Report IV (2)

Working Environment: Atmospheric Pollution, Noise and Vibration

Fourth Item on the Agenda
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INTRODUCTION

The first discussion of the question of the protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration took place at the 61st (1976) Session of the International Labour Conference. Following that discussion, and in accordance with article 39 of the Standing Orders of the Conference, the International Labour Office prepared and communicated to the governments of member States a report containing a proposed Convention and a proposed Recommendation based on the Conclusions adopted by the Conference at its 61st (1976) Session.

Governments were invited to send any observations or amendments they might wish to make so as to reach the Office by 30 November 1976 at the latest or to inform it, by the same date, whether they considered that the proposed texts constituted a satisfactory basis for discussion by the Conference at its 63rd (1977) Session.

At the time the present report was prepared, replies had been received from the Governments of the following 58 member States: Australia, Austria, Belgium, Bolivia, Brazil, Bulgaria, Burma, Burundi, Byelorussian SSR, Canada, Central African Empire, Chad, Chile, Cyprus, Czechoslovakia, Denmark, Egypt, El Salvador, Ethiopia, Finland, France, German Democratic Republic, Federal Republic of Germany, Greece, Guyana, Hungary, India, Iran, Iraq, Kenya, Kuwait, Libyan Arab Republic, Malawi, Malaysia, Mauritius, Mexico, Morocco, Netherlands, Niger, Norway, Pakistan, Papua New Guinea, Romania, Sierra Leone, Spain, Sri Lanka, Sudan, Sweden, Switzerland, Tunisia, Turkey, Uganda, Ukrainian SSR, USSR, United Kingdom, United States, Uruguay, Zambia.

The first part of this report, which has been drawn up on the basis of the replies from the governments, deals with the essential points of their observations. It is divided into three sections, the first containing observations of a general nature on the texts submitted, the second observations relating to the provisions of the proposed Convention, and the third observations relating to the provisions of the proposed Recommendation. It also contains commentaries on these observations.

The second part contains the English and French versions of the proposed Convention and proposed Recommendation, amended in the light of the observations made by governments and for the reasons set out in the Office commentaries. If the Conference so decides, these texts will serve as a basis for the second discussion, at the 63rd Session, of the question of the protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration.

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REPLIES FROM GOVERNMENTS AND COMMENTARIES

The substance of the replies received from the governments of member States with regard to the proposed Convention and proposed Recommendation concerning the protection of workers against occupational hazards in the working environment due to air pollution, noise and vibration is given below. These replies are followed, where appropriate, by the commentaries of the Office.

The Governments of the following 34 countries stated that for the moment they had no observations to put forward or that they considered the proposed texts to be a satisfactory basis for discussion at the 63rd Session of the Conference: Bolivia, Brazil, Bulgaria, Burma, Burundi, Central African Empire, Chad, Chile, Denmark, Egypt, El Salvador, Ethiopia, Guyana, Iran, Iraq, Kenya, Malawi, Malaysia, Mauritius, Mexico, Morocco, Niger, Pakistan, Papua New Guinea, Romania, Sierra Leone, Spain, Sudan, Switzerland, Turkey, Uganda, United States, Uruguay, Zambia.

The Governments of the remaining 24 countries made observations, some of a very general nature, the substance of which is reproduced in this report: Australia, Austria, Belgium, Byelorussian SSR, Canada, Cyprus, Czechoslovakia, Finland, France, German Democratic Republic, Federal Republic of Germany, Greece, Hungary, India, Kuwait, Libyan Arab Republic, Netherlands, Norway, Sri Lanka, Sweden, Tunisia, Ukrainian SSR, USSR, United Kingdom.

With their replies, the Governments of Australia, France, Netherlands and Sweden transmitted the views of employers’ and/or workers’ organisations on the texts or on particular provisions thereof. These observations are not reproduced in the present report save in so far as they are reflected in the Governments’ replies.

General Observations

AUSTRALIA

The Government does not oppose the adoption of a Convention but believes that, at least at this stage, it would be preferable to adopt a Recommendation only. It is doubtful whether there are sufficient valid data on vibration available at present to justify the inclusion of provisions dealing with this subject in an international instrument. In order to prevent the instrument from becoming obsolete in a short period of time, it should be worded in general terms, with emphasis being given to the objectives to be achieved rather than to the measures needed to achieve them.

FINLAND

The proposal to adopt a Convention supplemented by a Recommendation is satisfactory. The principles laid down in the instruments are believed in Finland to be fundamental. Report IV (1) also contains a resolution which makes it possible
to establish international co-operation and dissemination of information in respect of the working environment. The Government further considers that atmospheric pollution, noise and vibration are only part of the problems relating to the working environment. Efforts should therefore be continued to work out a comprehensive programme on the subject as a whole.

FRANCE

The Government will give the closest attention to the document to be circulated by the ILO prior to the 63rd Session of the International Labour Conference. Subject to the changes suggested in its observations, the Government is prepared to adopt the proposed instruments, submit them to the competent national authority for ratification and take the necessary steps inside the country to provide for their application.

LIBYAN ARAB REPUBLIC

The Convention would be a major step towards protecting workers and the community as a whole against occupational hazards. However, it would be difficult to apply the provisions relating to the prevention of hazards due to vibration, since little information is available so far on this subject.

TUNISIA

The Government agrees that priority should be given to eliminating occupational hazards or at least keeping them under control so that they have no harmful effects on health. Protective measures, for example in the form of personal protective equipment, should only be adopted when it is not feasible to achieve prevention by means of improvements in the working environment.

