

EUROPEAN PARLIAMENT

# Working Documents

1983-1984

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12 December 1983

DOCUMENT 1-1127/83

## Report

drawn up on behalf of the Committee on the Environment,  
Public Health and Consumer Protection

on the proposal from the Commission of the European  
Communities to the Council (Doc. 1-830/82 -  
COM(82) 646 final) for a Directive on the protection  
of workers from the risks related to exposure to  
chemical, physical and biological agents at work :  
noise

Rapporteur: Dr. A. SHERLOCK

PE 86.147/fin.



By letter of 4 November 1982, the President of the Council requested the European Parliament to deliver an opinion, pursuant to Article 100 of the EEC Treaty, on the proposal from the Commission to the Council for a Directive on the Protection of workers from the risks related to exposure to chemical, physical and biological agents at work : noise.

On 15 November 1982, the President of the European Parliament referred this proposal to the Committee on the Environment, Public Health and Consumer Protection as the committee responsible and to the Committee on Social Affairs and Employment for an opinion.

On 25 November 1982, the Committee on the Environment, Public Health and Consumer Protection appointed Dr Sherlock rapporteur.

The committee considered the proposal and the draft report at its meetings of 16 March, 29 September and 24 November 1983. At the last meeting, it decided by 9 votes to 7 with 1 abstention to recommend that the Commission's proposal be approved with the following amendments.

The committee also decided to reserve the right to propose to Parliament the application of Rule 36(2) of the Rules of Procedure, after hearing the opinion of the Commission.

The motion for a resolution as a whole was adopted by 12 votes to 7.

The following were present at the vote: Mr COLLINS, chairman; Mrs WEBER, vice-chairman; Dr SHERLOCK, rapporteur; Mr ALBER, Mr BOMBARD, Mr COTTRELL (deputizing for Miss HOOPER), Mr DEL DUCA, Mrs DURY (deputizing for Mr MUNTINGH), Mr FORTH, Mr GHERGO, Mrs VAN HEMELDONCK, Mr JOHNSON, Mrs LENTZ-CORNETTE, Mrs MAIJ-WEGGEN (deputizing for Mr RYAN), Mrs PRUVOT (deputizing for Mrs SCRIVENER), Mrs SCHLEICHER, Mrs SEIBEL-EMMERLING, Mrs SPAAK and Mrs SQUARCIALUPI.

The report was tabled on 29 November 1983. The opinion of the Committee on Social Affairs and Employment is attached.

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The Committee on the Environment, Public Health and Consumer Protection hereby submits to the European Parliament the following amendments to the Commission's proposal and motion for a resolution together with explanatory statement:

Proposal for a Council Directive on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work : noise

AMENDMENTS TABLED BY THE COMMITTEE  
ON THE ENVIRONMENT, PUBLIC HEALTH  
AND CONSUMER PROTECTION

TEXT PROPOSED BY THE COMMISSION OF  
THE EUROPEAN COMMUNITIES

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AMENDMENT No. 1

Preamble, fifth indent:

- Whereas (...) the most effective way of reducing noise levels at work is to incorporate noise prevention measures into the design of installations and to choose materials, procedures and working methods which produce less noise, and whereas the priority aim must be to achieve the said reduction at source;

Preable, fifth indent:

- Whereas the simplest and most effective way of reducing noise levels at work is to incorporate noise prevention measures into the design of installations and to choose materials, procedures and working methods which produce less noise, and whereas the priority aim must be to achieve the said reduction at source;

AMENDMENT No. 2

New indent, after 5th preamble:

- Whereas the provision and use of hearing protectors is a necessary complementary measure to the reduction of noise at source;

AMENDMENT No. 3

Article 1.2.:

Delete

This Directive shall not prejudice the right of Member States to apply or introduce laws, regulations or administrative provisions ensuring greater protection for workers, and/or intended to reduce the noise at work at source wherever possible, with a view to attaining levels which do not expose workers to danger or discomfort.

AMENDMENT No. 4

Article 13 to become Article 3a

AMENDMENT No. 5

Article 4 (2) first paragraph:

2. The daily sound exposure level to which the ear of a worker is subjected at work must not exceed the limit value of  $L_{EX,d} = 90$  dB(A).

