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Safety requirements for lifts (elevators) —

Part 1: Global essential safety requirements (GESRs)

Exigences de sécurité des ascenseurs —

Partie 1: Exigences essentielles de sécurité globale des ascenseurs

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 178, *Lifts, escalators and moving walks*.

This first edition of ISO 22559 cancels and replaces ISO/TS 22559-1:2004.

ISO 22559 consists of the following parts, under the general title *Safety requirements for lifts (elevators)*:

— *Part 1: Global essential safety requirements (GESRs)*

— *Part 2: Safety parameters meeting the global essential safety requirements (GESRs)* (Technical Specification)

— *Part 3: Global conformity assessment procedures (GCAP) — Prerequisites for certification of conformity of lift systems, lift components and lift functions* (Technical Specification)

— *Part 4: Global conformity assessment procedures (GCAP) — Certification and accreditation requirements* (Technical Specification)

Introduction

0.1 After the publication of ISO/TR 11071-1 and ISO/TR 11071-2, discrepancies were noted in the lift safety standards, and it was agreed that there was a need for an ISO publication that would set global essential safety requirements for lifts (elevators). The work, however, could start only after ISO 14798 was completed. This methodology was a critical tool in the development of this part of ISO 22559 on safety requirements for lifts.

0.2 The objective of the ISO 22559 series of documents is to:

a) define a common global level of safety for all people using, or associated with, lifts (elevators);

b) facilitate innovation of lifts (elevators) not designed according to existing local, national or regional safety standards, while maintaining equivalent levels of safety; and

c) help remove trade barriers.

NOTE ISO/TS 22559-2 contains global safety parameters (GSPs) for lifts (elevators) that should further assist in the use and implementation of the global essential safety requirements (GESRs) specified in this part of ISO 22559.

0.3 Clause 4 describes the approach and methodology used in the development of this part of ISO 22559. Clause 5 gives instructions for the use and implementation of GESRs. The GESRs are presented in Clause 6. Each GESR specifies a safety objective, i.e. what is to be achieved, not how to do it. This allows innovation and development of future technologies. Annex A gives an overview of GESRs in relation to lift subsystems.

0.4 This part of ISO 22559 does not supersede National Regulations. Users of this part of ISO 22559 should comply with the National Regulations. This part of ISO 22559 is intended to support national regulations on safety assessment of new lifts.

0.5 The hazards associated with lifts are similar worldwide. For achieving an appropriate uniform safety level, the requirements in this part of ISO 22559 should be considered in any safety assessment of new lifts.

0.6 ISO 22559-1 GESRs or the EU Lifts Directive 95/16/EC essential health and safety requirements (EHSRs), as well as those EHSRs of the Machinery Directive 2006/42/EC applicable to lifts, when complied with, give an appropriate level of safety for lifts. See Annex B for application of European legislation.

0.7 The ISO 22559 series of documents provides a process for assessment of conformity of lift systems, lift components or lift functions with the safety requirements specified in ISO 22559-1. It includes a structured methodology for establishing, documenting and demonstrating that necessary and appropriate protective measures are taken to eliminate hazards or sufficiently mitigate risks. This process is particularly useful for establishing safety of lift systems, lift components or lift functions involving innovative design or new technologies.

NOTE If one is using the process, parts 1 to 4 of the ISO 22559 series should be used.

0.8 ISO/IEC Guide 51 has been taken into account as far as practicable at the time of drafting of this part of ISO 22559. The process of risk reduction described in ISO/IEC Guide 51 is accomplished using ISO 14798.