OFFICE COMMENTARY

Although it is not opposed to a Convention in principle, the Government of Australia would prefer a Recommendation and would rather that the emphasis were placed on the objectives to be achieved than on the measures which might be adopted to achieve them. These points were raised during the general discussion in the Conference Committee. Broadly speaking, the observations of the Governments of Finland, France, the Libyan Arab Republic and Tunisia all recognise the importance of the subject and the need to take appropriate steps. The Government of Finland further considers that air pollution, noise and vibration are only a part of the factors that endanger the health of workers and advocates the adoption of a comprehensive programme. The Office wholeheartedly subscribes to the idea of a comprehensive approach to the various aspects of prevention and is working towards this end. A practical illustration of this is the International Programme for the Improvement of Working Conditions and Environment (PIACT), the principle of which was approved by the Governing Body of the ILO at its 201st (November 1976) Session.
Observations on the Proposed Convention concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration

The General Conference of the International Labour Organisation,
Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Sixty-third Session on 1 June 1977, and
Noting the terms of existing international labour Conventions and Recommendations which are relevant and, in particular, the Protection of Workers' Health Recommendation, 1953, the Occupational Health Services Recommendation, 1959, the Radiation Protection Convention and Recommendation, 1960, the Guarding of Machinery Convention and Recommendation, 1963, the Employment Injury Benefits Convention, 1964, the Hygiene (Commerce and Offices) Convention and Recommendation, 1964, the Benzene Convention and Recommendation, 1971, and the Occupational Cancer Convention and Recommendation, 1974, and
Having decided upon the adoption of certain proposals with regard to working environment: atmospheric pollution, noise and vibration, which is the fourth item on the agenda of the session, and
Having determined that these proposals shall take the form of an international Convention,
adopts this day of June of the year one thousand nine hundred and seventy-seven the following Convention, which may be cited as the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977:

Observations on the Preamble

Australia. In the light of the comments by the Office on the proposed instruments (Report IV (1), page 49), the words "atmospheric pollution" in the fourth paragraph of the Preamble should be replaced by the words "air pollution". However, at least in Australia, the use of the latter expression could lead to some confusion since it is normally understood to refer to pollution of the atmosphere outside the workplace.

Austria. The Labour Inspection Convention, 1947 (No. 81), and the Labour Inspection Recommendation, 1947 (No. 81), and the Labour Inspection (Agriculture) Convention, 1969 (No. 129), and the Labour Inspection (Agriculture) Recommendation, 1969 (No. 133), should be added to the list of instruments already cited.

United Kingdom. The Preamble refers to a number of Conventions and Recommendations which deal with the same or related matters. It should be made clear that the new instruments are not intended to deal with the same problems. The word "relevant" in the third paragraph of the Preamble should be replaced by the phrase "concerned with the protection of workers against other occupational hazards". At the present stage, it would also seem premature to embark on an instrument on vibration. However, provided that Article 2, paragraph 3, is retained without any curtailment of its flexibility, the Government is prepared to accept the inclusion of the concept of vibration in the instrument, but on the understanding

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1 The observations are preceded by the text to which they refer as given in the proposed Convention set forth in Report IV (1). Provisions on which no observations were made have not been reproduced.
that ratification of this category by the United Kingdom does not seem possible in the foreseeable future.

Office Commentary

The advisability of listing in the Preamble the titles of a certain number of Conventions that have a bearing on the matters dealt with in the proposed instruments was discussed by the competent Committee of the Conference and a number of proposals were put forward at the time. Eventually, the Committee accepted some of the suggestions made and the third paragraph of the Preamble was worded accordingly (see Report IV (1), page 7, paragraph 19). The Office therefore notes the suggestions made by the Governments of Austria and the United Kingdom but does not consider it desirable, at this stage, to make the corresponding changes in the third paragraph of the Preamble.

As to the proposal of the Government of Australia to substitute the words “air pollution” for “atmospheric pollution” in the fourth paragraph, as has been done elsewhere in the instruments where the expression is used, it should be noted that the reference here is to the wording of the item on the agenda of the 63rd Session of the Conference and, therefore, no change would seem to be called for.

PART I. SCOPE AND DEFINITIONS

Article 1

1. This Convention applies to all sectors of economic activity.

2. A Member ratifying this Convention may, after consultation with the representative organisations of employers and workers concerned where such exist, exclude from the application of the Convention particular sectors or branches of economic activity in respect of which special problems of a substantial nature arise.

Observations on Article 1

Australia. The Government is satisfied with the provision in its present form. However, the Conference might consider whether a further paragraph should be added to Article 1 requiring ratifying States to advise the Director-General of the International Labour Office, in their first and subsequent reports submitted in accordance with article 22 of the ILO Constitution, which sectors or branches of economic activity are excluded and what measures have been taken to bring those areas of activity into line with the Convention (see also the comments on Article 2, paragraph 3, below).

Austria. Self-employed workers should be specifically excluded from the scope of the Convention.

Cyprus. In paragraph 2, it should be clarified that exclusion may be permitted only at the time of ratification and for a limited period.

India. The Government is in favour of the proposed instruments. However, the standards they contain and their scope are such that the Government could not think of ratifying them for years to come. Paragraph 2 should therefore be amended
so as to make the instrument more flexible and thereby enable developing countries to apply the provisions of the Convention in a phased manner. The paragraph should be amended, after the words "where such exist", as follows: "decide the application of the Convention to particular sectors or branches of economic activity and to extend its application to other sectors and branches of activity in a phased manner. The member Governments may also exclude certain categories of industrial plants or operations for technical reasons."