Article 4 (2) first paragraph:

2. The daily sound exposure level to which the ear of a worker is subjected at work must not exceed the limit value of  $L_{EX,d} = 85$  dB(A).

AMENDMENT No. 6

Article 4 (2), second paragraph:

However, a transitional period is needed to enable each of the industries concerned to respect this limit value. This transitional period shall be determined separately for each branch of industry at between 5 and 10 years.

Article 4 (2), second paragraph:

However, where it is not reasonably feasible to comply with this limit from the date on which the measures provided for in this Directive are to take effect, the limit value may be increased to  $L_{EX,d} = 90$  dB(A) for a transitional period of a maximum of five years from the aforesaid date.

AMENDMENT No. 7.

Article 4, new paragraph 4:

4. Not later than 8 years after the entry into force of this Directive, the Commission shall, following a review of its operation and taking into account both increased medical knowledge and technological innovation, review the operation of this Article with a view to proposing a further reduction in the daily sound exposure level.

AMENDMENT No. 8

Article 6, new paragraph 1 :

1. Wherever the daily sound exposure level to which the ear of a worker is subjected is likely to exceed the limit value  $L_{EX,d} = 85$  dB(A), the use of hearing protectors provided by the company shall be compulsory.

AMENDMENT No. 9

Article 6, paragraph 2 :

2. The exposure to noise of the workers referred to in Article 3 must always be reduced as far as reasonably practicable by means of technical or organizational measures. In deciding what is reasonably practicable, regard must be had to the technical and economic factors.
3. Without prejudice to the provisions of paragraph 2, .....  
(rest unchanged)

Article 6, paragraph 1 :

1. The exposure to noise of the workers referred to in Article 3 must always be reduced as far as reasonably practicable by means of technical or organizational measures.
2. Without prejudice to the provisions of paragraph 1, .....

AMENDMENT No. 10

Article 9, paragraph 1:

1. Health surveillance shall be carried out on those workers exposed to a daily sound exposure level in excess of 95 dB(A), no account being taken of hearing protectors. ....  
(rest unchanged)

Article 9, paragraph 1:

1. Health surveillance shall be carried out on those workers for whom, in accordance with the provisions of Article 6(2) recourse is had to hearing protectors.

AMENDMENT No. 11

Article 9 (2), third indent:

- periodic audiometric examinations at intervals of no more than five years;

Article 9 (2), third indent:

- periodic audiometric examinations at intervals of no more than three years;

AMENDMENT No. 12

Article 9, paragraph 6:

6. If the physician recommends certain noise exposure conditions on a particular worker on account of his state of health, the employer shall be required to comply with these restrictions.

(rest unchanged)

Article 9, paragraph 6:

6. If the physician imposes certain noise exposure conditions on a particular worker on account of his state of health, the employer shall be required to comply with these restrictions.

AMENDMENT No. 13

Article 9, paragraph 7:

7. The workers concerned and their employer may ask for the health assessment referred to in the paragraph 6 to be reviewed by a competent body of the Member State concerned.

Article 9, paragraph 7:

7. The workers concerned and their employer may ask for the health assessment referred to in the paragraph 6 to be reviewed by a competent body.

AMENDMENT No. 14

Article 10.2.

2. The workers and/or, in the case of collective data, their representatives in the undertakings or establishments, where they exist, shall have access to this information.

2. The workers and/or their representatives in the undertakings or establishments, where they exist, shall have access to this information.



AMENDMENT No. 15

Article 11, second indent:

- the measures taken in pursuance of the provisions of Article 6, particularly as regards the compulsory use of hearing protectors for workers exposed to noise levels in excess of the limit value of 85 dB.

- the measures taken in pursuance of the provisions of Article 6;

AMENDMENT No. 16

Article 11, third indent:

- their duty to comply with technical and statutory provisions.

Article 11, third indent:

- the importance of complying with technical and statutory provisions.

AMENDMENT No. 17

Article 12(2a) (new)

The Commission shall draw up specific directives within the scope of this framework directive laying down maximum noise levels for the machinery, apparatus and tools most widely used at work.

