

COUNCIL DIRECTIVE 92/58/EEC

of 24 June 1992

on the minimum requirements for the provision of safety and/or health signs at work (ninth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 118 a thereof,

Having regard to the proposal from the Commission ⁽¹⁾, submitted following consultation of the Advisory Committee on Safety, Hygiene and Health Protection at Work,

In cooperation with the European Parliament ⁽²⁾,

Having regard to the opinion of the Economic and Social Committee ⁽³⁾,

Whereas Article 118 a of the Treaty provides that the Council must adopt, by means of directives, minimum requirements to encourage improvements, especially in the working environment, as regards the health and safety of workers;

Whereas, under that Article, such directives must avoid imposing administrative, financial and legal constraints in a way which would hold back the creation and development of small and medium-sized undertakings;

Whereas the Commission communication on its programme concerning safety, hygiene and health at work ⁽⁴⁾ provides for a revision and extension of the scope of Council Directive 77/576/EEC of 25 July 1977 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the provision of safety signs at places at work ⁽⁵⁾;

Whereas, in its Resolution of 21 December 1987 on safety, hygiene, and health at work ⁽⁶⁾, the Council took note of the Commission's intention of submitting to it within a short period of time a proposal for revising and extending the abovementioned Directive;

Whereas Directive 77/576/EEC should be replaced by this Directive for the sake of consistency and clarity;

Whereas this Directive is an individual Directive within the meaning of Article 16 (1) of Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work ⁽⁷⁾; whereas the provisions of Directive 89/391/EEC therefore apply in full to the provision of safety and health signs at work, without prejudice to more stringent and/or specific provisions contained in this Directive;

Whereas existing Community rules relate mainly to safety signs and the marking of dangerous obstacles and locations, and are therefore restricted to a limited number of types of signs;

Whereas the effect of this restriction is that some hazards are not appropriately marked; whereas new types of signs should therefore be introduced in order to enable employers and workers to identify and avoid risks to safety and/or health at work;

Whereas safety and/or health signs must be provided where hazards cannot be adequately reduced by techniques for collective protection or by measures, methods or procedures used in the organization of work;

Whereas the many differences between the safety and/or health signs currently in use in the Member States lead to uncertainty, and this may become more widespread with the free movement of workers within the internal market;

Whereas the use of standardized signs at work is, in general, likely to reduce the hazards which may arise from linguistic and cultural differences between workers;

Whereas this Directive constitutes a tangible step towards developing the social dimension of the internal market;

Whereas, pursuant to Decision 74/325/EEC ⁽⁸⁾, as last amended by the Act of Accession of Spain and Portugal, the Advisory Committee on Safety, Hygiene and Health Protection at Work is to be consulted by the Commission on the drafting of proposals in this field,

⁽¹⁾ OJ No C 53, 28. 2. 1991, p. 46 and OJ No C 279, 26. 10. 1991, p. 13.

⁽²⁾ OJ No C 240, 16. 9. 1991, p. 102 and OJ No C 150, 15. 6. 1992.

⁽³⁾ OJ No C 159, 17. 6. 1991, p. 9.

⁽⁴⁾ OJ No C 28, 3. 2. 1988, p. 3.

⁽⁵⁾ OJ No L 229, 7. 9. 1977, p. 12. Last amended by Commission Directive 79/640/EEC. (OJ No L 183, 19. 7. 1979, p. 11.)

⁽⁶⁾ OJ No C 28, 3. 2. 1989, p. 1.

⁽⁷⁾ OJ No L 183, 29. 6. 1989, p. 1.

⁽⁸⁾ OJ No L 185, 9. 7. 1974, p. 15.

HAS ADOPTED THIS DIRECTIVE:

SECTION I

GENERAL PROVISIONS

Article 1

Object

1. This Directive, which is the ninth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC, lays down minimum requirements for the provision of safety and/or health signs at work.
2. This Directive shall not apply to signs for the placing on the market of dangerous substances and preparations, products and/or equipment, unless other Community provisions make specific reference thereto.
3. This Directive shall not apply to signs used for regulating road, rail, inland waterway, sea or air transport.
4. The provisions of Directive 89/391/EEC shall apply in full to the whole area referred to in paragraph 1, without prejudice to more stringent and/or specific provisions in this Directive.