*United Kingdom.* As the Convention is not intended to apply to self-employed workers, it would be better to state this clearly in paragraph 1. Although the Government would have preferred to have marine transport and domestic service also excluded from the Convention, the Article as a whole is acceptable provided the provision of exemption in paragraph 2 is retained. As worded, paragraph 2 provides for exemption of certain sectors from the application of the Convention. A provision restricting exemption to particular Articles would be preferable. This could be particularly important if, for example, the provisions regarding air pollution were extended to certain areas of economic activity and it was then found impossible to apply the noise provisions at the same time. It would then be necessary to exempt the area concerned from the total application of the Convention, including the provisions regarding air pollution. This problem could be overcome by adding a further clause to the effect that exclusions could be restricted to the particular provisions in respect of which special problems arise.

*Sweden.* Most of the provisions of the Convention apply to the working environment generally. Although it does not propose the deletion of the provisions for exclusion in Article 1, paragraph 2, and Article 2, the Government points out that the Conference Committee had expressed a negative view with regard to such provisions.

*Office Commentary*

**Paragraph 1**

The Government of Austria would like self-employed workers to be explicitly excluded from the scope of the Convention and the Government of the United Kingdom feels that, in addition to self-employed workers, those engaged in maritime transport and domestic service should also be excluded. Amendments were in fact submitted to these provisions and discussed at length by the Conference Committee. Finally, and bearing in mind the possibility of making exceptions under the terms of paragraph 2, the Committee decided not to limit the scope of the instrument and, while recognising that self-employed workers would not be covered specifically by the Conclusions with the view to a Convention, adopted the paragraph in its present form (see Report IV (1), pages 7-8, paragraphs 21-22). It has therefore been deemed preferable to leave it to the Conference to decide whether or not it wished to reconsider this matter.

**Paragraph 2**

The Government of Cyprus would wish that any reservations regarding the application of certain provisions of the Convention should be authorised only at the time
of ratification of the instrument and for a limited period. As to the first point, the wording of paragraph 2 does not seem to run counter to such an interpretation, which would in fact seem to be confirmed by the wording of Article 2, paragraph 2, which provides that the categories of hazards in respect of which a member State accepts the obligations of the Convention shall be specified in its ratification. However, as the Government of Australia suggests, the instrument could include a special provision requiring all ratifying Members to indicate, in the first report that they are called upon to submit in accordance with article 22 of the ILO Constitution, which sectors or branches of economic activity are excluded from the application of the Convention and to provide thereafter information on progress achieved. This provision has been included in other instruments, such as the Holidays with Pay Convention (Revised), 1970 (No. 132), in Article 2, paragraph 3.

It is therefore suggested that a third paragraph be added to Article 1, as follows: "3. Each Member which ratifies this Convention shall list in the first report on the application of the Convention submitted under article 22 of the Constitution of the International Labour Organization any categories which may have been excluded in pursuance of paragraph 2 of this Article, giving the reasons for such exclusion, and shall state in subsequent reports the position of its law and practice in respect of the categories excluded, and the extent to which effect has been given or is proposed to be given to the Convention in respect of such categories."

As to the limited duration of such exemptions, there is a danger that a provision of this nature would pose problems for some countries that would find themselves confronted with prescribed time-limits for meeting their commitments which might require a substantial economic and administrative effort.

The Government of India is concerned that the high standards set by the instrument will make it difficult for developing countries to ratify the Convention and would like them to have the possibility of accepting the obligations of the Convention progressively, as and when it becomes possible for them to do so. The amendment to the text of paragraph 2 suggested by the Government would enable countries that had ratified the Convention to apply its provisions to the various sectors and branches of economic activity progressively and to exclude certain categories of industrial plants or operations from the application of the Convention. This proposal is similar to that of the Government of the United Kingdom, which also feels that the addition of a clause allowing for the exemption of a specific sector or branch of economic activity from certain provisions whose application would pose particular difficulties would provide sufficient flexibility for acceptance of the obligations of the Convention. As to the proposal of the Government of India, the Conference has on previous occasions taken into account the requirements of developing countries by affording them the possibility of accepting the obligations of a Convention in stages. This is the case, for example, of the Minimum Age Convention, 1973 (No. 138), Article 5 of which contains the following paragraph: "A Member whose economy and administrative facilities are insufficiently developed may, after consultation with the organisations of employers and workers concerned, where such exist, initially limit the scope of application of this Convention." However, a subsequent paragraph in the same Article stipulates the sectors and branches of economic activity to which the Convention is applicable as a minimum. In the case of the Convention on the working environment, therefore, to grant countries a certain degree of flexibility in applying the Convention while laying down an appro-
priate minimum scope would obviously pose serious difficulties. Moreover, the discussion of this subject in the Committee would seem clear evidence of a concern not to allow too great a degree of flexibility in accepting the obligations of the instrument. At this stage, therefore, it would seem appropriate to leave it to the Conference to decide whether it wishes to reconsider the matter.

With regard to the observation of the Government of the United Kingdom, a similar proposal was discussed at length by the Conference Committee (see Report IV (1), page 9, paragraph 26), following which it was finally decided to keep the present wording. It would therefore seem inappropriate to suggest changes at this stage, although the Conference may wish to reconsider the matter.

Article 2

1. Each Member may accept the obligations of the Convention separately—
   (a) in respect of air pollution;
   (b) in respect of noise;
   (c) in respect of vibration.

2. Each Member shall specify in its ratification in respect of which of the categories of hazards it accepts the obligations of the Convention.

3. Each Member which has not on ratification accepted the obligations of this Convention in respect of all the categories of hazards shall subsequently, when conditions permit, notify the Director-General of the International Labour Office that it accepts the obligations of the Convention in respect of a category or categories previously excluded.

