

PROTECTION AGAINST NOISE AT WORK : SITUATION IN THE EUROPEAN COMMUNITY AND VIEWS WITHIN THE COMMISSION

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1. INTRODUCTION

Noise at work has been addressed in Council Directive 86/188/EEC [1], which had to be transposed in the national legislation of the Member States on 1st January 1990 or 1991 (depending on the country) at the latest ; on 1st July 1992, eleven out of twelve of them have complied with this duty. That Directive however was never intended to be the end of the road on noise control at work, and it contains a requirement for review by the end of 1993.

The Commission of the European Communities had this in mind when it included in its Action Programme relating to the implementation of the Community Charter of the Basic Social Rights for workers [2], the presentation of a Proposal for a Council Directive on the minimum safety and health requirements regarding the exposure of workers to the risks caused by Physical Agents. That proposal is to be based on Article 118 A of the EEC Treaty and established as an individual directive within the meaning of Directive 89/391/EEC, the Framework Directive regarding the improvement of health and safety at work [3].

2. THE PROBLEM AND THE SITUATION

There are legal, political and logical reasons for including noise in the physical agents covered by the proposed Directive which aims at harmonising minimum provisions in this field, as part of the social dimension of the internal market.

Under Directive 86/188/EEC, there is a legal duty, for the Commission, to submit the proposal which is requested to allow the Council to debate and review the existing provisions (specifically, lifting the exemption of sea transport and air transport must be considered, and the Directive must be re-examined with a view to reducing the risks arising from exposure to noise). The Commission cannot evade its own obligations resulting from a Directive, while checking with the utmost care that all Member States fully respect each of theirs.

On the other hand, the political context has been deeply modified since May 1986 : the European Single Act (Article 118 A) as well as Directive 89/391/EEC set up a new frame to the prevention of occupational risks, and their provisions reflect a new political understanding. Council and Parliament also insisted that the previously existing directives were to be adapted, particularly when their scheduled re-examination takes place, and the Commission took such commitments for the Noise Directive.

Finally logical arguments plead for including noise in the scope of a directive on physical agents : it is the most relevant one met at work, and it is well suited to pattern the Community regulation on other physical agents.

NOISE AT WORK - CEC

The timing of the proposal also appears acceptable, in so far as the deadline of 31 December 1993 for a Council decision would not be out of reach (provided everybody agrees with everything ...). It must be reminded, in order to compare like with like, that Directive 86/188 was proposed in 1982, adopted in 1986 and implemented in 1990 ; ten years have thus passed prior to resuming the process and starting phase two which might then be in force in Member States towards the end of the century. One can speculate that the Ministers had this in mind when they set up the time schedule in 1986.

There are thus compelling reasons for reviewing the Noise Directive ; the author sees a number of merits in doing it through a proposal on Physical Agents.

3. A PROPOSAL ON PHYSICAL AGENTS

A proposal for a Directive requires formal adoption by the Commission, which has not occurred at the time of writing. The working documents which have been drafted and discussed are not binding on the institution and what follows merely represents the author's views and opinions.

A proposal on Physical Agents is not an isolated item but it fits in a whole context ; it takes into account other texts relevant to health and safety, as for example the directives adopted either under Article 118 A (aimed at improving the workplace and protecting persons) or under Article 100 A (dealing with free circulation of equipment). Provisions already adopted are not to be discussed again, so the proposal does not repeat them : they are referred to when it appears necessary to give additional elements or indicate ways of applying them in the case of a specific physical agent.

The proposal tries to set up objectives of protection expressed as results to be achieved ; the detailed specifications or technical instructions which must be available to the practitioners in order to ensure that the goals are reached, do not have to be included in a directive : a Ministers' meeting is not the most appropriate place for discussing them and they are better developed by suitably instructed specialists. Following such a strategy ensures that the allotment of competences and responsibilities complies with our ruling texts : political decisions describe the safety level to be achieved and are taken by the public authority (sole responsible for the protection of human health), while those decisions are expressed in operational terms (which may be quite complex in the case of physical agents) by qualified experts.

Of course, the "political" and "technical" aspects must be interfaced ; a system which is already used in the Community legislation about building materials might be very valuable if suitably adapted to this problem : what is called in Directive 89/106/EEC "interpretative documents" can give additional specifications, ensure that all Member States apply the provisions according to a common understanding, and lead to a commonly agreed view about what is the state of the art in a given field at a certain moment.

It is the author's view that such an articulation (Directive, interpretative documents, technical specifications) soundly applies the principle of subsidiarity to the protection of occupational health.

NOISE AT WORK - CEC

The general approach on which the Physical Agents proposal is based defines three zones of risk :

- a black zone corresponding to an exposure involving risks which are not accepted.
- a white zone where the residual health risk does not deserve specific measures and which is a goal for long term efforts.
- in between a grey zone where appropriate measures must gradually be implemented ; those measures are ranked in order of priority (reduction at source, then collective and finally individual protections measures), and the darker the shade of grey, the swifter must be the application.

