



BUSINESS PLAN
CEN/TC 10
LIFTS, ESCALATORS AND MOVING WALKS

EXECUTIVE SUMMARY

Lifts, escalators, moving walks and building hoists are essential elements in providing safe access to buildings.

The European lift industry stakeholders have been successful in providing such products and related services for many years.

In the last decade, there has been a major geographical shift for the industry as demand for lifts and escalators has grown rapidly in Asia Pacific region. At present, 80% of total global new equipment is installed in that region.

Worldwide, there are more than 11 million lifts and escalators in operation and more than 700,000 new units are installed every year.

The total volume of new equipment installed in Europe is more than 130,000 units. The total volume of the existing installations is more than 5.4 million units (>50% of total), of which more than 50% is older than 20 years.

The industry employs more than 160,000 people in Europe.

Interested parties in the standardization process are all lift, escalator, moving walks and building hoist manufacturers and, component manufacturers, public authorities and regulators, inspection bodies, building owners and operators, facility management companies, insurance companies, users and workers.

CEN/TC 10 standards cover safety, accessibility and energy efficiency for lifts, escalators, moving walks and building hoists. Standards are developed with participation from stakeholders and interested parties.

At this moment 37 standards have been published and another 8 are under development. Currently, 21 standards have been harmonised and 5 are in the process to be harmonised in accordance with the European New Approach to technical harmonisation.

Many of CEN/TC 10 standards are more than 5 years old and there is a need to review and possibly update those standards.

CEN/TC 10 standards are widely used around the world. Therefore, CEN/TC 10 takes every opportunity to extend cooperation with national and international organisations around the world.

In addition, CEN/TC 10 works very closely with ISO/TC 178 to develop standards with global coverage or adopts relevant ISO standards as EN standards whenever possible.

1 BUSINESS ENVIRONMENT OF THE CEN/TC 10

1.1 Description of the Business Environment

CEN/TC 10 covers lifts, escalators, moving walks and building hoists. The term “lift” may be understood as lifting appliances intended for lifting persons or person with goods; or goods only when the lifting appliance travels through several fixed levels.

Lift and escalator industry stakeholders (the industry) have two main areas of activities:

- a) Production and installation of new equipment, and their components, for new or old buildings;
- b) Inspection, maintenance, repair and modernization of the equipment already installed.

Economic performance is nearly equally divided between two activities, globally. However, in Europe, activity b) represents nearly 60% of the total revenue for the industry.

Main stakeholders of the industry:

- Manufacturers
- Installers
- Maintenance and service organisations
- Building designers and owners/operators
- Inspections and certifications bodies
- Public authorities and regulators
- Users of the equipment
- Workers

There are three main EU New Approach directives directly applicable to newly installed lifts and escalators:

- Directive 95/16/EC (Lifts Directive): This Directive applies to lifts permanently serving buildings and constructions. Where the relevant hazard exists and is not dealt in the annex I of this directive, the essential health and safety requirements of Annex I to Directive 2006/42/EC apply.
- Directive 2006/42/EC (Machinery Directive): This directive applies to escalators and lifting appliances that are out of scope of the Lifts Directive.
- Directive 2004/108/EC (EMC Directive): relating to Electromagnetic compatibility which applies to lifts and escalators

Other directives may be applicable, based on the intended use and design of lifts and escalators.

Existing equipment is subject to national regulations.

In the last decade, the industry has gone through a major geographical transformation. Unpresented growth in China and rapid growth in many Asian Pacific and some South American countries has shifted the demand for lifts and escalators to those markets. In response, many European manufacturers, including small and medium sized enterprises (SMEs), have established manufacturing and research and development facilities or joint ventures in those regions.

The lifts and escalator market in Europe has stabilised after severe difficulties due to financial crisis, although the situation may vary for each country.

Several mega trends influence the business environment for the industry. Urbanisation and moving people from countryside to cities continues. The rate of urbanization differs in each region of the world, with highest rate in developing markets specifically in Asia Pacific. As a result of urbanisation combined with high rate of economic growth, demand for lifts and escalator has surged in those regions.