Observations on Article 2

Australia. The text of paragraphs 1 and 2 is satisfactory. As regards paragraph 3, however, the Government has a number of reservations concerning the interpretation placed by the Office on the words “when conditions permit” in its preliminary comments on the proposed text (see Report IV (1), page 50). The Office suggests that authorities other than the competent authority of a ratifying country could determine when the body of obligations not accepted in the ratification should become operative in the country concerned. While recognising that a provision enabling States to extend their ratification is necessary, the Government is of the view that the text proposed, if construed in the manner suggested, represents an important departure from normal ILO practice and raises significant issues regarding national sovereignty. It would leave the way open for bodies other than the competent authority to determine the extent to which a ratifying Member accepts the obligations imposed. Such an interpretation would be an obstacle to ratification of the Convention since a government would only take this step if it was in a position to guarantee full compliance with the instrument. Moreover, the provisions of paragraphs 1 and 2 would have little or no effect in practice, because it would not be up to the competent authority to determine whether or not conditions permitted extension of the obligations accepted. Furthermore, in Report IV (1), the Office does not make any effort to define the term “certain authorities”, as designating all those entitled to present complaints of non-application of the instrument. A further but not unimportant consideration is that no indication is given as to the criteria which would be used by the “authorities” in determining whether in fact conditions did permit acceptance of the obligations under the Convention.
The Government feels that a provision of a type similar to Point 5 (3) of the Proposed Conclusions should be included in this Article and strongly opposes any move to include a provision based on the present wording of paragraph 3.

France. The Office interpretation of the scope of paragraph 3 of this Article (see Report IV (1), page 50) suggests that the phrase “when conditions permit” could cover opinions emanating from sources other than the competent authority. The Government considers that ratifying countries must have full power of decision regarding the progressive application of the instrument. It therefore suggests that the phrase should be replaced by the words “when it considers that conditions permit.”

Federal Republic of Germany. The principle of ratification by categories contained in paragraph 2 is essential considering the fact that the possibility of issuing regulations on vibration is still somewhat limited.

India. The responsibility for deciding the acceptance of the obligations of a Convention should lie only with the government concerned and cannot be shared with other authorities. Paragraph 3 should therefore be amended by adding the words “it is satisfied that” after the word “when.”

Sweden. See under Article 1.

United Kingdom. It is important that this Article be retained in an unrestricted form if the Convention is to apply to noise and vibration as well as to air pollution.

Office Commentary

Paragraph 3

The Office interpretation of the phrase “when conditions permit” in its presentation of the proposed texts (see Report IV (1), page 50) has given rise to certain reservations on the part of the Governments of Australia, France and India. In the opinion of these Governments, any decision concerning the extension of the application of the instrument to other areas or branches of economic activity previously excluded is the sole responsibility of the Government. The Government of Australia suggests replacing paragraph 3 by Point 5 (3) of the Proposed Conclusions (see Report VI (2) to the 61st Session, page 105), which does not contain this phrase; the Government of France proposes replacing it by the phrase “when it considers that conditions permit”; and the Government of India proposes inserting the words “it is satisfied that” after the word “when.” The point raised by the three Governments is of fundamental importance. It is understandable that they should feel that the possibility for various bodies, including even bodies outside the country, of having a say in the assessment of the situation existing in particular areas and branches of economic activity and the right which they would have to request the Government to accept obligations which might represent a considerable burden at both the socio-economic and the administrative levels are liable to restrict their own power of decision. The Office has given the matter its closest attention and suggests that the paragraph should be clarified along the lines indicated by the Governments of France and India and that the phrase “when conditions permit” should be replaced by “when it considers that conditions permit.”
Article 3

For the purpose of this Convention—

(a) the term "air pollution" covers all air contaminated by substances, whatever their physical state, which are harmful to health or otherwise dangerous;
(b) the term "noise" covers all sound which can result in hearing impairment or be harmful to health or otherwise dangerous;
(c) the term "vibration" covers any vibration which is transmitted to the human body through solid structures and is harmful to health or otherwise dangerous.

Observations on Article 3

Australia. The point might be made that air pollution as defined in subparagraph (a) could be construed as meaning air containing any trace of a contaminant as opposed to a level which represents a hazard to workers. The wording should therefore be changed. As regards the definition of "vibration" in subparagraph (c), the words "through solid structures" should be deleted since vibrations transmitted through air can also be harmful.

Austria. The expression "otherwise dangerous" should be deleted in all three subparagraphs or replaced by a more precise concept; a provision with practical implication cannot be left so vaguely worded.

Canada. The phrase "or otherwise dangerous" in the three subparagraphs would seem to be superfluous.

Greece. In its natural state, the atmosphere contains harmful substances which may present a health hazard for the human body if concentrated beyond a certain level. The Government therefore suggests that subparagraph (a) should be replaced by the following definition: "the term 'air pollution' covers an increase in the concentration of substances liable to prove toxic or otherwise dangerous beyond normal levels".

Sweden. One of the competent authorities declares that there does not at present exist any unambiguous and normative nomenclature concerning noise. It presumes, however, that the term "noise", as used in subparagraph (b), is also taken to include inaudible sounds such as infrasonic and ultrasonic sounds below 20 Hz and above 20,000 Hz respectively. Another competent authority submits that the definition of noise must be deemed to include both noise which can result in hearing impairment and noise which is of such a character that it is liable to prejudice the total adjustment of the individual to the work situation. This aspect is particularly important in shipping, because it is not sufficient here to issue standards concerning noise that is directly harmful to the hearing. The crew of a ship, whether on duty or off duty, are present on board 24 hours a day; the matter must therefore be given particularly close attention where shipping is concerned.

United Kingdom. The words "or otherwise dangerous" give an unwarranted open-endedness to the definition. The report of the Conference Committee (Report IV (1), page 11, paragraph 33) refers to the possibility of "noises" masking audible warning signals. However, where noise levels cannot be kept down to an acceptable level, personal protective equipment would have to be used, in which case an audible warning would be inappropriate and a visual warning of some kind
would have to be substituted. As it stands, the definition could also include psychological reactions, such as noise stress, and the extension of the scope of the Convention in respect of air pollution to other hazards such as explosion and fire. The words "or otherwise dangerous" should be deleted.