AMENDMENT No. 18

Article 14(1)

In sectors and factories where noise exposure varies markedly from one working day to the next, the Commission may grant derogations from the provisions of Article 4(2), but only on condition that the weekly average of the daily sound exposure levels complies with the limit value laid down in that Article.

In the case of workplaces where noise exposure varies markedly from one working day to the next, Member States may grant derogations from the provisions of Article 4(2), but only on condition that the weekly average of the daily sound exposure levels complies with the limit value laid down in that Article.

AMENDMENT No. 19

Article 14(2), third paragraph:

The Commission shall keep a record of derogations granted under the terms of this paragraph; a summary of the information contained therein shall be forwarded annually to the Commission.

Member States shall keep a record of derogations granted under the terms of this paragraph; a summary of the information contained therein shall be forwarded annually to the Commission.

AMENDMENT No. 20

Annex I, paragraph 2:

2. The measurement of sound pressure should be made with the microphone located at the position(s) normally occupied by the head of the person concerned, the person being absent.

Wherever possible, the microphone shall be positioned where the worker's head is normally situated.

AMENDMENT No. 21

Annex II, third paragraph:

The audiometric examination shall be carried out at such a time as to ensure, as far as is reasonably possible, that the subject has not been exposed to a sound pressure exceeding 80 dB(A)  
(account being taken of any hearing protectors worn) during the 14 hours preceding the audiometric examination.

Annex II, third paragraph:

The subject must not have been exposed to a sound pressure level exceeding 80 dB(A) (account being taken of any hearing protectors worn) during the 14 hours preceding the audiometric examination.

A

MOTION FOR A RESOLUTION

closing the procedure for consultation of the European Parliament on the proposal from the Commission of the European Communities to the Council for a directive on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work: noise

The European Parliament,

- having regard to the proposal from the Commission to the Council (COM(82) 646 fin.)<sup>1</sup>;
  - having been consulted by the Council pursuant to Article 100 of the EEC-Treaty (Doc. 1-830/82);
  - having regard to the report of the Committee on the Environment, Public Health and Consumer Protection and the opinion of the Committee on Social Affairs and Employment (Doc. 1-1127/83);
  - having regard to the result of the vote on the Commission's proposal;
1. Welcomes the Commission's decision to follow its previous proposals, on the protection of workers from lead and asbestos, with a proposal designed to tackle the problem of noise in the workplace;
  2. Agrees that, the most effective way of tackling the problem of noise in the workplace is by reducing noise at source;
  3. Considers however that, given the very high cost of installing quieter machinery or modifying existing machinery, close and detailed consideration must be given to the relative benefits of the proposed measures;

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<sup>1</sup>OJ No. C 289 of 5 November 1982, p. 1

4. Believes that, in view of the almost non-existent difference in the benefits of a daily noise exposure level of 85 dB as opposed to 90 dB, and the fact that the fixing of an 85 dB level would require very high investment costs, take a long time to implement and lead to many derogations being requested, the daily sound exposure level should for the time being be fixed at 90 dB(A);
5. Believes that more attention should be paid to the value and efficacy of hearing protectors particularly in regard to the 85 dB - 90 dB range where they are an economic means of guarding against a minimal risk to hearing impairment;
6. Considers that the wording of Article 6(1), in so far as it refers to what is "reasonably practicable" should be clarified, so as to make it plain that the measures called for are to be feasible in both technical and economic terms;
7. Believes that, in order to facilitate a future revision of the present Directive with a view to achieving a further reduction at source of occupational noise, the Commission should consider proposing a separate Directive imposing certain obligations on the manufacturers and designers of industrial plant and machinery;
8. Calls on the Commission to incorporate the proposed amendments pursuant to Article 149 (2) of the EEC-Treaty;
9. Instructs its President to forward to the Council and Commission, as Parliament's opinion, the Commission's proposal as voted by Parliament and the corresponding resolution.

EXPLANATORY STATEMENT1. Introduction

The present proposal from the Commission is the third Directive to be presented in implementation of the framework Directive 80/1107/EEC on the protection of workers from the risks related to exposure to chemical, physical and biological agents at work. The previous proposals covered exposure to lead and asbestos in the workplace. This proposal deals with exposure to noise.

