# COUNCIL DIRECTIVE

# of 25 June 1987

amending Directive 84/534/EEC on the approximation of the laws of the Member States relating to the permissible sound power level of tower cranes

(87/405/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 (1),

Having regard to the opinion of the European Parliament (2),

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

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

Whereas Council Directive 79/113/EEC of 19 December 1978 on the approximation of the laws of the Member States relating to the determination of the noise emissions of construction plant and equipment (4), as last amended by Directive 85/405/EEC (5), laid down, in particular, the method to be used for determining airborne noise emitted at the operator's position by a tower crane;

Whereas Article 8 of Council Directive 86/188/EEC of 12 May 1986 on the protection of workers from the risks related to exposure to noise at work (6) lays down that Member States shall take appropriate measures in this field;

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

Whereas all the technical provisions required to determine the noise emission of tower cranes should be consolidated in one directive; whereas Directive 84/534/EEC (7) should be amended accordingly,

HAS ADOPTED THIS DIRECTIVE:

# Article 1

Directive 84/534/EEC is hereby amended as follows:

- 1. Article 1 (1) is replaced by the following text:
  - 1. This Directive shall apply to the permissible sound power level of airborne noise emitted into the environment and the permissible sould pressure level of airborne noise emitted at the operator's position for tower cranes used to perform work on industrial and building sites.'
- 2. Article 3 (1) shall be replaced by the following:
- '1. The approved bodies shall issue an EEC-type examination certificate for
- each type of tower crane for which the sound power level of airborne noise emitted into the environment, measured under the conditions set out in Annex I to Directive 79/113/EEC, as amended by Annex I to this Directive, does not exceed the permissible sound power levels given in the following table:

<sup>(1)</sup> OJ No C 267, 23. 10. 1986, p. 4.

<sup>(2)</sup> OJ No C 76, 23. 3. 1987, p. 197. (3) OJ No C 83, 30. 3. 1987, p. 11.

<sup>(4)</sup> OJ No L 33, 8. 2. 1979, p. 15.

<sup>(5)</sup> OJ No L 233, 30. 8. 1985, p. 9. (6) OJ No L 137, 24. 5. 1986, p. 28.

<sup>(7)</sup> OJ No L 300, 19. 11. 1984, p. 130.

	Permissible sound power level in dB(A)/1 pW as from	
	18 months after notification of the Directive	5 years after notification of the Directive
Lifting mechanism	102	100
Energy generator	Levels laid down in the Directive on power generators according to the power generated	
Assembly comprising lifting mechanism and energy generator	Highest values of the two components	

— each type of tower crane with an operator's position fixed to the structure of the tower crane, for which the sound pressure level of airborne noise, in dB(A), measured at the operator's position under the conditions set out in Annex II to Council Directive 79/113/EEC, as supplemented by Annex Ia to this Directive, does not exceed the permissible level given in the following table:

Permissible sound pressure level in dB(A)/20 $\mu Pa$ at the operator's position as from		
24 months after notification of the Directive	5 years after notification of the Directive	
85	80;	

- 3. Article 3 (7) is replaced by the following:
  - '7. Each tower crane built in accordance with the type certified by EEC type-examination shall bear a clear and permanent mark indicating the sound power level in dB(A) referenced to 1pW and, in the case of a type of tower crane with an operator's position fixed to the structure of the tower crane, the sound pressure level in dB (A) referenced to 20 μPa, both as guaranteed by the manufacturer and determined as laid down in Annexes I and II to Directive 79/113/EEC, as last amended by Directive 85/405/EEC and supplemented by Annexes I and II to this directive, together with the symbol ξ (epsilon). The models for these marks are given in Annex III to this Directive.'
- 4. Article 7 is replaced by the following:

# 'Article 7

Before the second stage enters into force, the Council shall act on the proposal for a reduction, as from 1 July 1995, in noise levels at the operator's position, which the Commission will submit in due course.'

5. A new Annex Ia is added, the text of which is given in Annex I to this Directive.

Annex III is replaced by the text in Annex II to this Directive.

#### Article 2

- 1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive upon expiry of a period of 24 months following its notification (1). They 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 governed by this Directive.

#### Article 3

This Directive is addressed to the Member States.

Done at Luxembourg, 25 June 1987.

For the Council
The President
H. DE CROO

<sup>(1)</sup> This Directive was notified to the Member States on 26 June 1987.

# 'ANNEX I

#### 'ANNEX Ia

# METHOD OF MEASURING AIRBORNE NOISE EMITTED BY TOWER CRANES AT THE OPERATOR'S POSITIONS

This method is applicable to tower cranes with an operator's position fixed to the structure of the tower

These technical procedures comply with the requirements of Annex II to Directive 79/113/EEC, as last amended by Directive 85/405/EEC, and the provisions of that Annex apply to tower cranes subject to the following amendments and conditions:

#### 6. OPERATOR

An operator must occupy the operator's position.

#### 6.2.1. Operator standing

If the operator's position does not have a seat, the measurements are to be taken with the operator standing.

# 6.2.2. Operator seated

If the operator's position does have a seat, the measurements are to be taken with the operator seated.

NB:

The position of the operator, whether standing or seated, is to be indicated in the test report.

# 7.1. General

The microphone is located as specified in 7.3.

# 9. GENERAL

The conditions for installing and operating the tower crane are as laid down in section 6.2 of Annex I. In the case of tower cranes with the lifting mechanism on the jib stay the measurements are to be taken in that configuration.

# 9.2. Operation of a tower crane with adjustable features (e.g. windows which can be opened)

None of the adjustable features referred to in 9.2.1, other than those mentioned in 9.2.2, is to be taken into consideration.

10.2.2. Using the A-weighted sound pressure levels  $L_{pA}$ . This section is not to be taken into consideration.

# ANNEX II

'ANNEX III

# MODELS FOR MARK STATING THE SOUND POWER AND PRESSURE LEVEL AT OPERATOR'S POSITION AS GUARANTEED BY THE MANUFACTURER