*Office Commentary*

The Government of Australia considers that the phrase "air pollution" is not sufficiently precise because it could be construed as meaning air containing a contaminant at a minimal, and therefore harmless, level that would not require the introduction of the preventive and protective measures provided for in the instrument. The Government of Greece makes a similar point. However, for the purposes of the instrument, the definition contained in Article 3, subparagraph (a), must be interpreted in the light of the provisions of Article 8—particularly paragraphs 1 and 2—which give the competent authority full freedom in establishing criteria and, if necessary, determining the exposure limits that conform with the provisions of the Convention. It would therefore not seem necessary, at this stage, to amend this provision, which was drawn up during the first discussion by a working group especially appointed by the Conference Committee (see Report IV (1), pages 10-11, paragraphs 32-33).

The Government of the United Kingdom reaffirms the opposition to the inclusion in the instrument of the phrase "or otherwise dangerous" which it had expressed during the first discussion. Referring to the Committee's interpretation of this phrase as regards noise (see Report IV (1), pages 10-11, paragraph 33), it argues that audible warning signals cannot be taken into account when the noise level is high and is afraid that the phrase may cover other kinds of hazard with which the instrument is not concerned. The Government of Austria would also like the phrase to be deleted as too vague to serve in the drawing up of regulations. The Government of Canada makes a similar point. It should, however, be observed that this matter was debated during the first discussion and that the Committee eventually adopted the present wording. It is therefore for the Conference to decide whether it wishes to reconsider the matter.

The Government of Sweden refers to the interpretation of the word "noise". Paragraph 33 of the Committee report (Report IV (1), pages 10-11) makes it clear that the word covers the complete range of frequencies, including the ultrasonic and infrasonic ranges. This definition includes the frequencies referred to by the Government.

**PART II. GENERAL PROVISIONS**

*Article 4*

1. National laws or regulations shall prescribe that, as appropriate, measures be taken for the prevention and control of, and protection against, occupational hazards in the working environment due to air pollution, noise and vibration.

2. Provisions on the practical implementation of the measures so prescribed may be adopted through standards, codes of practice and other appropriate methods.
Observations on Article 4

Australia. As available professional literature on occupational health is almost completely devoid of information that could provide a basis in drawing up national laws or regulations on vibration, the Government considers that the flexibility offered by paragraph 2 should be retained.

Austria. It is necessary to ensure that the term “standards” in paragraph 2 covers legal provisions.

Belgium. It is inadvisable to refer solely to national laws or regulations in paragraph 1 since, according to Article 16, effect is to be given to the Convention “by laws or regulations or any other method consistent with national practice and conditions”. The phrase “national laws or regulations shall prescribe that” should be deleted and the words “the necessary” inserted before the word “measures”. The same observation applies to Articles 5, 6, 7 and 15.

Libyan Arab Republic. A new paragraph should be added to the effect that the competent authority should be consulted before any industry likely to create health hazards is set up.

United Kingdom. In this Article, and in Articles 5-7, 9-13 and 15, the methods of achieving the objectives are specified as “national laws or regulations” but in Article 16 the methods for applying the whole Convention are set out as “laws or regulations or any other method consistent with national practice and conditions”. To avoid any ambiguity and repetition, it would be preferable to retain the wording in Article 16 and to refer to it in the other cases.

Office Commentary

The Governments of Belgium and of the United Kingdom emphasise that several Articles of the proposed Convention, including Article 4, prescribe application of the provisions by means of laws or regulations, whereas the Part relating to the measures of application employs a more flexible formula, allowing for the use of other methods. It certainly seems that reference to national laws and regulations alone, as in Articles 4-7, 9-13 and 15, might restrict the means of applying the instrument solely to such laws and regulations and be in conflict with the terms of Article 16 (a). This Article leaves governments more latitude in choosing the most appropriate methods in each case, so as to take account of national practice, as pointed out by the Government of Sweden in its observations on paragraphs 2 and 3 of Article 5. Furthermore, as the Government of the United Kingdom points out, useless repetition should be avoided and, to give effect to the provisions of the Convention, reference could be made to Part IV, which deals with measures of application. This matter has been considered carefully by the Office. The reference in Article 4 to laws or regulations seems to be appropriate since paragraph 1 deals with a fundamental question, i.e. the necessity for laws or regulations to define the cases to which the prescribed measures should apply as well as to define the aim and scope of these measures. On the other hand, in the other Articles mentioned, the reference to national laws or regulations does not seem to be essential and has been omitted so that it is left to Article 16 to indicate the various methods whereby measures to give effect to the provisions of the Convention can be taken.
The Government of the Libyan Arab Republic would like provision to be made for the competent authorities to be consulted before any establishment is built, not only when machinery is being installed. It would seem, however, that a provision of this kind would extend the scope of the instrument to the environment in general, taking it beyond the framework of the item on the Conference agenda. Consequently it has not been considered advisable at this stage to propose amendments along these lines but the Conference will no doubt wish to consider the matter.

The Government of Austria would like to be sure that the "standards" in paragraph 2 apply also to laws and regulations. It should be noted that the wording of this paragraph does not exclude laws or regulations from the methods of application but that it stresses other methods, particularly technical standards. In order to dispel any doubts as to the meaning of this particular term, it is proposed to make it more specific by adding the word "technical" before it.

Article 5

1. In giving effect to the provisions of this Convention, by laws or regulations or any other method consistent with national practice and conditions, the competent authority shall act in consultation with the most representative organisations of employers and workers concerned.

2. National laws or regulations shall provide for the association of representatives of employers and workers with the elaboration of provisions on the practical implementation of the measures prescribed therein.