Demographic change is another mega trend. Increase of aging population around the world and higher attention to the needs of persons with disabilities, especially in Europe, requires higher attention to providing accessibility to buildings. In addition and based on the recent experiences with natural and other emergencies, the role of lifts in safe evacuation of buildings and relevant standardisation work need to be considered.

Safety of lifts and escalators has always been a key focus for the industry. Safety of new equipment is continually being improved through introduction of regulatory and standardisation measures as well as innovations. With more than 11 million lifts and escalators in operation worldwide, there is a need to address the safety of the existing equipment in comparison with the new equipment.

Fire related issues are another safety topic. Safe usage of the lift in case of fire alarms or use of lifts in firefighting in the buildings has worldwide importance.

Environmental impact, specifically energy efficiency, for lifts and escalators has gained a high level of importance around the world. Therefore, improving energy efficiency is another focus point for the industry.

From a regulatory point of view, European New Approach to technical harmonisation, in the form of Lifts Directive and Machine Directive, has been successful in implementing free circulation of safe lifts, escalators and safety components within EU. In addition, such regulatory approach has created an environment in which innovative and safe solutions may be put on the EU market faster. Other regions show much interest to implement a similar approach for lifts and escalators in their markets. Performance Based Codes reflect such approach outside Europe.

Considering geographical changes and current mega-trends, worldwide free circulation of safe and compliant products is becoming essential for the industry and therefore, there is a pressing need for global harmonisation of codes and standards for lifts and escalators.

It is important to note that national standards in many countries around the world, especially in Asia Pacific region, are based on technical requirements of European standards. This has been an essential element for harmonisation of technical and safety requirements for lifts and escalators around the world with benefits for all stakeholders and economic operators.

Close cooperation between CEN and regional or national standardisation organisations and accommodating their needs and requirements is a crucial factor in maintaining the current level of harmonisation and improving it in the future. In addition, promoting European New Approach and facilitating the access to and use of European standards outside Europe is a must.

1.2 Quantitative Indicators of the Business Environment

Currently, global volume of new lifts and escalators is approximately 700,000 units. More than 65% of all those installation are in China! And nearly 80% of total are installed in Asia Pacific region. It is expected that the current trend to continue for the foreseeable future.

There are more than 11 million lifts and escalators in operation around the world.

More than 130,000 units of new lifts and escalators are installed in Europe annually.

More than 5.4 million lifts and escalators are in operation, nearly 50% of total worldwide. More than 50% of the existing equipment in Europe is more than 20 years old!

Existing equipment is being modernised at the rate of less than 2 % of the total installations each year. The owner of the building or its representative takes the final decision on modernisation of the equipment.

The industry employs more than 160,000 people in Europe.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 10

- Providing standards and technical specifications addressing safety of the users, i.e. passengers and workers, of lifts and escalators and moving walks. Those documents are developed using risk assessment methods supported by available reports and statistics on accidents and incidents.
- Developing harmonised standards in support of European legislations to facilitate and simplify conformity to the legislations and also set minimum acceptable level of safety for a given product and its application. Therefore, reducing costs to the manufacturers and installers and other stakeholders of the industry, while maintaining high level of safety for the products. Currently 21 harmonised standards have been published and 5 new standards are under development.
- CEN/TC 10 standards may facilitate or simplify the tasks of the market surveillance authorities, reducing costs and improving response time and performance.
- Contributing to removal or preventing technical barriers for trade throughout Europe and worldwide. CEN/TC 10 standards are being developed with input from national and international standardisation organisations worldwide, as much as possible. In addition, adopt relevant ISO standards as identical EN whenever possible.

CEN/TC 10 work program consists of

- o Publications
 - Standards: 31 (two ISO standards is adopted as identical)
 - Technical Specifications: 4
 - Technical Report: 2
- o Under development
 - Standards: 7 (includes two EN ISO standards under development, ISO lead)
 - Technical Specifications: 0
 - Technical Report: 1

3 PARTICIPATION IN THE CEN/TC 10

All CEN national members are welcome and encouraged to nominate delegates to CEN/TC 10 and its Working Groups. TC 10 takes all possible measures to ensure a balance representation of stakeholders and interested parties.

