

THE LIFTINSTITUUT AND THE EUROPEAN COMMON MARKET

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ABSTRACT

The European Commission's White Paper of June 1985 and the Single European Act, which came into force in July 1987, have committed the European Community to the most ambitious project since the signing of the Treaty of Rome in 1957. The completion of the European Common Market, with no internal frontiers, by removing physical and technical barriers (European standardisation) will also have an impact on inspection and certification bodies like the Liftinstituut (Netherlands Institute for Lift Technology). Since 1956, the Liftinstituut has been charged by the Ministry of Social Affairs and Employment with carrying out all lift inspections in the Netherlands. A summary of EC legislation and the prospects for the Liftinstituut will be given.

The European perspective

On 1 January 1993, the first steps will have been taken towards creating a Single European Market of the 12 Member States.

This development has not only been initiated as a result of technical renewal, but primarily because of new political thinking within the European Community.

This new way of political thinking is fundamental to the changes.

European perspective

1957 Treaty of Rome

Completion of the Common market,
as a result of the free movement of:
- goods (removal of economic and
technical trade barriers)
- services
- people
- capital

1985 Single European Act

1987 • White Paper with 300 measures,
of which 200 concern technical
harmonisation

In 1957, with the signing of the Treaty of Rome, European unification was initiated. The aim of the Treaty was "the realisation of a Common Market between the Member States", by gradually bringing together economic policy, encouraging harmonious development of economic activities within the community, gradual and steady expansion, greater stability, and improved living standards.

Old Approach and New Approach

The major hallmark of this change was that prior to 1985 decisions between EC Member States had to be taken unanimously, whilst under the regime of the New Approach, a qualified majority was sufficient.

In order to remove trade barriers, harmonisation of technical regulations for products is necessary.

Under the Old Approach, many Member States held on desperately to their own technical regulations, worked out in detail. As a result of disunity on the details, harmonisation was out of the question.

An example of a directive drawn up under the Old Approach is the Directive on Electrical Passenger Lifts (84/529.EEC), undoubtedly known to you, which states that all door-locking devices, overspeed governors, buffers and safety gears must undergo an EC type examination prior to them being placed on the market and used. This type examination must be carried by an independent testing and inspection body notified with the European Commission.

Directives from the Old Approach contain wide-ranging, concrete, technical construction requirements. As a result of the aim of including these wide-ranging, technical construction rules in these guidelines, actually introducing them in practice took many years.

The Liftinstiuit has been notified with the European Commission by the Dutch Government, within the framework of the Directive on Electrical Passenger Lifts, and is therefore authorised to implement type examinations for the European Market. With the New Approach, the so-called White Paper containing 300 measures aimed at achieving the intended free movement within the Community, by the end of 1992, was introduced in 1987.

Since that time, decisions have been taken by qualified majority, and harmonisation of technical regulations is limited to target regulations in European legislation.

Both the alterations to the decision-making procedures and the approach of only developing the main points of EC Directives, as well as leaving the standardisation of technical construction requirements to the technical experts, within the framework of European standardisation (CEN), have led to an enormous acceleration in the rapidity of the developments.

NEW APPROACH

essential health and safety requirements are prescribed targets in regulations, legislation and European standardisation (harmonised)

- products manufactured according to the harmonised standards are assumed to comply with the legal requirements.
- manufacturers need not apply the harmonised standards if, in some other way, they are able to show that their product fulfils the same health and safety levels as the standard.

The Economic and Social dimensions of the European Community

Besides containing measures aimed at giving form to the Economic dimension (removal of trade barriers) the White Paper also contains measures for giving form to the Social dimension (health and safety at work).

