II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DIRECTIVE

of 7 December 1981

amending Directive 79/113/EEC on the approximation of the laws of the Member States relating to the determination of the noise emission of construction plant and equipment

(81/1051/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament (1),

Having regard to the opinion of the Economic and Social Committee (2),

Whereas provisions, the purpose of which is to limit noise at operators' positions of work, and methods of measuring noise differ from one Member State to another, which means that, when applied to construction plant, they constitute a barrier to trade in such plant; whereas such provisions should therefore be approximated;

Whereas Directive 79/113/EEC (3) seeks to harmonize methods of measuring the sound levels of construction plant and equipment;

Whereas, on the occasion of the Council meeting held on 18 and 19 December 1978, the Ministers for the Environment stated that the technical provisions for the measurement of noise at the operator's position should appear in the Annexes to the separate Directives for each machine in question;

Whereas all the general technical provisions required to determine the noise emission of construction plant and equipment should be consolidated in one Directive,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Directive 79/113/EEC is hereby amended as follows:

1. Article 1 (3) shall be replaced by the following:

   '3. Agricultural and forestry tractors are excluded from the scope of this Directive.'

2. Article 2 is hereby repealed and shall be replaced by the following:

   'Article 2

   1. Where a separate Directive provides for the determination of the noise emission of the construction plant and equipment referred to in Article 1, such emission shall be determined in accordance with the requirements of Annex I.

   2. Where a separate Directive provides for the determination of the noise emission at the operator's position(s) of the construction plant and equipment referred to in Article 1, such emission shall be determined in accordance with the requirements of Annex II.'

(1) OJ No C 147, 16. 6. 1980, p. 129.
(2) OJ No C 182, 21. 7. 1980, p. 7.
(3) OJ No L 33, 8. 2. 1979, p. 15.

3. Article 4 (1) shall be replaced by the following:

'1. A Committee on the Adaptation to Technical Progress of the Directives on the determination of the noise emissions of construction plant and equipment, hereinafter called "the Committee", is hereby set up; it shall consist of representatives of the Member States and be chaired by a Commission representative.'

4. The Annex is hereby amended as follows:

(a) the heading 'Annex' shall be replaced by 'Annex I';

(b) Sections 4.2 and 6.5 shall be deleted.

5. An Annex II shall be added, the text of which is annexed to this Directive.

Article 2

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive within 18 months of its notification 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, 7 December 1981.

For the Council

The President

CARRINGTON

ANNEX

'ANNEX II

METHOD OF DETERMINING AIRBORNE NOISE EMITTED TO THE OPERATOR'S POSITION(S) BY MACHINES USED OUTDOORS

1. AIM

The aim of this method is to determine the noise emitted to the operator's position(s) by all categories of machines, parts of machines or installations used outdoors, hereinafter called 'machine', and defined in Article 1 of the Directive.

It is not applicable for measurements to determine directly the level of an operator's exposure at his post.

The values obtained by this method represent the data that make it possible to determine the equivalent continuous sound pressure level emitted by machines to the operator's position(s). Save as otherwise indicated, these values include all tolerances.

The operator's position(s) of the various machines is (are) specified in the separate Directives.

This method is applicable unless separate Directives lay down different or supplementary provisions taking into account the special characteristics of certain types of machine.

2. SCOPE

2.1. **Type of noise**

This method is applicable to all types of noise emitted to the operator's position(s) by machines.

2.2. **Type of machine**

This method is applicable to all machines with one or more operator's positions.

3. DEFINITIONS

3.1. **Sound pressure level L_{pA}**

See Section 3.1 in Annex I.

3.2. **Equivalent continuous sound pressure level L_{Aeq} (t_1, t_2)**

The equivalent continuous sound pressure level L_{Aeq} (t_1, t_2) is obtained by applying the A-weighting as defined in IEC publication 179, 1973, second edition, to the equivalent continuous sound pressure level L_{eq} (t_1, t_2) defined below. This weighting is obtained *inter alia* by using the A-weighting filter in the measuring system.

The equivalent continuous sound pressure level for a limited period between intervals t_1 and t_2, L_{eq} (t_1, t_2), expressed in decibels, of a noise at a given point is defined by:

$$L_{eq}(t_1, t_2) = 10 \log_{10} \left(\frac{1}{t_2 - t_1} \int_{t_1}^{t_2} \frac{p^2(t)}{p_o^2} \, dt \right)$$

$$= 10 \log_{10} \left(\frac{1}{t_2 - t_1} \int_{t_1}^{t_2} 10^{\frac{L_p(t)}{10}} \, dt \right)$$