Several trade associations, specifically representing SMEs, are in liaison with CEN/TC 10:

- ELA - European Lift Association
- ELCA - European Lift Components Association
- EFESME - European Federation for Elevator Small and Medium-sized Enterprises
- UIPI - International Union of Property Owners

Other relevant trade associations are invited by the TC Chairman to attend the TC or working group meetings based on the topic of the discussions.

Inspection and Notified Bodies are also participating in the committees nominated by their National organisation or through liaison with Notified Bodies for Lifts.

Wherever possible, CEN/TC 10 invites ISO/TC 178 members to join the work, by utilising the cooperation agreement between CEN and ISO.

Other international experts are also invited by the TC Chairman, considering the topic of discussions and observing the CEN rules.

In every occasion, CEN/TC 10 encourages participation of experts from SMEs. Also use of IT, e.g. telecommunication, and easily accessible meeting locations are encouraged to facilitate SMEs attendance and reduce travelling costs.

4 OBJECTIVES OF THE CEN/TC 10 AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC 10

CEN/TC 10 standards address three main topics for lifts and escalators:

- Safety
- Fire related issues
- Accessibility and evacuation
- Energy efficiency

CEN/TC 10 will continue developing standards to address those topics. There are specific objectives:

- Completion of on-going work, on time, is essential. As a consequence of two new main standards, EN 81-20 and EN 81-50 which are the result of EN 81-1 and EN 81-2 revision, many other standards need to be amended. Based on the comments from the CEN Enquiry, there is a clear need for revision or amendment to those standards
- Many CEN/TC 10 standards are more than 5 years old. Review and update of those standards in line with experience gained and current state of the art is necessary

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- There are several new fields to be covered. New standards will cover lifts in wind turbines, lifting equipment for stages within the entertainment industry, lifting appliances with enclosed carrier and low speed.

CEN/TC 10 standards address an extensive range of topics related to lifts and escalators with a wide geographical coverage. CEN/TC 10 need to be highly responsive to the questions and interpretation requests raised by the users of those standards.

CEN/TC 10 also intensifies cooperation with ISO/TC 178 in topics of common interest and when possible to come to a single global standard on those topics. PrEN ISO 25745-2 and -3 covering energy efficiency classification for lifts and escalators are good examples.

4.2 Identified strategies to achieve the CEN/TC 10 defined objectives.

- CEN/TC 10 set its priorities through consultation with its members and stakeholders.
- Work closely with other TCs and liaison organisations to bring relevant expertise and resources to its work groups
- Use existing national or international standards and documents to accelerate the development of the standards. Adopt relevant ISO standards as identical ENs whenever possible
- Work closely with ISO/TC 178 to prevent redundancies of the work, whenever possible. For example, for standards in wind turbines ISO/TC 178 experts will be invited to participate under the ISO and CEN cooperation agreements
- Extend cooperation with and participation from non-European national and international standardisation organisations, whenever possible and within the CEN rules and agreements
- SMEs are great source of innovation, expertise and resources. CEN/TC 10 encourages and facilitates participation of SMEs in its work as much as possible.

4.3 Environmental aspects.

CEN/TC 10 considers the environmental aspects in development of its standards and other technical documents, taking into account the guidance provided in the CEN Guide 4. In addition, where possible, the overall effect of the lifts, escalators and moving walks on total environmental performance of the building is considered. For example, in the last revision of EN 81-1/-2, which resulted in a new standard as EN81-20, the requirements for lift well ventilation has been reviewed and modified. The requirements of EN 81-20 will improve the energy performance of the building, where the lift installed, without affecting the safety of the lift users or technicians.

Main environmental impact of the lifts and escalators relates to the (electrical) energy consumption in the usage phase of those installations. CEN/TC 10 and ISO/TC 178 working together, under Vienna Agreement, in developing EN ISO 25745-1/-2/-3 standards for energy measurement and classification for lifts, escalators and moving walks installations. Considering the high interest from the stakeholders of the industry, those standards will be taken into use and may provide a globally agreed common set of tools for improving the energy performance of those installations.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 10 WORK PROGRAMME

- Lack of or inadequate resources may cause delays in some of the projects.
- Cooperation agreements between CEN and other international institutions provide an opportunity for CEN/TC 10 to extend cooperation with those institutions