Article 2

Definitions

For the purposes of this Directive:

- (a) safety and/or health signs means signs referring to a specific object, activity or situation and providing information or instructions about safety and/or health at work by means of a signboard, a colour, an illuminated sign or acoustic signal, a verbal communication or a hand signal, as the case may be;
- (b) prohibition sign means a sign prohibiting behaviour likely to incur or cause danger;
- (c) warning sign means a sign giving warning of a hazard or danger;
- (d) mandatory sign means a sign prescribing specific behaviour;
- (e) emergency escape or first-aid sign means a sign giving information on emergency exits or first-aid or rescue facilities;
- (f) information sign means a sign providing information other than that referred to in (b) to (e);
- (g) signboard means a sign which provides specific information by a combination of a geometric shape, colours and a symbol or pictogram and which is rendered visible by lighting of sufficient intensity;
- (h) supplementary signboard means a signboard used together with one of the signs described under (g), which provides supplementary information;
- (i) safety colour means a colour to which a specific meaning is assigned;
- (j) Symbol or pictogram means a figure which describes a situation or prescribes specific behaviour and which is used on a signboard or illuminated surface;
- (k) illuminated sign means a sign produced by a device made of transparent or translucent materials which are illuminated from the inside or the rear in such a way as to give the appearance of a luminous surface;
- (l) acoustic signal means a coded sound signal which is released and transmitted by a device designed for that purpose, without the use of a human or artificial voice;
- (m) verbal communication means a predetermined spoken message communicated by a human or artificial voice;
- (n) hand signal a movement and/or position of the arms and/or hands, in coded form, for guiding persons who are carrying out manoeuvres which constitute a hazard or danger for workers.

SECTION II

EMPLOYERS' OBLIGATIONS

Article 3

General rules

1. Employers shall provide safety and/or health signs as laid down in this Directive where hazards cannot be avoided or adequately reduced by techniques for collective protection or measures, methods or procedures used in the organization of work, or ensure that such signs are in place.

Employers shall take into account any risk evaluation made in accordance with Article 6 (3) (a) of Directive 89/391/EEC.

2. Without prejudice to the provisions of Annex V, the signs used for road, rail, inland waterway, sea and air

transport shall be installed, wherever appropriate for such forms of transport, inside undertakings and/or firms.

Article 4

Safety and/or health signs used for the first time

Without prejudice to Article 6, a safety and/or health sign used at work for the first time on or after the date referred to in Article 11 (1) first subparagraph must fulfil the minimum requirements set out in Annexes I to IX.

Article 5

Safety and/or health signs already in use

Without prejudice to Article 6, a safety and/or health sign which was already in use at work before the date referred to in Article 11 (1) first subparagraph must fulfil the minimum requirements set out in Annexes I to IX by no later than eighteen months after that date.

Article 6

Exemptions

1. Taking account of the types of activity and/or size of the undertakings concerned, Member States may specify categories of undertakings allowed to replace totally, partially or temporarily the illuminated signs, and/or acoustic signals provided for in this Directive by alternative measures which afford the same level of protection.

2. Member States may derogate, after consulting both sides of industry, from the application of Annex VIII, section 2 and/or Annex IX, section 3, whilst laying down alternative measures guaranteeing the same level of protection.

3. Member States shall consult, in accordance with national laws and/or practice, employers' and workers' organizations when implementing paragraph 1.

Article 7

Information and instruction for workers

1. Without prejudice to Article 10 of Directive 89/391/EEC, workers and/or their representatives shall be informed of all the measures to be taken concerning the safety and/or health signs used at work.

2. Without prejudice to Article 12 of Directive 89/391/EEC, workers must be given suitable instruction, in particular in the form of specific directions concerning the safety and/or health signs used at work.