<u>Directives</u>		
<u>1985</u>		
<u>Economic dimension</u>		<u>Social dimension</u>
Removal of Trade barriers		Harmonisation of level of
- product safety (art.100a)		- industrial safety (art.118a)
(absolute level)		(minimum level)
<u>TRADE/MANUFACTURE</u>		<u>USE</u>
<u>PRODUCT SAFETY</u>	<u>1987</u>	<u>SAFETY IN USE</u>
- Directive on Simple Pressure Vessels (1987)		- Framework Directive on Health and Safety at Work (1989)
- Directive on Machines (1989)		- Directive on the Work Place (1989)
- Supplementary Directive on Mobile Machines and Lifting and Hoisting Equipment (1991)		- Directive on the use of Work Equipment (1989)
- Directive on Personal Protection Equipment (1989)		- Directive on the use of Personal Protection Equipment (1989)
- Draft Directive on Lifts		- Directive on Handling of Heavy Loads (1990)
- Draft Directive on Cable-way installations for Passenger Transport		- Directive on VDU Work (1990)
- Draft Directive on Fairground and Attraction Equipment		
- Directive on Pressure Vessels (1990)		
- Resolution on Assessment Conformity Procedures (1989)		

1992

Implementation of Directives in Member States

Within the Economic dimension, directives have been and are being developed for products, known as product safety directives.

On the one hand, these are intended to remove trade and technical barriers, whilst at the same time applying health and safety requirements for products.

Form is given to the Social dimension by demanding a certain minimum level (of health) and safety when using work equipment.

This level is laid down in the directives on safety in use.

What do these various directives actually mean?

Product Safety Directives and Essential Safety Requirements

It is important to know that many directives are being developed or have already been laid down, with the intention of removing trade barriers, and simultaneously harmonising the health and safety aspects of products.

This is taking place on the basis of article 100a of the Single European Act. These directives contain "fundamental safety and health requirements". These are the target requirements which products must fulfil in order to represent no danger to the health and safety of the user.

These requirements cover danger aspects which can occur during use. These directives call for the use of safe materials, safe and ergonomically acceptable operating stations, and the fitting of protection systems against mechanical, electrical or other risks.

<u>Content of Directives</u>	
<u>Product safety</u>	<u>Safety in use</u>
Directives aimed at manufacturers/suppliers	Directives aimed at employers/employees
Essential safety requirements	
Product requirements	User requirements
Inspection and Certification	
↓	↓
CE mark on products at point of sale	Use of products with CE mark

A product should be designed and manufactured in such a way that it can function and be adjusted or maintained without representing any danger. This then is **product safety**.

If products are manufactured entirely in accordance with these directives, the CE mark must be applied to the product.

These products may then be sold freely on the internal market. The manufacturer or supplier is obliged to fulfil these product safety directives.

Inspection and certification requirements are laid down for certain products. These requirements are described in a Resolution (90/683/EEC) of 13 December 1990, dealing with the procedures for the assessment of conformity.

Converting the essential health and safety requirements into technical product standardisation and specification is the task of experts, within the framework of the European (CEN) and national standards institutes.

The product standards must indicate, in a concrete form, how the essential health and safety requirements can be achieved.

For the lift industry and the Netherlands Institute for Lift Technology, the following product safety directives are important:

- Directive on Machines (89/392/EEC) of 14 June 1989.
This directive applies to motor-driven machinery, and is valid as of 1 January 1993.
- Supplementary Directive on Mobile Machines and Lifting and Equipment

(91/368/EEC) of 20 June 1991.

This directive is a supplement to the abovementioned directive, and applies to mobile machines, and adjustable-height lifting and mechanical handling devices and hand-operated hoists and winches.

The directive also covers auxiliary equipment, lifting and hoisting equipment and moving equipment. This guideline was drawn up on 20 June 1991, and must be applied as of 1 January 1993.

- Draft Directive on Lifts

This draft directive is due to contain provisions for lifting and hoisting equipment intended for moving people, either loaded or unloaded. No clear area of application has yet been described.

It is probable that these directives will apply to both lifts and escalators, since this type of directive is currently being developed.

It is also possible that the directive will be integrated into the Supplementary Directive on Mobile Machinery and Lifting and Hoisting Equipment.

- Draft Directive on Passenger Cable-way Installations for Passenger Transport.

The area of application for this draft directive will probably extend to cover suspended cable cars, funicular railways, inclined lifts, tow lifts and drag lifts. The draft directive is currently being developed. It is at present unknown whether this draft directive will become a Supplementary Directive to Machine directive (89/392/EEC).

- Draft Directive on Fairground and Attraction Equipment.

In the European connection, discussions are currently taking place on the safety of fairground attraction equipment, which also concern inspection and certification systems. It is unknown whether or when a directive of this type will be realised.

