# COMMISSION OF THE EUROPEAN COMMUNITIES

COM(78) 134 final.

Brussels, 3 April 1978

# Proposal for a COUNCIL DIRECTIVE

adapting to technical progress the Council Directive of 19 November 1973 on the approximation of the laws of the Member States relating to material measures of length

(submitted to the Council by the Commission)

COM(78) 134 final.

## EXPLANATORY MEMORANDUM

#### I. General

The Council Directive (73/262/EEC) on the approximation of the laws of the Member States relating to material measures of lenght was adopted on 19 November 1973.

Since its adoption, the Commission has received from Member States and from the European Tools Committee (Comité européen de l'outillage - CEO) which links the industries concerned several requests for adaptation of this directive to technical progress.

These requests were justified mainly on the grounds that new measures of lenght which are not covered by the Directive have appreared on the European market and that new methods of manufacture must also be taken into consideration in order that the text of the European legislation may acquire a broader scope. In view of these requests and on the basis of information collected on this subject, the competent Commission departments have, over the past two years, organized meetings of government experts with the close collaboration of representatives of industry.

#### II. Procedure

The Council Directives may, after some years of application prove to be out of date with respect to current manufacturing techniques in the field of the instruments concerned, since technical progress is sometimes so fast that, both at national and at international level, legal texts are overtaken by events.

Aware of this fact, in 1969 when a general programme for the elimination of technical barriers to trade was laid down, the Council passed a resolution concerning the adaptation of directives to technical progress. This resolution, which was adopted on 28 May 1969, was published on page 8 of the Official Journal of 17 June 1969.

Furthermore articles 17, 18 and 19 of the Council Directive of 26 July 1971 on provisions relating to both measuring instruments and methods of metrological control (71/316/EEC) introduced this procedure and provided for the setting up of a Committee for Adaptation to Technical progress.

In the light of the various data and having regand to the procedure laid down, the competent Commission departments have, as a result of the meetings held with the national experts, prepared a draft directive adaptating to technical progress the directive relating to material measures of lenght. The final text drawn up by the competent Commission departments met not only with the agreement of the industries concerned but also with almost the unanimous approval of the national experts who had taken part in the preparation of the draft. It was not possible to attain complete unanimity, since the experts from one Member State had indicated that while they were in agreement with the proposed amendments, they would have liked others to be introduced as well and thought that the proposal did not go far enought. Their additional proposals, however did not meet with the approval of the other experts, and the Commission departments thought it better to drop them.

In these circumstances and in order to avoid any delay in the updating of this Council Directive, the Commission representative transmitted the draft to each Member State with in the time limit laid down in the Committee's own rules of procedure.

During this period, two comments were sent to the Commission's departments. One of these concerned the new text of Section 4.1 reexceeding the principal scale marks, which one delegation was unable to accept because of the difference in interpretation to which this new provision was liable to give rise as compared with the corresponding section in International Recommandation N° 35 of the International Organization of Legal Metrology (IOML). Futhermore, one delegation considered that this proposal for adaptation to technical progress was not sufficiently exhaustive.

#### III. Opinion of the Committee

In view of this situation the adaptation draft was submitted on 19 January 1978 to the appropriate Committee for adaptation to technical progress, namely the Measuring Instruments Committee. The latter did not give a favourable opinion, since two delegations finally supported the view that the adaptation draft should accord with the IOML text as regards the provision on the graduation and numbering of measures of lenght. The qualified majority was not reached and the Commission was therefore obliged to follow the procedure laid down by the Council Resolution of 28 May 1969, i.e." without delay submint to the Council a proposal on the measures to be taken".

Although it was not possible to reach a qualified majority on the draft submitted to the Committee, the Commission felt that the draft should be presented to the Council unchanged, since it remained convinced that this draft was, in the present state of the art, the best suited to meet the needs of industry in the Community. Any amendment to the proposed text was likely to place most of the delegations in difficulty. Moreover each of the individual points in the draft had been approved by the majority of the delegates.

# IV. Conclusions and proposals

In view of the foregoing considerations it is hereby proposed that, in accordance with the procedure laid down in Article 3 (b) of the Council Resolution of 28 May 1969 and of Article 19 (3) (b)of the Council Directive of 26 July 1971 relating to down measuring instruments and methods of metrological control, the Commission should submit to the Council the proposal for a directive attached hereto.