In particular, the instruction referred to in the first subparagraph shall cover the meaning of the signs, especially signs incorporating words, and the general and specific behaviour to be adopted.

Article 8

Consultation of workers and workers' participation

Consultation and participation of workers and/or their representatives shall take place in accordance with Article 11 of Directive 89/391/EEC on the matters covered by this Directive, including Annexes I to IX.

SECTION III

MISCELLANEOUS PROVISIONS

Article 9

Adaptation of the Annexes

Adaptations of a technical nature to Annexes I to IX shall be adopted, in accordance with the procedure provided for in Article 17 of Directive 89/391/EEC, in the light of:

- the adoption of directives on technical harmonization and standardization concerning the design and manufacture of safety and/or health signs or devices at work,
- technical progress, changes in international rules or specifications and advances in knowledge in the field of safety and/or health signs at work.

Article 10

1. Directive 77/576/EEC shall be repealed on the date referred to in Article 11 (1), first subparagraph.

However, in the cases referred to in Article 5, that Directive shall continue to apply for a maximum period of eighteen months following that date.

2. Any reference to the repealed Directive shall be taken to refer to the corresponding provisions of this Directive.

*Article 11***Final provisions**

1. Member States shall bring into force the laws, regulations and administrative provisions required to comply with this Directive no later than 24 June 1994.

They shall immediately inform the Commission thereof.

2. When Member States adopt these measures they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

3. Member States shall communicate to the Commission the text of the provisions of domestic law which they have already adopted or adopt in the field covered by this Directive.

4. Member States shall report to the Commission every five years on the practical implementation of the provisions of this Directive, indicating the views of employers and workers.

The Commission shall inform the European Parliament, the Council, the Economic and Social Committee and the Advisory Committee on Safety, Hygiene and Health at Work thereof.

5. The Commission shall forward periodically to the European Parliament, the Council and the Economic and Social Committee a report on the implementation of this Directive, taking into account paragraphs 1 to 4.

Article 12

This Directive is addressed to the Member States.

Done at Luxembourg, 24 June 1992.

For the Council

The President

José da SILVA PENEDA

ANNEX I

GENERAL MINIMUM REQUIREMENTS CONCERNING SAFETY AND/OR HEALTH SIGNS
AT WORK

1. Preliminary remarks

- 1.1. Where health and/or safety signs are required by the general rule in Article 3 of the Directive, they must conform to the specific requirements in Annexes II to IX.
- 1.2. This Annex introduces those requirements, describes the different uses of safety and/or health signs, and gives general rules on the interchanging and combining of signs.
- 1.3. Health and/or safety signs must be used only to convey the message or information specified in the Directive.

2. Types of signs

2.1. Permanent signs

- 2.1.1. Permanent signboards must be used for signs relating to prohibitions, warnings and mandatory requirements and the location and identification of emergency escape routes and first-aid facilities.

Signboards and/or a safety colour must be used to mark permanently the location and identification of fire-fighting equipment.

- 2.1.2. Signboards on containers and pipes must be placed as laid down in Annex III.
- 2.1.3. Places where there is a risk of colliding with obstacles or of falling must be permanently marked with a safety colour and/or with signboards.
- 2.1.4. Traffic routes must be permanently marked with a safety colour.

2.2. Occasional signs

- 2.2.1. Illuminated signs, acoustic signals and/or verbal communication must be used where the occasion requires, taking into account the possibilities for interchanging and combining signs set out in Section 3, to signal danger, to call persons to take a specific course of action and for the emergency evacuation of persons.
- 2.2.2. Hand signals and/or verbal communication must be used where the occasion requires, to guide persons carrying out hazardous or dangerous manoeuvres.

3. Interchanging and combining signs

- 3.1. Any one of the following may be used if equally effective:

- a safety colour or a signboard to mark places where there is an obstacle or a drop,
- illuminated signs, acoustic signals or verbal communication,
- hand signals or verbal communication.