1.1. Based on Article 100 of the EEC-Treaty, the Directive seeks to achieve a harmonisation of measures to protect employed persons from noise in the workplace. The two main elements of the proposal are:

- I. the setting of a maximum daily dose of noise which a worker may receive;
- II. the setting up of a comprehensive system of health surveillance, including audiometric examination, for all workers exposed to noise in excess of the above dose and at a maximum interval of three years.

1.2. The legal obligations resulting from the Directive fall mainly on the employer. The Directive requires that the specified exposure level must be achieved, in so far as is reasonably practicable, by technical or organisational measures (Art. 6). In most instances this will mean the modification or even replacement of plant and machinery. Recourse to hearing protectors is only envisaged when all other reasonable measures have not brought about the required reduction of noise.

1.3. Some concern has been expressed over the wording and content of Art. 6. The ETUC have interpreted it as meaning that the problem of noise in the workplace is to be tackled primarily by means of hearing protectors. Employers, on the other hand, are concerned lest it be taken to mean an unlimited commitment to the reduction of noise at source.

1.4. Art. 6(1) stipulates that noise must be reduced by technical or organisational measures "... as far as reasonably practicable." This term is

certainly familiar to, and well defined in, English law, but may be less familiar in the laws of other Member States. The Commission should therefore give some further clarification of the meaning of these words within the context of the present Directive. The Committee would wish to see the concept refer to economic as well as technical feasibility.

1.5. Where reasonably practicable technical or organisational measures do not achieve the necessary reduction in noise, then hearing protectors are to be used. The directive imposes in this respect a dual obligation on the employer to provide them (Art. 8) and on the worker to wear them (Art. 6.2.)

## 2. The sound exposure level

The directive provides (Art. 4) that the daily sound exposure level to which the ear of a worker is subjected must not exceed 85 dB(A). Where reasonably feasible, this level is to be met by 31 December 1984. Where this is not feasible, industry will be given until December 1989 to achieve the 85dB(A) level and during this transitional period the maximum level of 90 dB(A) will be permitted.

2.1. The setting of the sound exposure level is the most difficult aspect of the proposal. There is of course no doubt that exposure to noise beyond a certain level will increase the likelihood of loss of hearing ability. There is equally no doubt that occupational exposure to noise is not the sole cause of loss of hearing ability and that noise in the non-working environment and, very importantly, the natural ageing process both lead to a loss of hearing ability.

2.2. In its explanatory statement the Commission produces figures (without indication of their source) purporting to show the percentage of workers likely to suffer either a "perceptible" or "definite" handicap as a result of exposure to noise at levels ranging from 80 dB(A) to 100 dB(A). The terms "perceptible" and "definite" are not defined. Furthermore the Commission figures attempt to show hearing loss as a result of exposure to noise alone, i.e. excluding the inevitable human ageing process. Not only is such an assessment extremely difficult to verify, but it is also unhelpful, as every worker exposed to noise is equally susceptible to ageing.

2.3. A more accurate and realistic picture can be constructed to show percentage hazard using BS (British Standard) 5330 (1976) and the Report by the UK Advisory Council (Command 5461 - 1973). These can be interpreted to define a perceptible handicap as a 30 dB loss of hearing and a definite handicap as a 50 dB loss of hearing. Taking into account, as one must, also the effect of age, the following results (Table I) give the percentage of the working population likely to suffer hearing loss by the age of 60 according to different levels of occupational exposure.

Table I  
 PERCENTAGE OF POPULATION EXPECTED TO SUFFER HEARING LOSS  
 AT AGE OF 60 YEARS (40 YEARS OCCUPATIONAL EXPOSURE)

EXPOSURE L <sub>EQ</sub>	PERCEPTIBLE HANDICAP % (30 dB LOSS)			DEFINITE HANDICAP % due to noise (50 dB loss)
	Due to age	Due to noise	Total	
75	10	0	10	-
80	10	0	10	-
85	10	6	16	2
90	10	13	23	2
95	10	28	38	6
100	10	52	62	21

2.4. Table I shows that the perceptible handicap due to noise is approximately equal to that due to age until the level of 90 dB(A) is exceeded. It also shows that, irrespective of whether the exposure level is 85 dB(A) or 90 dB(A), only 2% of the population are likely to suffer a definite handicap.