Furthermore, a policy on inspection and certification systems is being developed in Brussels. This policy is laid down in the Resolution of 13 December 1990 concerning the modules for the various phases of procedures for the assessment of conformity which must be used in the directives for technical harmonisation (90/683/EEC).

This Resolution defines seven different modules for inspection and certification procedures (procedures for the assessment of conformity).

PROCEDURES FOR THE ASSESSMENT OF CONFORMITY

- RESOLUTION OF 13 DECEMBER 1990

- EUROPEAN HARMONISATION OF INSPECTION AND CERTIFICATION PROCEDURES
- RECOGNITION OF NOTIFIED BODIES based on QUALITY ASSURANCE STANDARDS EN 45000 / ISO 9000 (= EN 29000)
- SEVEN INSPECTION AND CERTIFICATION PROCEDURES from MANUFACTURERS DECLARATION to SYSTEM QUALITY ASSURANCE to be evaluated by a Notified Body.

These procedures extend from a simple manufacturing check by the manufacturer by means of a manufacturer's declaration, via initial type testing and individual inspection, right through to total quality control, carried out by recognised inspection agencies, registered with the European Commission, and known as "Notified Bodies".

These Notified Bodies must be able to show, by means of a certificate of recognition, that they fulfil the relevant harmonised quality assurance standards EN 45000 and ISO 9000 (= EN 29000).

The Member States must register the Notified Bodies with the European Commission, on the basis of a certificate of recognition issued by the National Council for Accreditation in the Member States. Recognition means compliance with the abovementioned quality assurance standards.

The Liftinstituut has contacted the Dutch Government with a request for notification.

This Resolution creates a structure both for inspection and certification organisations both under private and public law, which renders possible mutual recognition and acceptance of the inspection and certification organisations.

Within this structure, the application of the CE mark (Conformité Européenne) is introduced for all products which comply with the stipulations of the directives.

By means of this Resolution, the Member States mutually recognise the notified inspection and certification bodies.

Safety in Use Directives

A supplement to the Product Safety Directives are the Safety in Use Directives, drawn up on the basis of article 118a of the Single European Act, in the framework of the Social dimension of European integration.

As already mentioned, these directives contain minimum provisions for health and safety at work.

These directives currently contain no provisions for inspection and certification procedures.

As a result, the Member States are free to run their own inspection and certification systems.

So long as the European Commission introduces no more detailed legislation, national regulations will be employed in the Member States. In the Netherlands, this means that the Liftinstituut, as inspection and certification body, carries out inspections on lifts prior to commissioning, and thereafter, periodically. Similar regulations are valid in many Member States.

The following Safety in Use Directives will define the level of industrial safety in the Community, based on article 118a of the Single European Act.

- Framework Directive on Health and Safety at Work (89/391/EEC) of 12 June 1989. This directive gives minimum provisions concerning health and safety of employees at work, and is aimed at both employers and employees.

- Directive on Minimum Provisions for Health and Safety at the Work Place (89/654/EEC) of 30 November 1989.
- Directive on Minimum Provisions for Use of Working Equipment (e.g. machines) by employees, at the work place (89/655/EEC) of 30 November 1989.

These directives contain regulations for protecting employees in connection with the equipping of the work place, and the use of machines.

- Directive on Minimum Provisions for the Use of Personal Protective Equipment at Work (89/656/EEC) of 30 November 1989.
This directive indicates when certain equipment must be used for the protection of employees.
- Directive on Handling Heavy Loads.
This directive is intended to avoid the lifting of excessively heavy loads.
- Directive on VDU Work.
This directive contains regulations on working with VDUs.

It is also possible for the Member States, on a national level, to prescribe a higher protection level than the minimum level, laid down in the safety in use directives. This is not the case for product safety directives.

The position of the Liftinstituut (Netherlands Institute for Lift Technology)

Essential for European unification is the free movement of goods, services, people and capital.

This fundamental approach will lead to an open European Market, governed by free competition.

Many independent inspection and certification bodies in the Member States have been appointed by their Government to inspect and to certify lifts and other equipment. Since the 1930s, such a surveillance-system concerning machines with (high) potential risks has led to a high standard of safety in the Member States nowadays.