- 3.2. Some types of signs may be used together:

- illuminated signs and acoustic signals,
- illuminated signs and verbal communication,
- hand signals and verbal communication.

4. The instructions in the table below apply to all signs incorporating a safety colour:

Colour	Meaning or purpose	Instructions and information
Red	Prohibition sign	Dangerous behaviour
	Danger alarm	Stop, shutdown, emergency cutout devices Evacuate
	Fire-fighting equipment	Identification and location
Yellow or Amber	Warning sign	Be careful, take precautions Examine
Blue	Mandatory sign	Specific behaviour or action Wear personal protective equipment
Green	Emergency escape, first aid sign	Doors, exits, routes, equipment, facilities
	No danger	Return to normal

5. The effectiveness of a sign must not be adversely affected by:
 - 5.1. the presence of another emission source of the same type which interferes with visibility or audibility; therefore, in particular,
 - 5.1.1. the placing of too many signs too close together should be avoided;
 - 5.1.2. two illuminated signs which are likely to be confused are not to be used at the same time;
 - 5.1.3. an illuminated sign is not to be used in the proximity of another similar illuminated source;
 - 5.1.4. two acoustic signals are not to be used at the same time;
 - 5.1.5. an acoustic signal is not to be used if there is too much ambient noise;
 - 5.2. poor design, insufficient number, incorrect positioning, poor state of repair or incorrect functioning of the signs or signalling devices.
6. Depending on requirements, signs and signalling devices must be cleaned, maintained, checked, repaired, and if necessary replaced on a regular basis to ensure that they retain their intrinsic and/or functional qualities.
7. The number and positioning of signs or signalling devices to be installed will depend on the extent of the hazards or dangers or on the zone to be covered.
8. Signs requiring some form of power must be provided with a guaranteed emergency supply in the event of a power cut, unless the hazard has thereby been eliminated.
9. The triggering of an illuminated sign and/or acoustic signal indicates when the required action should start, the sign or signal must be activated for as long as the action requires.
Illuminated signs and acoustic signals must be reactivated immediately after use.
10. Illuminated signs and acoustic signals must be checked to ensure that they function correctly and that they are effective before they are put into service and subsequently at sufficiently frequent intervals.
11. If the hearing or the sight of the workers concerned is impaired, including impairment caused by the wearing of personal protective equipment, measures must be taken to supplement or replace the signs concerned.
12. Areas, rooms or enclosures used for the storage of significant quantities of dangerous substances or preparations must be indicated by a suitable warning sign taken from section 3.2. of Annex II, or marked as provided in section 1 of Annex III, unless the labelling of the individual packages or containers is adequate for this purpose.

ANNEX II

MINIUM GENERAL REQUIREMENTS CONCERNING SIGNBOARDS

1. Intrinsic features

- 1.1. The shape and colours of signboards are set out in section 3, in accordance with their specific object (signboards indicating a prohibition, a warning, a mandatory action, an escape route, an emergency or fire-fighting equipment).
- 1.2. Pictograms must be as simple as possible and should contain only essential details.
- 1.3. The pictograms used may be slightly different from or more detailed than those shown in section 3, provided that they convey the same meaning and that no difference or adaptation obscures the meaning.
- 1.4. Signboards are to be made of shock and weather-resistant material suitable for the surrounding environment.
- 1.5. The dimensions and colorimetric and photometric features of signboards must be such that they can be easily seen and understood.

2. Conditions of use

- 2.1. Signboards are in principle to be installed at a suitable height and in a position appropriate to the line of sight, taking account of any obstacles, either at the access point to an area in the case of a general hazard, or in the immediate vicinity of a specific hazard or object and in a well-lit and easily accessible and visible location.

Without prejudice to the provisions of Directive 89/654/EEC, phosphorescent colours, reflective materials or artificial lighting should be used where the level of natural light is poor.

- 2.2. The signboard must be removed when the situation to which it refers ceases to exist.

3. Signboards to be used

3.1. Prohibitory signs

Intrinsic features:

- round shape
- black pictogram on white background, red edging and diagonal line (the red part to take up at least 35 % of the area of the sign).