The Framework Directive already specifies a number of points which are thus already established :

- the field of application covers any activity in which workers are exposed (to harmful physical agents) except in specific public service activities (armed forces, police, civil protection etc.)
- the employer has a duty to provide a safe and healthy work environment and he must evaluate the risks which are present ; when necessary this includes measurement (of the physical agent) in order to identify the relevant workers and workplaces
- the risk must be avoided or at least reduced ; emergency measures must be taken in the event of serious, imminent and unavoidable danger
- information, training and balanced participation of workers must be ensured
- workers are entitled to a health surveillance where relevant.

As equipment is generally the source of physical agents and thus the main cause of excessive exposure, a proposal aimed at protecting people must also address the corresponding problems. Existing texts (e. g. the Machinery Directive 89/392/EEC) contain already safety - oriented provisions which are relevant for physical agents. However, they do not (and probably can not) solve all problems ; the supplier is not even aware of all the conditions in which his products are used or maintained and there is a limit to the duties imposed upon him by directives which ensure primarily the free circulation of goods.

This proposal thus takes the relay and contains user-oriented provisions which ensure that, like work places and work processes, equipment used at work is as safe as feasible and does not result in undue risk ; pertinent equipment - specific information on the residual risk allows also the employer to face his responsibilities in protecting his employee's health.

The proposal also acknowledges that some activities may result in an increased risk of overexposure and that they thus deserve a particular attention. Other ones result in conditions which are not met in the usual work situations, and which may present abnormal risks to health and safety ; adequate steps must then be taken.

NOISE AT WORK - CEC

Generally speaking, the proposal proceeds along the lines of the existing Noise Directive, taking however in account aspects which surfaced when that directive had to be implemented by Member States, as well as problems which had not been addressed at the time of its adoption.

4. PROTECTION AGAINST NOISE

We see no good reasons to change the quantities used in Directive 86/188/EEC as predictors of hazard which thus remain the daily personal noise exposure (which has in the meantime been formally standardised in ISO 1999 - 1990) as well as the peak sound pressure, for which the C-weighting has been selected to overcome problems due to different frequency responses of available instruments.

Reviewing the Noise at Work Directive must occur with a view to reducing the risk, and Member States are committed to encouraging improvements with no reduction in levels of protection already achieved. The author therefore feels that the proposal must generalize the lowest noise levels which Member States have adopted when transposing the provisions of Directive 86/188/EEC. This seems fair towards both the workers (who then enjoy the same level of protection) and the employers (who operate in a level playing field). To summarize, the black zone would remain at an effective exposure of the ear exceeding 90 dB (A) or 200 Pa and 75 dB (A) would be the upper boundary of the white zone, with an intermediate grey zone, inbetween.

To avoid misinterpretations, the meaning of "threshold" and "action" levels must be reminded and kept in mind : they are NOT Maximum Permissible Exposure levels. The 75 dB (A) threshold level is the value aimed at by preventive measures, and efforts must continue, in order to control the risk considered, at least as long as that objective is not reached. Of course, the general principle of concentrating efforts on the greatest hazards still applies, and the noisiest situations deserve most efforts. The idea is already implicit in Directive 86/188/EEC Article 5.1 does apply below 85 dB (A) as well, as noise exposure below that figure definitely results in Noise Induced Permanent Threshold Shift (ISO 1999 allows to make an estimation), even when it remains below a conventional definition of hearing loss or handicap. This pleads for a more explicit formulation, and expressing such a long term goal in quantitative terms is felt to be a great help for designers of equipment processes and workplaces.

"Action levels" represent conditions in which a certain risk may be found, which justifies specific actions, (at least a more thorough investigation of the situation) ; it may be seen as a warning signal which starts blinking.

In quantitative terms, actions levels are proposed at

- 80 dB (A) for informing workers on the existing risk, making protectors available, opening the right to health surveillance
- 85 dB (A) (and 112 Pa) for training workers, providing information on noise produced by work equipment, applying a program of engineering/administrative control

NOISE AT WORK - CEC

90 dB (A) (and 200 Pa) for delimiting a noisy area, and for mandatory wearing of protectors.

It is also felt that when the ambient noise (the hazard of which must be reduced by wearing hearing protectors) exceeds 105 dB (A) or 600 Pa, the significant increase of risk justifies that such cases are reported, and that equipment producing such levels is marked so that workers in its vicinity are alerted about the increased potential hazards.

As can be seen, those provisions deal with the risk to hearing, except however that the proposal also requests that lower levels of noise must be respected in situations where other health or safety impairments would occur. An obvious example is found on board sea going ships, where the sleeping quarters of the crew must provide noise levels way below what is accepted for "ordinary" workplaces. Non-auditory effects of noise, which range from physiological disturbances to interference with good performance when tasks require mind concentration, are an intricate and sensitive question. The available scientific knowledge does not readily allow to specify quantitative limitations of the exposure, and non-auditory effects (which should however not be disregarded) are generally less socially significant than noise induced deafness. It is thus felt that the problem should be addressed elsewhere than in such a Directive, and a Recommendation appears more adequate to deal with it.

Harmful effects of noise exposure must be reduced, and this is certainly not an easy task ; it requires time and imagination to improve workstations and equipment. The determined efforts, of which Directive 86/188/EEC is an example must proceed stoutly and dynamically, and the proposed Directive on Physical Agents would be a contribution to that objective.

5. REFERENCES

- [1] OJEC L 137 of 24.05.86
- [2] COM(89) 568(final)
- [3] OJEC L 183 of 29.06.89