3. National laws or regulations shall provide for as close a collaboration as possible at all levels between employers and workers in the application of the measures prescribed in pursuance of this Convention.

4. In so far as national practice permits, representatives of the employers and representatives of the workers shall have the opportunity to accompany inspectors supervising the application of the measures prescribed in pursuance of this Convention.

Observations on Article 5

Australia. The Government has reservations regarding the wording of paragraph 2, which seems unnecessarily complex. In particular, the word "elaboration" should be replaced by a more appropriate word such as "preparation" or "detailing". It would be preferable to redraft paragraph 2 along the following lines: "National laws or regulations may provide for consultation between employers and workers on the means of implementing the measures prescribed". As regards paragraph 4, the Government considers that this provision should be similar to others of the same kind contained in other ILO instruments and proposes a wording similar to that in Article 16 (b). Furthermore, it doubts whether it is necessary for workers' representatives to accompany inspectors. It would seem sufficient to authorise inspectors to have access to such representatives for the purposes of their duties. Moreover, it would be disadvantageous for inspectors to be accompanied when undertaking certain types of inspection (for example, noise measurement).

Belgium. The association of the social partners in the drafting of regulations, prescribed in paragraph 2, and collaboration between them in applying preventive measures, provided for in paragraph 3, go beyond the framework of this Convention and should be dealt with in a more general Convention. Nevertheless, there would
be no problems of application in Belgium. In paragraph 4, it should be made clear that the employers' and workers' representatives referred to belong to the undertaking and that outsiders are excluded.

**Byelorussian SSR.** The Government proposes deletion of the phrase "in so far as national practice permits" to make the provision clearer and more effective.

**France.** The Government has some reservations concerning the wording of paragraph 4 in view of the provisions of the Labour Inspection Convention, 1947 (No. 81), and of the Labour Inspection (Agriculture) Convention, 1969 (No. 129), whereby it is left entirely to the inspectors to decide whether or not to be accompanied by workers or their representatives on tours of inspection. Paragraph 4 might imply that labour inspectors should give prior notice of their visit in order to make sure that employers' representatives will be present. Nor is it clear whether it is the employer himself who is referred to or representatives of employers' organisations.

**German Democratic Republic.** Paragraph 4 presents no difficulties as regards application. When the state supervisory bodies carry out inspections they contact the representatives of the undertakings and of the unions and assess the results of the visits with them.

**Federal Republic of Germany.** Referring to the Works Constitution Act which deals, inter alia, with workers' participation in the drawing up of rules on safety and health, the Government considers that the provisions of the Convention should be worded with more flexibility. In paragraph 2, "representatives of employers and workers" are mentioned whereas paragraph 1 refers to "organisations". There might be doubts as to the persons considered as "representatives". Participation in the drawing up of rules should be left to national practice rather than be governed by law. As regards paragraph 3, it would seem difficult for a concept like "as close a collaboration as possible" to be reflected in national laws and regulations. In the Federal Republic the law makes provision for this collaboration to take place between employers and works councils. The word "workers" should be replaced by the words "workers' representatives". The type of relationship between the organisations of the social partners is a matter that should be left to the organisations themselves. With regard to paragraph 4, the Government refers to the provisions of the Works Constitution Act which, while allowing for close co-operation between employers and workers at the level of the undertaking, also empowers workers to accompany inspectors who visit the undertaking to supervise application of provisions relating to protective measures in respect of work and health. Nevertheless, the organisations of workers referred to in paragraph 1 should not be given the role of auxiliaries to the supervisory authorities.

**India.** In India the law does not require the inspector to take employers' or workers' representatives with him on inspection visits. This would present problems where there is more than one trade union. The restriction concerning national practice at the beginning of paragraph 4 should over-ride the other considerations, the text being modified accordingly if necessary.

**Kuwait.** The Government considers that the provisions of paragraph 2 are covered by those of paragraph 3 of this Article and proposes deleting paragraph 2.
In any case, the word "association" is ambiguous and should be replaced by the word "consultation". In paragraph 4 the inspection for supervising application of the measures prescribed to control air pollution, noise and vibration is highly technical. The presence or absence of representatives of either the workers or the employers would not be of any value. Moreover, in the case of noise measurement, it is sometimes advisable to discourage anyone from coming to the site to avoid disturbance of the acoustic field. Although aware of similar provisions in Conventions Nos. 81 and 129 the Government considers that it is not essential for this paragraph to be included in the instrument.

Netherlands. In paragraph 4 the words "In so far as national practice permits" undermine the aim of the amendment of the Workers' members in the Committee (see Report IV (1), page 22, paragraph 80). Furthermore, the Government does not share the view that Conventions Nos. 81 and 129 already give workers' representatives sufficient scope to accompany labour inspectors on their visits. Therefore the phrase quoted above should be deleted and the following words should be added at the end of paragraph 4: "unless they consider that such a notification may be prejudicial to the performance of their duties". Furthermore, in the same paragraph, the words "of employers and workers" should be changed to "of the employers and the workers directly concerned" to make it clear that there is no question of people from outside the undertaking being involved. The Government further suggests the revision of Conventions Nos. 81 and 129 in the near future to merge them into a single instrument. In the process, account could also be taken of the matter dealt with in paragraph 4. The Government also states that the employers' organisations do not support the amendment it proposes concerning the reference to national practice. For them there are two disadvantages: first, this might impede inspection and, second, no definition is given of the term "representatives of the workers". For their part, the workers' organisations agree to the proposal to delete the words "In so far as national practice permits" but do not agree to the proposed addition to the end of the paragraph of the new text proposed by the Government as they fear this might give rise to abuse.