Signs to be used



No smoking



Smoking and naked flames forbidden



No access for pedestrians



Do not extinguish
with water



Not drinkable



Not access for unauthorized
persons



No access for industrial vehicles



Do not touch

3.2. *Warning signs*

Intrinsic features:

- triangular shape
- black pictogram on a yellow background with black edging (the yellow part to take up at least 50% of the area of the sign).



Flammable material
or high temperature ⁽¹⁾



Explosive material



Toxic material



Corrosive material



Radioactive material

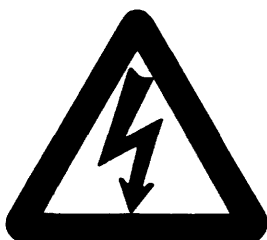


Overhead load

⁽¹⁾ In the absence of a specific sign for high temperature.



Industrial vehicles



Danger: electricity



General danger



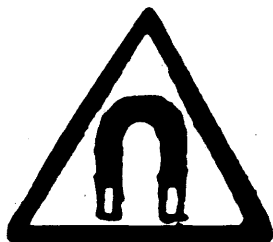
Laser beam



Oxidant material



Non-ionizing radiation



Strong magnetic field



Obstacles



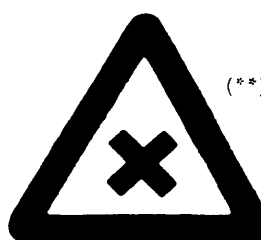
Drop



Biological risk



Low temperature

Harmful or irritant
material

3.3. Mandatory signs

Intrinsic features:

- round shape
- white pictogram on a blue background (the blue part to take up at least 50% of the area of the sign).

(*) Pictogram laid down in Council Directive 90/679/EEC of 26 November 1990 on the protection of workers from the risks related to exposure to biological agents at work (Seventh individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC) / OJ No L 374, 31. 12. 1990, p. 1.

(**) The background to this sign may exceptionally be amber if justified in order to differentiate it from a similar road safety sign.



Eye protection must be worn



Safety helmet must be worn



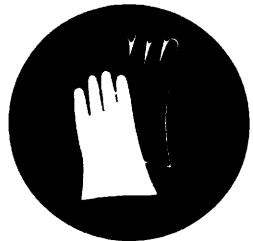
Ear protection must be worn



Respiratory equipment must be worn



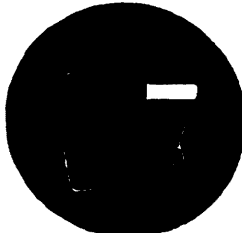
Safety boots must be worn



Safety gloves must be worn



Safety overalls must be worn



Face protection must be worn



Safety harness must be worn



Pedestrians must use this route

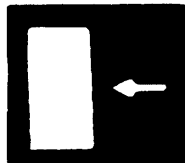
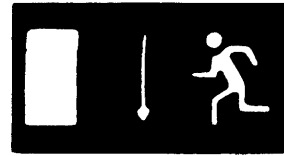
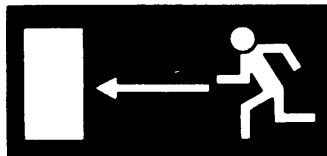


General mandatory sign (to be accompanied where necessary by another sign)

3.4. *Emergency escape or first-aid signs*

Intrinsic features:

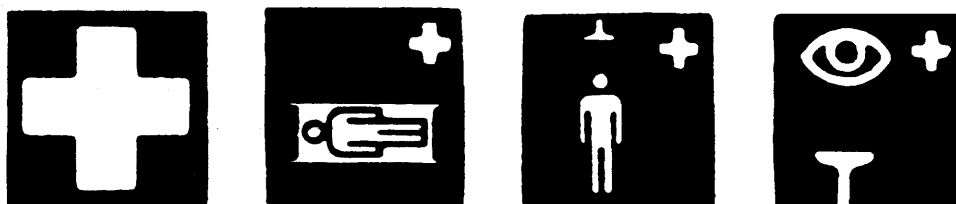
- rectangular or square shape
- white pictogram on a green background (the green part to take up at least 50% of the area of the sign).