Table II compares the Commission's figures with those quoted in ISO (International Standards Organisation) 1999 (1975) and results obtained by Bijl ("Geluid en Omgeving", March 1982) who analysed the ISO 1999 (1975) figures according to the principles proposed in the 1982 Draft DIS 1999. Comparison with Table I can also be made.

Table II  
 PERCENTAGE OF EXPOSED POPULATION  
 EXPECTED TO SUFFER HEARING IMPAIRMENT FROM EXPOSURE TO NOISE

	Equivalent Exposure Level dB(A)				
	80	85	90	95	100
In the Explanatory Memorandum:					
- "Perceptible Handicap"	0	6	17	36	48
- "Definite Handicap"	0	3	12	28	55
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ISO 1999 (1975) <sup>(1)</sup>	0	10	21	29	41
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DIS 1999 Analysis (Bijl):					
- Population screened <sup>(2)</sup>	0	1	3	12	34
- Population unscreened <sup>(3)</sup>	0	1	3	10	29
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Notes

- (1) Risk % quoted in ISO 1999 (1975)
- (2) New ISO/DIS 1999 Annex A data for age effects relating to otologically normal (screened) population and Annex D for noise effect
- (3) As (2) but Annex B data for age effects relating to typical (unscreened) population

It is important to note that this comparison shows that the proportion of the population likely to suffer a hearing handicap due to exposure to 90 dB after 40 years occupational exposure is 3%. The Commission, in choosing 85 dB, considered 3% - 6% an acceptable figure.

2.5. When considering the choice of a sound exposure level it is important to appreciate that the decibel (dB) scale is logarithmic. Thus a reduction from 90 dB to 87 dB is actually halving the sound energy (87 dB + 87 dB = 90 dB). Similarly 85 dB is only one-third of the sound energy of 90 dB. The following table illustrates this in relation to everyday comparisons:



## DECIBELS (dB) - WHAT THEY MEAN TO THE LAYMAN

<u>Intensity</u>	<u>dB</u>	<u>Example of noise source</u>
1	0	threshold of hearing
10	10	quiet whisper, leaves rustling
100	20	very quiet room
1,000	30	subdued speech
10,000	40	quiet office
100,000	50	normal conversation at 3 feet
1,000,000	60	office
10,000,000	70	
100,000,000	80	traffic
1,000,000,000	90	lathes, typical process plant
10,000,000,000	100	foundry, pneumatic drills
100,000,000,000	110	woodworking shop
1,000,000,000,000	120	boiler shop, diesel engine room
10,000,000,000,000	130	jet engine, rivetting

2.6. For the purposes of the proposed directive the workers' exposure to noise is averaged over a day in the form of a time weighted equivalent (Lex, d). A worker currently exposed to 90 dB(A) Lex,d over an eight hour day could only work for 2 1/2 hours a day if an 85 dB(A) Lex,d limit is chosen.

### 3. Existing national legislation

In its explanatory statement the Commission provides a brief review of existing legislation in the Member States, with the exception of Greece.

3.1. This review shows that in two Member States (Italy and the Netherlands) no specific sound exposure level is stipulated. In the seven other Member States 90 dB(A) is set as the level above which specific measures (medical surveillance, provision of hearing protectors, etc.) must be taken. In no Member State is an exposure level of 85 dB(A) set, although it is regarded as a "warning level" in France and Germany. It is believed that at least two Member States are currently considering revised legislation, but the available information indicates that any mandatory reduction in noise levels in the workplace will be accompanied by a long transitional period.

#### 4. Costs

One of the most unsatisfactory aspects of the current proposal is the apparent lack of detailed analysis of the cost-benefits of setting a sound exposure level of 85 dB(A) to be achieved by technical means and without taking into account the use of hearing protectors.

4.1. While the Commission's estimates of the benefits of its proposal are believed to be unsatisfactory (see 2.4. above), its estimates of the costs are totally inadequate. The Commission suggests that it would cost approximately 20 ECU per worker per year to reduce employees' exposure to noise by means of hearing protectors and to introduce a programme of noise measurement and audiometric surveillance. But it offers no guidance on the likely cost of setting a sound exposure level of 85 dB(A) to be achieved by technical means, even though figures are available for a number of Member States.

