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# UNICE POSITION ON THE AMENDED PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND THE COUNCIL ON THE MINIMUM HEALTH AND SAFETY REQUIREMENTS REGARDING THE EXPOSURE OF WORKERS TO THE RISKS ARISING FROM PHYSICAL AGENTS (VIBRATION)

#### **GENERAL COMMENTS:**

- 1. UNICE notes the revised proposal for a Directive on vibration covering hand-arm and whole-body aspects respectively, and proposing the introduction of action and limit values.
- 2. UNICE attaches great importance to the protection of workers' health.
- 3. UNICE represents the views of companies affected by the proposal in a wide range of sectors including, for example, industry, agriculture, construction, telecommunications, mining and road transport.
- 4. UNICE points out that the proposed values are not based on a transparent, complete and balanced scientific assessment, followed by a proper feasibility evaluation and a business impact assessment. This is unacceptable.
- 5. UNICE is moreover convinced that the present state of scientific knowledge does not make it possible to set health-based mandatory values with regard to hand-arm and whole-body vibration<sup>1</sup>, and that the proposed values therefore seem arbitrary.
- Consequently, UNICE considers that adoption of action thresholds and limit values for hand-arm and whole-body vibration is based on a lack of scientific certainty, and that it is an inappropriate approach for achieving better health protection among workers exposed to vibrations.
- 7. UNICE also underlines that adoption of the envisaged values would have serious competitive implications for the affected European industry sectors, and, in particular, small and medium-sized enterprises, and run counter to the terms of the Article 137(2) through the imposition of administrative, financial and legal constraints holding back the development of small and medium-sized undertakings. European companies would have to face high compliance costs, since the Directive would force them to replace existing equipment, to meet expensive measuring obligations and to reorganise work.

<sup>&</sup>lt;sup>1</sup> Recent scientific evaluations support this. See, for example:

Lings/ Leboeuf-Yde (1998): Whole-body vibration and low back pain, Danish Medical Association, 160/29

Gemne/ Lundström (2000): Current knowledge regarding disorders in work with hand-held vibrating machines – medical aspects, in: Arbete och Hälsa 2000/18

8. UNICE stresses therefore that the cost-benefit relationship of the proposed measures needs to be carefully considered. The cost of the measures that would have to be taken appears high as compared with the potential benefits.

# SPECIFIC COMMENTS:

9. UNICE seriously questions the scientific basis for the action and limit values set out in Article 3 and believes that particular values, if prescribed at all, require a thorough scientific assessment followed by a proper feasibility evaluation. This should follow the example of the procedures put in place for preparation of occupational exposure limits for chemical agents. It would be desirable for the Commission to base its proposed limit values for vibrations on a comparable assessment. There are no epidemiological studies, which establish a correlation between the risk level and the value of a threshold. UNICE believes therefore that the proposed action and limit values require further consideration.

# Whole-body vibration (WBV)

- 10. Most research to date on health effects regarding whole-body vibration has been based on single axis measurements for the z-axis only. There is a clear lack of epidemiological and medical research with regard to x- and y-axis vibrations which should consequently be excluded from the scope of any directive at this stage.
- 11. Moreover, it appears from research that the relative importance of WBV as a cause of back pain remains unclear<sup>2</sup>. Because of this lack of scientific evidence about the health effects of WBV, the setting of action and limit values seems inappropriate.
- 12. There is also different individual susceptibility to vibration-related pathologies (also dependent on intercurrent risk factors not connected with work).

# Hand-arm vibration (HAV)

13. Whereas a link between exposure to HAV and disorders such as Raynaud's syndrome (white finger) may be established, there are no conclusive scientific findings on the relationship between the dose (level of exposure) and the health effect which would permit recommendations for precise action thresholds and limit values<sup>3</sup>. The envisaged approach therefore seems inappropriate.