Emergency exit/escape route



This way
(supplementary information sign)



First-aid post

Stretcher

Safety shower

Eyewash

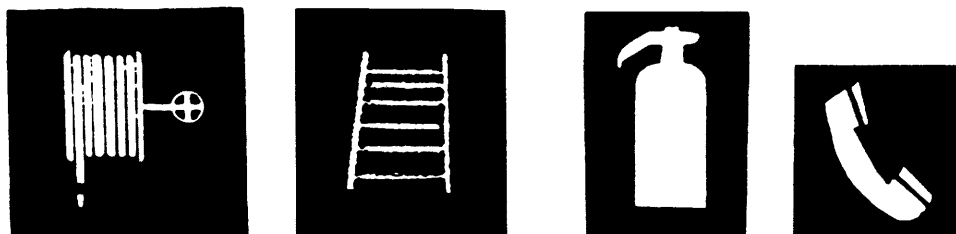


Emergency telephone for first-aid or escape

3.5. Fire-fighting signs

Intrinsic features:

- rectangular or square shape
- white pictogram on a red background (the red part to take up at least 50% of the area of the sign).



Fire hose

Ladder

Fire
extinguisher

Emergency fire
telephone



This way
(supplementary information sign)

ANNEX III

MINIMUM REQUIREMENTS GOVERNING SIGNS ON CONTAINERS AND PIPES

1. Containers used at work for dangerous substances or preparations defined in Directives 67/548/EEC ⁽¹⁾ and 88/379/EEC ⁽²⁾ and containers used for the storage of such dangerous substances or preparations, together with the visible pipes containing or transporting dangerous substances and preparations, must be labelled (pictogram or symbol against a coloured background) in accordance with those Directives.

Paragraph 1 does not apply to containers used at work for brief periods nor to containers whose contents change frequently, provided that alternative adequate measures are taken, in particular for information and/or training, which guarantee the same level of protection.

The labels referred to in paragraph 1 may be:

- replaced by warning signs as provided for in Annex II, using the same pictograms or symbols,
 - supplemented by additional information, such as the name and/or formula of the dangerous substance or preparation and details of the hazard,
 - for the transporting of containers at the place of work, supplemented or replaced by signs applicable throughout the Community for the transport of dangerous substances or preparations.
2. Signs must be mounted as follows:
 - on the visible side(s),
 - in unpliable, self-adhesive or painted form.
 3. Where appropriate, the signs referred to in section 1 of this Annex must have the intrinsic features defined in section 1.4. of Annex II and must fulfil the conditions of use for signboards laid down in section 2 of Annex II.
 4. Without prejudice to sections 1, 2 and 3, the labels used on pipes must be positioned visibly in the vicinity of the most dangerous points, such as valves and joint, and at reasonable intervals.
 5. Areas, rooms or enclosures used for the storage of significant quantities of dangerous substances or preparations must be indicated by a suitable warning sign taken from section 3.2 of Annex II, or marked as provided in section 1 of Annex III, unless the labelling of the individual packages or containers is adequate for this purpose, taking into account Annex II, point 1.5 with regard to dimensions.

Stores of a number of dangerous substances or preparations may be indicated by the warning sign for general danger.

The signs or labels referred to above must be positioned, as appropriate, near the storage area or on the door leading into the storage room.

⁽¹⁾ OJ No L 196, 16. 8. 1967, p. 1.

⁽²⁾ OJ No L 187, 16. 7. 1988, p. 14.

ANNEX IV**MINIMUM REQUIREMENTS FOR THE IDENTIFICATION AND LOCATION OF FIRE-FIGHTING EQUIPMENT****1. Preliminary remark**

This Annex applies to equipment used exclusively for fire-fighting purposes.