4.2. Information is available to indicate the likely cost of implementing the Commission's proposal in British, Dutch and Danish industry. These figures are reproduced below as they are likely to be fairly representative of the costs which would be incurred in other Member States. It should be remembered that costs will vary considerably as between divergent industrial sectors, and that in some particularly noisy industries the 85 dB(A) limit would not be attainable at all.

EXPRESSED IN 1,000 MILLION ECUS			
	UK	Den <sup>(1)</sup>	Neth
90 dB	1.0	-	1.6
85 dB	1.9	1.1	2.5

Expressed in terms of average investment costs per worker, recent studies come to the following conclusions:

COST PER WORKER		
UK	Netherlands	Denmark
£6000	D.A. 15.000	D.Kr. 6.600
10.000 ECU	7.000 ECU	800 ECU

(1) The estimates for Danish industry represent the difference between reaching 90 dB(A) and 85 dB(A) by technical means, which is why they are significantly lower than the UK or Dutch figures

The Commission estimates that in the Community as a whole 10 - 15 million workers are exposed to more than 85 dB(A) and 6 - 8 million are exposed to more than 90 dB(A). If one takes as a rough average the cost per worker of achieving these reductions as being 4.000 ECU, the following total cost is arrived at:

NO. OF WORKERS EXPOSED	COST PER WORKER	TOTAL COST TO INDUSTRY IN EEC
above 85 dB(A) : 12.5 million	4.000 ECU	50.000 million ECU
above 90 dB(A) : 7 million	4.000 ECU	28.000 million ECU

4.3. It is clear that the costs of implementing the Commission's proposals are extremely high. It must be pointed out that these costs could not only lead to a competitive disadvantage for European industry (for example vis-a-vis the USA where a 90 dB(A) limit is generally applicable), but also to a loss of jobs: many of the undertakings affected by the Directive would either be small factories which could not shoulder the burden of replacing or modifying expensive machinery, or large industrial sectors which are currently in poor economic shape, e.g. iron, steel, textiles, etc.

4.4. All improvements in occupational health and safety cost money and we must be prepared to pay the price of worthwhile benefits. But the Committee cannot endorse a proposal where little or no relation has been shown between the costs and the benefits.

#### 5. Revised sound exposure level

5.1. The Committee therefore feels that a basic sound exposure level (Art. 4.2) of 90 dB(A) should be set instead of the 85 dB(A) proposed by the Commission. The reasons for this recommendation can be summarised as follows:

- risk of hearing impairment from exposure to 90 dB(A) is not materially greater than exposure to 85 dB(A);
- the marginal extra protection afforded by an exposure level of 85 dB(A) bears no relation to the cost of achieving such a limit;

- fewer derogations would be needed if a 90 dB(A) level is adopted;
- as 90 dB(A) is close to existing or proposed levels in most Member States it would require a much shorter transitional period before being applied as law;

5.2. However, the Committee does feel that developments in the coming years will make it possible to achieve further reductions in noise levels at more reasonable cost. This will be so as the cost of quieter plant and machinery comes down and existing machinery becomes due to be replaced at the end of its useful life. For this reason the Committee wishes to see the Directive make provision for the Commission to revise the proposal after a number of years operation and, if all the circumstances then justify it, to fix a lower sound exposure level.

5.3. A certain number of particularly noisy industries will still need a transitional period to achieve a 90 dB(A) limit. During this period the Committee feels that hearing protectors have a useful role to play and that the Directive should make it clear that there is a legal obligation on the employer to provide them and on the employee to use them.

5.4. The Committee acknowledges the fact that for a very small number of industries it will never be possible to achieve a 90 dB(A) limit through technical means alone and that hearing protectors will continue to play an important role for the foreseeable future. The number and nature of these industries should be a matter for consultation between the Commission and the sectors concerned.

5.5. Finally on this point the Committee feels that the provision of hearing protectors to all employees exposed to levels in excess of 85 dB(A) would be a useful extra measure of protection, although the employee would not be legally obliged to wear them until a 90 dB(A) level was exceeded.