So long as the European Council of Ministers lays down no European policy in this matter, and the National Governments see no cause for altering the current inspection policy, the market for (lift) inspection is expected to remain exclusive, for the time being. In the future, however, it is to be expected that the competition principle will also be introduced in this field.

It is hoped that this competition principle will not lead to a worsening of inspection practices, and as a result to a reduction in the high level of protection provided during product use.

No one, be they consumers, employees, employers or governments, are of any avail in this

field.

The inspection and certification bodies will have to employ European harmonised standards, and if possible, world-wide harmonised standards as test criteria.

In order to ensure good implementation of the inspections, it will be necessary to comply with the International Quality Assurance standards (ISO 900 and EN 45000).

MARKET

THE LIFTINSTITUUT (NETHERLANDS INSTITUTE FOR LIFT TECHNOLOGY) OPERATES IN

- THE MARKET IN THE NETHERLANDS ON LIFTS (Recognized by the Ministry of Social Affairs and Employment)

- THE FREE MARKET IN THE NETHERLANDS ON ESCALATORS, PASSENGER CONVEYORS, FACADE-LIFTING EQUIPMENT, ELEVATING PLATFORMS, FAIRGROUND AND ATTRACTION EQUIPMENT, OTHER STACKING-, CONVEYING-, LIFTING EQUIPMENT

FOR:

- INSPECTIONS
- CERTIFICATION
- TRAINING

ON THE BASIS OF:

- EUROPEAN STANDARDS

The Liftinstituut already inspects and certifies products such as lifts, escalators, passenger conveying systems, mobile elevating platforms, stacking and lifting equipment and other mechanical handling devices, on the basis of regulations contained in this series of standards. Fairground and attraction equipment is also inspected.

In order to ensure a high standard of quality in the implementation of inspections by the many inspection bodies in the Member States, it is very desirable for each Member State to set up a Council for Accreditation, aimed at recognising those inspection and certification bodies which comply with the abovenamed quality assurance standards.

By linking these national accreditation councils with the European Organisation for Testing and Certification (EOTC), an umbrella with a high level of protection would be created in Europe.

IN EUROPE;

LIFTINSTITUUT → EUROPEAN MARKET

as a

NOTIFIED BODY

NOTIFIED BY DUTCH GOVERNMENT

based on

RECOGNITION BY THE ACCREDITATION COUNCIL

on the basis of

EN 45000 (ISO 9000)

The Liftinstituut is already well on the way to conforming to these structures. After all, the Liftinstituut with its expertise, independence and objectivity, is part of the European market.

Finally, the Product Safety Directives and the Safety in Use Directives broadly contain the very essential target definitions (essential safety requirements) related to health and safety.

In this way, these directives form a basis for inspections and tests. Harmonised European Standards (product standards) are being, and will have to be developed to provide more detailed technical information, to back up the essential safety requirements.

The Liftinstituut is contributing, within the framework of European and world-wide standardisation (CEN and ISO), to the setting up of international standards for various equipment (including lifts, escalators, facade-lifting equipment, elevating platforms. Furthermore the Liftinstituut is also involved in national standardisation for fairground and attraction equipment, directly linked to the activities for European standardisation.

Summary

The European Directives for Product Safety and Safety in Use not only encourage trade, but also the level of protection when using the products.

Furthermore, a European structure for recognised inspection and certification bodies, the so-called Notified Bodies, is created, for the implementation of inspection and certification procedures according to the international quality assurance standards.

This serves both professional and non-professional users.

The Liftinstituut (Netherlands Institute for Lift Technology), as an inspection and certification body, both wants to and can play an important role in this development.

About the author

M.A. Lagendijk, born in 1950, is managing director of the Netherlands Institute for Lift Technology.

In 1979, he obtained an M.Sc. Degree in mechanical engineering at the Delft University of Technology.

After obtaining his degree, he became general manager at an enterprise manufacturing mechanical handling and lifting equipment.

Subsequently he was general manager at the Ministry for Social Affairs and Employment, charged with implementing policies on working conditions.

In this function, he was intimately involved in international negotiations for the Single European Market.

Mr. Lagendijk is a member of several committees within the Netherlands Standardisation Institute.

He has also written a number of publications in the fields of industrial safety measures and the unification of the European Community.