Sweden. The Government assumes that the provision in paragraph 1 is met by the customary procedure in Sweden whereby proposed regulations are referred to the employers' and workers' organisations for comment, the final decisions then being taken by the appropriate authority. It is therefore not necessary for the decision to be approved by the organisations in question. The words "in consultation" should be replaced by the words "after consultation". Furthermore, for collaboration between employers and workers to be secured solely by means of national legislation—as provided for in paragraphs 2 and 3—is too narrow an approach. Wording similar to that in paragraph 1 should be used. This proposal is borne out by the fact that Sweden has no legislation on these matters but satisfies the provisions of the Article in practice.

Tunisia. Paragraph 4 should include the exception provided for in Article 16, paragraph 3, of Convention No. 129 and in Article 12, paragraph 2, of Convention No. 81 since the presence of employers' and workers' representatives should be avoided if it is likely to make the inspection less effective.
Ukrainian SSR. In paragraph 4 the phrase “In so far as national practice permits” should be deleted to make the provision clearer and more effective.

USSR. The phrase “In so far as national practice permits” should be deleted in paragraph 4. Thus amended, the paragraph would correspond more effectively to the needs of the employers and workers.

United Kingdom. The Government accepts the principle that representatives of employers and workers should normally be able to accompany inspectors. In some situations, however, it may be necessary for an inspector to make a spot check inspection without waiting for the representatives. This point is covered by the qualification “In so far as national practice permits.” There should be an additional provision to the effect that the employers’ and/or workers’ representatives should be notified of the inspections provided that the performance of the inspection was not dependent upon notification being given in advance.

Office Commentary

Paragraph 1

The Government of Sweden suggests replacing the words “in consultation” by “after consultation.” It fears that the former wording might imply that the approval of workers’ organisations would be required for any decision connected with the implementation of the provisions of the Convention. It should be noted that the words “in consultation” have been employed in other international instruments, particularly—and for similar purposes—in Article 6(a) of the Occupational Cancer Convention, 1974 (No. 139). They are employed in ILO instruments because there may be several consultations during the various stages in the procedure established to give effect to the provisions of the instrument. It does not therefore seem advisable at this stage to change the wording of this provision along the lines indicated. Nevertheless, in accordance with the decision of principle set forth in the Office Commentary on Article 4 above, the reference to laws or regulations and to methods consistent with national practice and conditions has been deleted from this paragraph.

Paragraphs 2 and 3

The Government of the Federal Republic of Germany would like reference not to be made solely to national laws or regulations. This observation has been taken into account in the new wording of the paragraph.

The Governments of Belgium and Kuwait consider that the expression “the association of”, in paragraph 2 in connection with the preparation of regulations, and the reference in paragraph 3 to close collaboration with workers in implementing the texts, go beyond the framework of this Convention and relate to a more general problem. The Government of Kuwait proposes the deletion of paragraph 2 or substitution of the word “consultation” for the word “association”. The Government of Australia suggests a more flexible wording for the paragraph. During the consideration of this point by the Conference Committee, the question of the role to be played by occupational organisations in devising methods of application and in implementing the measures prescribed was the subject of lively discussion and the
present text of paragraph 2 was adopted in a spirit of compromise between diverging viewpoints. Consequently it should be left to the Conference to decide whether it wishes to reconsider this question. The wording of paragraphs 2 and 3 has therefore not been changed as regards the substance although the reference to national laws or regulations has been deleted and the necessary changes have been made at the end of paragraph 2.

Paragraph 4

Several governments have expressed their disagreement on the wording of paragraph 4 with regard to the expression “representatives of the employers and representatives of the workers” and the reference to “national practice”. Regarding the first objection, the Governments of Belgium, France and Netherlands consider that the expression “representatives of the employers and representatives of the workers” is ambiguous and they would like it to be made clear that the representatives come from within the undertaking. The Office considers that the question raised by these three Governments reflects the discussions in the Conference Committee concerning inspection visits and that the point should be made clearer by putting the word “employers” in the singular and adding “of the undertaking” after “of the workers”.

As regards the second comment, the Governments of Australia, France, India, Kuwait, Netherlands, Tunisia and the United Kingdom opposed the wording of the paragraph, on the one hand because it seems to imply that inspectors should always be accompanied by representatives of the employers and of the workers, and, on the other hand, because the reference to national practice in no way appears to settle the difficult question of the labour inspector’s duties. While the Government of Kuwait suggests that the paragraph might simply be deleted, that of the United Kingdom emphasises the need to leave the inspector the possibility of making spot checks without having to wait for the representatives in question, and would like it to be specified that these representatives should be notified of the visit; the Governments of France, Netherlands and Tunisia would like to adhere more closely to the wording of the corresponding provisions in Conventions Nos. 81 and 129. The Governments of the Byelorussian SSR, the Ukrainian SSR and the USSR, for their part, would like to delete the phrase “In so far as national practice permits”. It will no doubt be recalled that the Committee discussed the implications of this provision at length (see Report IV (1), page 22, paragraph 80) and that there was some opposition to the idea of labour inspectors always being accompanied by representatives of employers and of workers when on inspection visits. The wording used in this paragraph was introduced in order to take account of national practice in the matter and to give the provision the desired flexibility. It nevertheless appears that the present wording is not specific enough and that its application might give rise to conflicting interpretations. To avoid any misunderstanding on this important matter, the Office considers it advisable—as proposed by the Government of the Netherlands—to use the wording of Article 16, paragraph 2, of Convention No. 129. It is proposed, therefore, to delete the phrase “In so far as national practice permits” and to add the following words at the end of the paragraph: “unless their presence is likely to detract from the effectiveness of the inspection”.
**Article 6**

1. National laws or regulations shall make employers responsible for compliance with the prescribed measures.

2. Without prejudice to the responsibility of each employer for the health and safety of his employees, employers shall be encouraged to collaborate in obtaining the desired standards whenever two or more of them undertake activities simultaneously at one workplace.