## 6. Medical surveillance

6.1. Article 9 and Annex II provide for a comprehensive health surveillance system, including audiometric examination, for all workers who are obliged to wear hearing protectors because the sound exposure level cannot be achieved by technical or organisational means.

6.2. Whilst fully recognising the benefits of periodic audiometric testing, the Committee is concerned about the extent of the testing required by the Commission. Apart from the costs involved, it is doubtful whether there would be sufficient skilled personnel and equipment to enable testing to be carried out. Particularly small and medium-sized enterprises would not have their own facilities to carry out such examinations and would be put to considerable trouble. The circumstances in which the examinations are to be carried out also give rise to problems. For example, the obligations (Annex II) to ensure that in the 14 hours preceding audiometric examination the employee must not have been exposed to noise in excess of 80 dB(A). In most cases this would be almost impossible to ensure or verify.

6.3. Once again it must be questioned whether the onerous arrangements proposed by the Commission are really beneficial. According to information received by the Committee from two wholly independent and highly respected medical bodies <sup>(1)</sup> there is no value in subjecting to routine audiometry workers obliged to wear hearing protectors because of their exposure to more than 85 dB(A), which is what the Commission is suggesting.

6.4. Audiometry cannot prevent hearing loss; it can only detect it and then only within certain limits of accuracy. Recent studies have shown that existing audiometry cannot reliably determine noise induced hearing loss of any significance in the case of workers exposed over a whole lifetime to less than 90 dB(A). Even at an exposure of 95 dB(A) any hearing loss would only become reliably measurable after a period of 5 years. It is even more illogical of the Commission to require routine audiometry on workers who are required to wear hearing protectors, which are capable of reducing noise at the ear to 85 dB (A).

6.5. The Committee therefore feels that resources, which in the case of audiometric testing will anyway be limited, could best be used by requiring routine audiometric testing at intervals of 5 years of workers exposed to 95 dB(A) or above.

6.6. It should be remembered that we are dealing here only with routine examinations. Extra examinations for particular reasons, as well as pre-employment audiometry, would of course be in addition to this.

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(1) Royal College of Physicians and the Society for Occupational Medicine

## 7. Obligation on manufacturers

Finally, the Committee is concerned that the Directive places no obligation on the manufacturers of plant or equipment for use in the workplace to produce quieter machinery. This despite the fact that a number of Directives exist imposing such obligations on the manufacturers of construction equipment, helicopters, agricultural tractors, etc. Furthermore, this is in itself an industrial sector in which competition can be affected.

7.1. Article 12 of the proposed Directive does refer in a general way to the obligations of designers, manufacturers, importers or suppliers of plant and machinery. However, the Committee does feel that this is the correct level to tackle the problem of industrial noise at its real source, i.e. the manufacturer of the machinery, and the Commission should give careful consideration to this matter which could be dealt with in a separate Directive.

## 8. Minority opinion

One minority held the view that a maximum limit value of 85 dB for the equivalent continuous sound pressure level during 8 hours should have been incorporated in Article 4(2). Another minority considered that this limit should have been fixed at 80 dB. Derogations ought to have been admissible only for a temporary period and only with the agreement of the workers concerned.

# EUROPEAN PARLIAMENT

## COMMITTEE ON SOCIAL AFFAIRS AND EMPLOYMENT

### OPINION

for the Committee on the Environment, Public Health  
and Consumer Protection

on

the draft Directive on the protection of workers  
from the risk related to exposure to chemical,  
physical and biological agents at work: noise

(COM(82) 646 final = doc. 1-830/82)

Draftsman: Sir David NICOLSON

O P I N I O N

(Rule 101 of the Rules of Procedure)

of the Committee on Social Affairs and Employment

Draftsman: Sir David NICOLSON

On 18 January 1983, the Committee on Social Affairs and Employment appointed Sir David NICOLSON draftsman of the opinion.

The Committee considered the draft opinion at its meetings of 22 March 1983 and 18 April 1983. It adopted the draft opinion on 18 April 1983 by 12 votes to 6 with 2 abstentions.