2. Fire-fighting equipment must be identified by using a specific colour for the equipment and placing a location signboard, and/or by using a specific colour for the places where such equipment is kept, or their access points.
3. The colour for identifying this equipment is red.
The red area must be sufficiently large to allow the equipment to be identified easily.
4. The signboards provided for in section 3.5 of Annex II must be used to mark the locations of this equipment.

ANNEX V

MINIMUM REQUIREMENTS GOVERNING SIGNS USED FOR OBSTACLES AND DANGEROUS LOCATIONS, AND FOR MARKING TRAFFIC ROUTES**1. Signs for obstacles and dangerous locations**

- 1.1. Places where there is a risk of colliding with obstacles, of falling or of objects falling should be marked with alternating yellow and black, or red and white stripes in built-up zones in the undertaking to which workers have access during their work.
- 1.2. The dimensions of the markings must be commensurate with the scale of the obstacle or dangerous location in question.
- 1.3. The yellow and black or red and white stripes must be at an angle of approximately 45° and of more or less equal size.
- 1.4. Example:

**2. Marking of traffic routes**

- 2.1. Where the use and equipment of rooms so requires for the protection of workers, traffic routes for vehicles must be clearly identified by continuous stripes in a clearly visible colour, preferably white or yellow, taking into account the colour of the ground.
- 2.2. The stripes must be located so as to indicate the necessary safe distance between the vehicles and any object which may be near by, and between pedestrians and vehicles.
- 2.3. Permanent traffic routes in built-up areas outdoors should, as far as is practicable, be similarly marked, unless they are provided with suitable barriers or pavements.

ANNEX VI

MINIMUM REQUIREMENTS FOR ILLUMINATED SIGNS

1. Intrinsic features

- 1.1. The light emitted by a sign must produce a luminous contrast which is appropriate to its environment, in accordance with the intended conditions of use of the sign, but without producing glare for an excessive amount of light or poor visibility as a result of insufficient light.
- 1.2. The luminous area emitting a sign may be of a single colour or contain a pictogram on a specified background.
- 1.3. The single colour must correspond to the table of colours and their meanings set out in section 4 of Annex I.
- 1.4. Likewise, when the sign contains a pictogram, the latter must comply with all the relevant rules set out in Annex II.

2. Specific rules governing use

- 2.1. If a device can emit both continuous and intermittent signs, the intermittent sign should be used to indicate a higher level of danger or a more urgent need for the requested/imposed intervention or action than is indicated by the continuous sign.

The duration of each flash and the frequency of the flashers of an intermittent illuminated sign must be such as to

- ensure the proper perception of the message, and
- avoid any confusion either between different illuminated signs or with a continuous illuminated sign.

- 2.2. If a flashing sign is used instead of — or together with — an acoustic signal, identical codes must be used.
- 2.3. Devices for emitting flashing signs in the event of grave danger must be under special surveillance or be fitted with an auxiliary lamp.

ANNEX VII

MINIMUM REQUIREMENTS FOR ACOUSTIC SIGNS

1. Intrinsic features

1.1. Acoustic signals must:

- (a) have a sound level which is considerably higher than the level of ambient noise, so that it is audible without being excessive or painful;
- (b) be easily recognizable, particularly in terms of pulse length and the interval between pulses or groups of pulses, and be clearly distinct from any other acoustic signal and ambient noises.

- 1.2. If a device can emit an acoustic signal at variable and constant frequencies, the variable frequency should be used to indicate a higher level of danger or a more urgent need for the requested/imposed intervention or action in relation to the stable frequency.

2. Code

The signal for evacuation must be continuous.

ANNEX VIII

MINIMUM REQUIREMENTS FOR VERBAL COMMUNICATION

1. **Intrinsic features**

- 1.1. Verbal communication between a speaker or emitter and one or more hearers is to take the form of (sometimes coded) short texts, phrases, groups of words and/or individual words.
- 1.2. Spoken messages are to be as short, simple and clear as possible; the verbal skills of the speaker and the hearing abilities of the hearer(s) must be such as to ensure reliable verbal communication.
- 1.3. Verbal communication is direct (by means of the human voice) or indirect (by means of a human or artificial voice which is broadcast by whatever means is appropriate).