# Risk assessment/ measurements

- 14. It needs to be stressed that accurate assessment of worker exposure to vibration is difficult. The information provided by manufacturers concerning the level of emission from the work equipment is one element among others that should be considered for risk assessment. It is also important to take into account the operation of equipment in its industrial environment and the multitude of other factors that influence the actual exposure to vibration of the user.
- 15. Exposure to vibration varies, depending on several factors. For HAV, the energy that will be received by the user of the equipment will depend, for example, on the type of

<sup>&</sup>lt;sup>2</sup> See, for example, HSE (2001): "Regulatory impact assessment of the proposal for a physical agents (vibration) directive as agreed by the Council of Ministers on 30 November 2000"

<sup>&</sup>lt;sup>3</sup> Please refer to Gemne/ Lundström (2000): Current knowledge regarding disorders in work with hand-held vibrating machines – medical aspects, Arbete och Hälsa 2000/18

material being worked upon, the way the equipment is handled and the nature of the task. The nature of the ground, the nature of the work, the speed of the machine and the posture of the driver are examples of variables that will influence the level of exposure to WBV.

- 16. Generally, companies would have to have recourse to specialised external consultancy services for exposure measurements due to the complexity of measurement methods and the sophisticated measurement equipment needed. Measurements would have to be undertaken for every single piece of machinery/equipment and its operator and the specific circumstances in which the machinery/equipment is used by the operator. The estimated cost of exposure measurement per single piece of machinery/equipment and operator would amount to 500 1000 euro.
- 17. It must also be noted that difficulties would arise in relation to application of the proposed measuring methods. For HAV, measurements will be based on the use of a new, not yet applied standard, introducing a new measurement method (3-axis instead of traditional single-axis which, as pointed out above, is highly contestable). In addition, ISO itself refers to possible uncertainties of up to 40% in relation with application of that standard when it comes to evaluating the daily vibration exposure levels. As regards WBV, it needs to be highlighted that it is very difficult to measure operator exposure to vibration on mobile machinery during use. The general validity of measurement data is low and current WBV measurement methods involve high error margins (around 40% or higher).
- 18. As a result, risk assessment and measurements would, due to the many variables involved, not only be complicated and expensive, but also highly uncertain.

#### Health surveillance

19. UNICE endorses the proposed alignment of the provisions on health surveillance with those in the Chemical Agents Directive (Council Directive 98/24/EC).

#### CONCLUSIONS:

- 20. UNICE believes that the proposal should be goal-based introducing practical requirements for controls within an appropriate hierarchy of controls rather than prescriptive limit values. Depending on the particular equipment and its vibration properties, a particular control level may be considered by the employer. This could relate to duration of usage, number and duration of breaks, etc.
- 21. The adoption of action thresholds and limit values also necessarily leads to an emphasis on metrology, a method requiring the mobilisation of considerable internal and external human resources and financial resources, to the detriment of other evaluation (and control) methods. The elaboration of practical guides for risk assessment should be envisaged to help companies to deal with HAV and WBV. In addition, proper training of users/operators would be an important measure to enhance the health protection of workers.
- 22. Should the limit value approach nevertheless be maintained, phased introduction should be considered, *subsequent* to that of the action values in line with the derogation given to state of the art and service life of equipment. This is essential in view of the difficulties of "measurability", in particular for SMEs, for machinery used in a wide variety of industrial end-use applications. Moreover, action and limit values can only be set at levels which also take account of technical and economic feasibility elements.

- 23. It needs to be noted that, in many cases, lower vibration equipment is currently unavailable on the market. In some cases even up-to-date machinery (e.g. for agricultural use), although complying with health and safety provisions applicable under the machinery Directive, might not meet the provisions of the proposed Directive with regard to WBV.
- 24. It is therefore of utmost importance that, should Member States adopt action and limit values for HAV and WBV, adequate transition periods are provided for. In this context, UNICE very much welcomes the concept of transition periods for equipment already in use. Appropriate timeframes need to be foreseen to enable companies to continue operating while lower vibration equipment is developed and made available on the markets, and to enable them to buy new equipment gradually.

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