The following took part in the vote: Mr Papaefstratiou, Chairman; Mr Patterson (introducing the opinion in the absence of Sir David Nicolson); Mr Alexiadis (substitute Member), Mr Abens (deputizing for Mrs Salisch), Mr Boyes, Mr Brok, Mr Ceravolo, Ms Clwyd, Mr Dalsass (deputizing for Mrs Cassarmagnago-Cerretti), Mr Ferrero (deputizing for Mr Damette), Mr Ghergo, Mr Griffiths (deputizing for Mrs Duport), Mrs Kellett-Bowman (deputizing for Mr Simpson), Mr McCartin, Mr Mertens (deputizing for Mr Estgen), Mrs Nielsen, Dame Shelagh Roberts (deputizing for Sir David Nicolson), Mrs Squarcialupi (deputizing for Mr Frischmann), Mr Tuckman, Mr Vgenopoulos (deputizing for Mr Dido).



OPINION

of the Committee on Social Affairs and Employment

Draftsman: Sir David NICOLSON

The Committee on Social Affairs and Employment welcomes the aims and intent of the proposed Commission document submitted to the Council on the protection of workers from risk related to industrial noise at work. It feels that the spirit and intent of the proposal are highly commendable and is wholeheartedly in favour of the protection of employees in the workplace from health hazards related to the problem of excessive noise levels, so far as is reasonably practicable.

However, the Committee on Social Affairs and Employment would draw the attention of the Committee on the Environment, Public Health and Consumer Protection to the following points, with the request that it takes them into account in its draft motion for a resolution:

1. The Commission proposes a level of 85 db (Article 4, Paragraph 2) as being the threshold level of daily sound exposure to which any employee should be subjected. However, a level of 90 db would be considered acceptable by the Commission for a transitional period of five years. Most countries in the Community already operate either voluntary codes or requirements for noise levels in the workplace of 90 db (UK, Ireland, Denmark), while Germany recommends a "noise warning" be issued when the level reaches 85 db, and France requires ear protection to be worn at levels in excess of 85 db.
2. Nevertheless, excessive noise at the workplace has a high social cost, which must be taken into account.
3. The Committee on Social Affairs and Employment invites the Committee on the Environment, Public Health and Consumer Protection to reduce from 85 to 80 db the threshold of exposure to noise giving rise to the obligation to carry out the regular audiometric examination referred to in Article 9 of the proposal for a Council directive.
4. The Committee would point out that the cost of reducing the noise level in industry will vary enormously. In some industries, relatively minor design changes and the use of acoustic enclosures and screens can

make significant differences to the level of noise at a relatively small cost, and where feasible the Committee recommends that these measures be encouraged. However, in other industries, notably textiles, paper-making, bottling and canning, the cost of re-equipping or modifying existing plant, where this is technically feasible, is astronomical. In 1981, the UD industry estimated it would cost £500m to reduce noise by 5 db from 90 db to 85 db.

5. The cost/benefit balance must be considered: the extremely high price of modifying plant for a 5 db reduction must inevitably, in the current economic climate, put many businesses at risk, resulting in serious job losses and all the concomitant social repercussions.
6. The Committee consequently urges the Commission of the European Communities to accept that the 85 db level should be mandatory for industry only in cases where new equipment is being installed and/or capital plant replaced - and then only as far as reasonably practicable - as it believes that even where modifications to existing plant are technically possible, their cost in the present economic situation would be totally prohibitive.
7. Requests, moreover, that the Commission take account of the Committee's request, as formulated in the preceding paragraph, in defining the purport of the words "as far as reasonably practicable" contained in Article 6 of its proposal for a draft Directive.
8. The Committee fully accepts that, in principle, it is preferable to eliminate the problem at source rather than rely on industry to enforce personal protection on its employees. The Committee would, nevertheless, urge the Commission to consider the possibility of the use of ear defenders and protectors as a practical alternative measure in many cases to the high cost of modifying plant to meet the proposed 85 db requirement, taking account of the fact that they could represent a danger for the workers' safety and provoke physical and psychological disturbances during working hours.
9. In conclusion, the Committee would urge the Commission to consider carefully the validity of the 85 db level proposed, both in practicable and realistic terms. It would also urge that the Commission considers carefully the consequences of imposing 85 db levels on industry in the

Community in the prevailing economic climate, and would ask that further research be undertaken to establish accurate and easily usable audiometric testing of employees, taking into consideration the problems of non-occupational damage to hearing.

