — Urban planning and design — Part 4: Shops and offices*

EN 50132-7, *Alarm systems — CCTV surveillance systems for use in security applications — Part 7: Application guidelines*

3 Terms and definitions

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

3.1

petrol station

liquid fuel supplying point for motor vehicles that provides supplies for the operation of motor vehicles, and can provide other services as well (i.e. food, catering, car wash, maintenance and car repair, emergency car repair)

3.2

petrol

liquid fuel comprising a mixture of several hydrocarbons that are derived from petroleum refining and/or organic fuel, and which is used to power combustion engines