#### COUNCIL DIRECTIVE

adapting to technical progress the Directive 71/316/EEC on the approximation of the laws of the Member States relating to material measures of length

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community,

Having regard to Council Directive 71/316/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to common provisions for both measuring instruments and methods of metrological control<sup>(1)</sup>, as amended by the Act of Accession, and in particular Articles 17, 18 and 19 thereof,

Having regard to Council Directive 73/362/EEC of 19 November 1973 on the approximation of the laws of the Member States relating to material measures of length<sup>(2)</sup>,

Having regard to the proposal from the Commission;

Whereas, since the preparation and adoption of Directive 73/362/EEC, new material measures of length have been developed and whereas the said Directive should therefore be amended to take account of technical progress;

Whereas on 19 January 1978 the Commission submitted a proposed amendment to the Committee on the adaptation to Technical Progress of the Directives concerning the elimination of technical barriers to trade in measuring instruments for its opinion; whereas, no opinion having been delivered, the Commission, in accordance with the procedure laid down in Article 19(3)(b) of Directive 71/316/EEC, proposed to the Council the measures to be adopted,

(1) OJ NO L 202, 6.9.1971, p. 1.
(2) OJ NO L 335, 5.12.1973, p. 56.

# HAS ADOPTED THIS DIRECTIVE:

# <u>Article 1</u>

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In the Annex to Directive 73/362/EEC items 3.6., 4.1., 5.1., 6.3., 7.1., 7.2., 7.3., 8, 9.1, 9.2. and 9.4 are hereby amended in accordance with the Annex hereto. Item 9.5 is deleted.

# <u>Article 2</u>

- Member States shall adopt the laws, regulations and administrative provisions needed in order to comply with this Directive in such a manner that these provisions shall take effect one year after the date of notification of this Directive and shall forthwith inform the Commission thereof.
- 2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field covered by this Directive.

#### Article 3

This Directive is addressed to the Member States.

Done at Brussels,

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For the Council

## ANNEX

3.6

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6.3

Tape measures shall be made so that when the tape is stretched out on a flat surface its edges are practically straight and parallel.

Along their nominal length, measures of length shall carry clear, regular and indelible graduation and numbering, in such a way that they enable a sure, simple and unambiguous reading to be made.

However, some non-numbered scale marks may extend beyond the principal scale marks.

The nominal length of the measures shall be one of the following values: 0.5 - 1 - 1.5 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - metres, or a complete multiple of 5 metres.

All these incriptions shall be given visibly and legibly, starting at the beginning of the measure.

However, in agreement with the national authority concerned, certain inscriptions may appear on an integral part of the instrument. In this case, the EEC pattern approval certificate shall state where these incriptions are to be placed.

Furthermore, where the width of the measure of length does not enable the EEC pattern approval sign to appear legibly, that sign may appear, notwithstanding the provisions in 3.1. of Annex I to the Council Directive (71/316/EEC) of 26 July 1971, and, on the approximation of the laws of the Member States relating to common provisions for both measuring instruments and methods of metrological control, and in accordance with 3.5. of this Annex, in the form of the following signs, arranged in succession:

- the stylized letter  $\mathcal{E}$ 

- the distinguishing letter(s) of the Member State which has granted EEC pattern approval
- the last two digits of the year of EEC pattern approval
- the reference number of the EEC pattern approval (e.g., (F 75 5345)

#### 7. <u>Maximum permissible errors</u>

- 7.1 The measures of length defined in this Directive shall be divided into three classes, designated I, II and III, according to their degree of accuracy. In EEC initial verification of measures of length, the maximum permissible error, plus or minus, a) on the nominal length and b) on the distance between any two non-consecutive scale marks, shall be expressed as a function of the length in question by a formula in the form (a + bL) millimetres in which : - L is the length in question, rounded up to the next whole metre above;
  - 'a' and 'b' are coefficients fixed for each class of accuracy according to the following table:

Class of accuracy	a	Ъ	
I ·	0.1	0.1	
II	0.3	0.2	
III	0.6	0.4	•

7.2

7.2.1 The maximum permissible error, plus or minus, on the length of the intervals not exceeding 1 cm shall be fixed for each class of accuracy according to the following table:

Length 'i' of the	Maximum permissible error in milli-		
interval in question	metres for class of accuracy		
	Ĩ	· II	III
i'	0.1	0.2	0.3
	0.2	0.4	0.6

In the case of intervals exceeding 1 cm, the maximum permissible error shall be expressed as a function of the length of the interval by the formula (a + bL)mm, where the values of the parameters are equal to those given in 7.1. and where L is the length in question, rounded up to the next whole metre above.