2. **Specific rules governing use**

- 2.1. The persons involved must have a good knowledge of the language used so that they are able to pronounce and understand the spoken message correctly and consequently behave in a way which is appropriate to health and/or safety.
- 2.2. If verbal communication is used instead of — or together with — gestures, code words should be used such as:
 - start to indicate the start of a command
 - stop to interrupt or end a movement
 - end to stop the operation
 - raise to have a load raised
 - lower to have a load lowered
 - forwards
 - backwards
 - right
 - left } to be coordinated with the corresponding hand signals
- danger for an emergency stop
- quickly to speed up a movement for safety reasons.

ANNEX IX

MINIMUM REQUIREMENTS FOR HAND SIGNALS

1. Features

Hand signals must be precise, simple, expansive, easy to make and to understand, and clearly distinct from other such signals.

Where both arms are used at the same time, they must be moved symmetrically and for giving one sign only.

Provided that they fulfil the conditions given above, the signals used may vary slightly from or be more detailed than those shown in section 3; they must, however, be equally meaningful and comprehensible.

2. Specific rules governing use

- 2.1. The person giving the signs, hereinafter referred to as the 'signalman', will use arm/hand movements to give manoeuvring instructions to the person receiving the signs, hereinafter referred to as the (operator).
- 2.2. The signalman must be able to monitor all manoeuvres visually without being endangered thereby.
- 2.3. The signalman's duties must consist exclusively of directing manoeuvres and ensuring the safety of workers in the vicinity.
- 2.4. If the conditions described in point 2.2 are not fulfilled, one or more extra signalmen should be deployed.
- 2.5. The operator must interrupt the ongoing manoeuvre in order to request new instructions when he is unable to carry out the orders he has received with the necessary safety guarantees.

2.6. Accessories:

The operator must be able to recognize the signalman without difficulty.

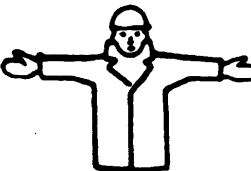





The signalman is to wear one or more appropriate distinctive items, e.g. a jacket, helmet, sleeves or armbandds, or carry bats.



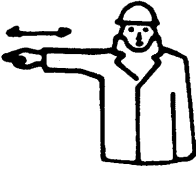
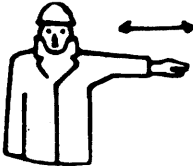

The distinctive items are to be brightly coloured, preferably all of the same colour and for the exclusive use of signalmen.


3. Coded signals to be used

Preliminary remark:

The following set of coded signals are without prejudice to other codes applicable at Community level, used for the same manoeuvres in certain sectors:

Meaning	Description	Illustration
A. General signals		
START Attention Start of command	both arms are extended horizontally with the palms facing forward	
STOP Interruption End of movement	the right arm points upwards with the palm facing forwards	
END of the operation	both hands are clasped at chest height	
B. Vertical movements		
RAISE	the right arm points upwards with the palm facing forward and slowly makes a circle	
LOWER	the right arm points downwards with the palm facing inwards and slowly makes a circle	
VERTICAL DISTANCE	the hands indicate the relevant distance	

Meaning	Description	Illustration
C. Horizontal Movements		
MOVE FORWARDS	both arms are bent with the palms facing upwards, and the forearms make slow movements towards the body	
MOVE BACKWARDS	both arms are bent with the palms facing downwards, and the forearms make slow movements away from the body	
RIGHT to the signalman's	the right arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the right	
LEFT to the signalman's	the left arm is extended more or less horizontally with the palm facing downwards and slowly makes small movements to the left	
HORIZONTAL DISTANCE	the hands indicate the relevant distance	

Meaning	Description	Illustration
D. Danger		
DANGER Emergency stop	both arms point upwards with the palms facing forwards	
QUICK	all movements faster	
SLOW	all movements slower	