# საქართველოს სტანდარტი

მეთოდოლოგია ექსპლუატაციაში მყოფი ლიფტების უსაფრთხოების ამაღლების შეფასებისა მოქმედი ლიფტები-ნაწილი 80: მოქმედ სამგზავრო და სატვირთო სამგზავრო ლიფტებში უსაფრთხოების გაუმჯობესების წესები

# სსტ ენ 81-80:2003/2016

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 81-80** 

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### English version

# Safety rules for the construction and installation of lifts - Existing lifts - Part 80: Rules for the improvement of safety of existing passenger and goods passenger lifts

Règles de sécurité pour la construction et l'installation des élévateurs - Ascenseurs existants - Partie 80: Règles pour l'amélioration de la sécurité des ascenseurs et des ascenseurs de charge existants Sicherheitsregeln für die Konstruktion und den Einbau von Aufzügen - Bestehende Aufzüge - Teil 80: Regeln für die Erhöhung der Sicherheit bestehender Personen- und Lastenaufzüge

This European Standard was approved by CEN on 3 November 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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

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## **Foreword**

This document (EN 81-80:2003) has been prepared by Technical Committee CEN/TC 10 "Lifts, escalators and moving walks", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2004, and conflicting national standards shall be withdrawn at the latest by June 2004.

Regulations concerning the safety upgrading of existing lifts vary from member state to member state and have not, to date, been harmonised at either international or European level.

CEN/CENELEC have embarked on a programme of work to produce a series of related machinery and lift safety standards as part of the process of European harmonisation. This standard both makes use of and refers to EN 292 parts 1 and 2 and most of the EN 81 series of standards (see clause 2).

This standard is part of the EN 81 series of standards: "Safety rules for the construction and installation of lifts". This is the first edition of the standard.

Annexes A and B are informative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

### Introduction

### Background of this standard

More than 3 million lifts are in use today in EU and EFTA and almost 50 % were installed more than 20 years ago. Existing lifts were installed to the safety level appropriate at that time. This level is less than today's state of the art for safety.

New technologies and social expectations have led to today's state of the art for safety. This has led to the situation today of different levels of safety across Europe causing accidents. However, users and authorised persons expect a common acceptable level of safety.

In addition, there is a growing trend for people to live longer and for disabled people to expect access and design for all. Therefore it is especially important to provide a safe means of vertical transport for disabled and elderly persons without supervision.

Lift attendants and in many cases building caretakers are not so common anymore, so it is important that relevant safety features for the rescue of trapped persons should be provided.

Furthermore the life cycle of a lift is longer than most other transportation systems and building equipment, which therefore means that lift design, performance and safety can fall behind modern technologies. If existing lifts are not upgraded to today's state of the art of safety the number of injuries will increase (especially in buildings which can be accessed by the general public).

With the freedom of movement of people within the EU for both users and authorised persons, familiarisation with the different installations is becoming more and more difficult.

### Approach of this standard

This standard

- categorises various hazards and hazardous situations, each of which has been analysed by a risk assessment;
- is intended to provide corrective actions to progressively and selectively improve, step by step, the safety of all
  existing passenger and goods passenger lifts towards today's state of the art for safety;
- enables each lift to be audited and safety measures to be identified and implemented in a step by step and selective fashion according to the frequency and severity of any single risk;
- lists the high, medium and low risks and corrective actions which can be applied in separate steps in order to eliminate the risks.

Other designs to previous national regulations or standards, providing they have an equivalent safety level, may be acceptable.

#### Use of this standard

This standard can be used as a guideline for:

- a) national authorities to determine its own programme of implementation in a step by step process via a filtering process (see annex A) in a reasonable and practicable<sup>1)</sup> way based on the level of risk (e.g. extreme, high, medium, low) and social and economic considerations;
- b) owners to follow their responsibilities according to existing regulations (e.g. Use of Work Equipment Directive);

<sup>1) &</sup>quot;Reasonable and practicable" is defined as follows: "In deciding what is reasonably practicable the seriousness of a risk to injury should be weighted against the difficulty and cost of removing or reducing that risk. Where the difficulty and costs are high, and a careful assessment of the risk shows it to be comparatively unimportant, action may not need to be taken. On the other hand where the risk is high, action should be taken at whatever cost."

- c) maintenance companies and/or inspection bodies to inform the owners on the safety level of their installations;
- d) owners to upgrade the existing lifts on a voluntary basis in accordance with c) if no regulations exist.

In making an audit of an existing lift installation annex B can be used to identify the hazards and corrective actions in this standard. However, where a hazardous situation is identified which is not covered in this standard a separate risk assessment should be made. This risk assessment should be based on ISO/TS 14798 (see bibliography).