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The maximum permissible difference between the lengths i of 7.2.2 two consecutiv e intervals not exceeding 1cm shall be fixed for each class of accuracy according to the following table:

Length i of the interval in question	Maximum permissible difference in millimetres for class of accuracy			
	I	II	III	
·i <b>≼</b> <sup>1 mm</sup>	0.1	0.2	0.3	
1mm < i	0.2	0.4	0.6	

In the case of intervals exceeding 1 cm, the maximum permissible difference between the lengths i of two consecutive intervals shall be expressed as a function of the length of the interval by the formula (a + bL)mm, as defined in 7.2.1.

- However for an end or composite measure of length the maximum permissible error, plus or minus, on the length of the terminal interval bounded by a surface shall be increased:
  - by 0.1 mm for measures of class I
  - by 0.2 mm for measures of class II
  - by 0.3 mm for measures of class III
  - Moreover, the provisions set out in items 7.1 and 7.2.2 do not apply :
  - when one of the non consecutive scale-marks as referred to in item
    - 7.1 b) is formed by a surface, and
  - when one of the two consecutive scale-marks as referred to in item 7.2.2 is a terminal interval bounded by an end.

#### Verification marks

Every measure of length shall be constructed in such a way that it is able to receive the verification marks laid down by Council Directive 71/316/EEC of 26 July 1971 on the approximation of the laws of the Member States relating to common provisions for both measuring instruments and methods of metrological control.

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A place near the beginning of the measure shall be provided for this purpose on the measure itself or on an integral additional device.

9.1 Fibre glass and plastic end, line or composite tape measures

Nominal length between 0.5 and 100 metres. The tractive force, of about 20 N, shall be shown on the measure. The free ends of end and composite measures shall be provided with a band or tip resistant to wear. These measures shall belong to classes of accuracy I, II or III.

9.2 Measures made in one piece, rigid or semi-rigid, in metal or other material

Nominal length between 0.5 and 5 metres.

The reference temperature may, in some cases, be other than 20°C. These measures also include dipsticks used for checking the level of liquids.

The end of a rigid dipstick shall be provided with a butt or tip resistant to impact and wear. It shall not cause sparking on impact.

These measures shall belong to classes of accuracy I or II.

9.4 Steel tape measures

9.4.1 End, line or composite measures on a winder.

Nominal length between 0.5 and 10 metres; the blades of measures between 5 and 10 metres shall be of cambered cross-section. These measures may be contained in a case, one of whose dimensions may be included in the part used for measuring, particularly for measuring internal dimensions; the free end of these measures shall be provided with a fixed or sliding hook or tongue.

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These measures shall belong to classes of accuracy I or II.

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9.4.2

End or line measures, designed for measuring lengths greater than the nominal length of the measure.

Nominal length: 5, 10, 20, 50, 100 or 200 metres.

The tractive force, of about 50 N, shall be shown on the measure.

These measures shall be equipped with handles or rings at the two ends.

If the handles are included in the nominal length, they shall be constructed in such a way that their jointing does not introduce any inaccuracy of measurement.

These measures shall belong to classes of accuracy I or II.

9.4.3 Line or composite measures on a winder not designed for the measuring of lengths greater than the nominal length. Nominal length between 5 and 200 metres. The reference temperature may, in certain cases, be other than 20°C. The tractive force of about 50 N shall be shown on the measure. The free end shall include a handle, ring or hook which shall not be included in the nominal length.

These measures shall belong to classes of accuracy I or II.

9.4.4 Composite dip-tapes with sinkers, used for checking the level of liquids.

Nominal length between 5 and 50 metres.

The reference temperature may, in certain cases, be other than 20°C.

The tractive force, sufficient to extend the tape correctly, must be shown on the measure. This tractive force shall be exerted on the measure with the aid of a sinker which must bear an indication of its mass.

The principal scale mark, beginning the scale, shall be constituted by the base of a sinker of appropriate shape and of a material not liable to cause sparking on impact.

The sinker shall be attached to the tape in a fixed or detachable way so that this attachment or jointing does not introduce any inaccuracy of measurement.

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The entire length of the tape shall be graduated in millimetres and the graduation shall continue on one flat side of the sinker.

The other end of the measure may be equipped with a winder.

These measures shall belong to classes of accuracy I or II, however, the maximum permissible error of the instrument in position for use with the sinker shall never be less than 0.6 mm.

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