**Observations on Article 6**

**Australia.** The Government agrees in principle that employers should be required to comply with measures prescribed in national laws or regulations and that representatives of workers’ organisations should be consulted on the nature of these measures, but considers that the workers should then be required to comply with such measures to the fullest extent possible, for example by using protective devices properly. As regards paragraph 2, this provision might weaken the obligation laid down in paragraph 1. Moreover, it would be difficult to enforce as a legislative provision the notion that employers “be encouraged to collaborate”. It would be more appropriate for this provision to be included in the Recommendation.

**Byelorussian SSR.** Paragraph 2 should be expanded by stating that, where necessary, the competent authority will determine the responsibility of each employer by ordinance.

**France.** The Government recalls the special provisions applicable to building operations in the interests of occupational safety and health, as contained in a recently adopted law on the development of prevention. It would like to know what other forms of activity are referred to in Article 6 and, in particular, whether the collaboration in question would be likely to apply to subcontractors.

**German Democratic Republic.** The question dealt with in paragraph 2 has already been provided for. If several employers are operating within an undertaking, the head of the parent firm is responsible for co-ordinating health protection measures. If several firms of equal importance are operating on the same work site, one of them is appointed to co-ordinate preventive measures.

**India.** When several employers undertake activities simultaneously at one workplace, they should previously agree on the application of measures to prevent the hazards in question. The competent authority should determine the procedure to be followed and the responsibilities of individual employers.

**Kuwait.** This provision does not adequately cover the situation of various subcontractors undertaking temporary jobs on the same work site. The normal practice followed in Kuwait is to place the responsibility on the principal employer or the owner of the site. However, to take account of other situations, the Government proposes that the Article be expanded by introducing the notion of “mutual responsibility” among the various employers.

**Netherlands.** In paragraph 2 the use of the word “encouraged” makes it difficult to make a statutory regulation of this paragraph. It would be better to replace the words “shall be encouraged to collaborate” by the words “should collaborate”.
Problems regarding liability might arise but the task of settling them should be left to national laws and regulations. The employers' organisations propose retaining the text as it stands because they consider that collaboration is not always useful or even desirable.

**Tunisia.** The Government agrees with the principle set forth in paragraph 2 but suggests that the collaboration referred to should take place within the framework of existing institutions, such as inter-works medical services or health and safety committees. Services of this kind exist nearly everywhere in Tunisia, grouping undertakings with between 40 and 300 workers, those with over 300 workers being required to have their own medical service. Similar rules might be considered for services dealing with the prevention of pollution.

**Ukrainian SSR.** Paragraph 2 should be expanded to state that, where necessary, the responsibility of each employer will be specified by an ordinance issued by the competent authority.

**USSR.** Paragraph 2 should be expanded by prescribing that, if necessary, the responsibility of each employer will be specified by the competent authority.

**United Kingdom.** Encouragement to collaborate is not sufficient where an employer should have responsibility for the protection of workers other than his own. In any case, where local agreement cannot be reached there should be provision for intervention by the competent authority. This point was accepted by the Conference Committee but was lost in drafting. The required modification could be achieved by adding: “In circumstances where agreement cannot be reached the competent authority should prescribe the procedures to be followed and allocate responsibility.”

**Office Commentary**

**Paragraph 1**

The Office has noticed a slight discrepancy between the English and French versions of paragraph 1. To reflect the conclusions of the Conference Committee's discussions on this point more accurately, it proposes to bring the French text into line with the English.

**Paragraph 2**

The Government of France would like to know whether the collaboration prescribed in paragraph 2 should apply to subcontractors. From reference to the discussion of this Article by the Conference Committee (see Report IV (1), page 12, Point 8 (2)), it seems clear that what the Committee members had in mind was to promote effective collaboration between those responsible for various groups of workers employed on the same work site so as to apply protective measures according to the standards laid down in the instrument. The Government of the Netherlands proposes to delete the words “shall be encouraged”, which it would be difficult to incorporate in a law. The Government of Australia makes a similar suggestion but would like the provision to be transferred to the Recommendation. The Government of Kuwait would like to strengthen the provision by introducing the idea of
"mutual responsibility" among the various employers. It should be noted that the responsibility of the individual employer is in no way lessened by the collaboration referred to in this paragraph and it would therefore be his duty to collaborate in the prevention of health hazards. The Government of India would like the competent authority to intervene to determine the procedure whereby the collaboration would take place, and the Governments of the Byelorussian SSR, the Ukrainian SSR, the USSR and the United Kingdom suggest that the authorities should intervene if there is disagreement. The question of whether to define more precisely the nature of this collaboration, which the Government of Tunisia would like to place within the framework of the occupational health services, or whether it should be made more official by means of agreements approved by the competent authority, was discussed at length when the matter was considered by the Conference Committee. The latter did not consider it advisable for this collaboration to take place within the rigid framework of agreements approved by the competent authority but neither did it wish to retain the proposal in the texts put forward by the Office, i.e. to secure the intervention of the competent authority to determine the nature of the collaboration. Consequently it is not considered appropriate to amend the present text, but the Conference will no doubt decide whether it wishes to re-examine the matter.

Article 7

1. National laws or regulations shall oblige workers to comply with safety procedures relating to the prevention and control of, and protection against, occupational hazards due to air pollution, noise and vibration in the working environment.

2. National laws or regulations shall provide for the right of workers to present proposals, to obtain information and training and to appeal to appropriate bodies so as to ensure protection against occupational hazards due to air pollution, noise and vibration in the working environment.

Observations on Article 7

Australia. In paragraph 2 the proposal to provide for a right of "appeal to appropriate bodies" requires clarification. If it means that workers can approach the authorities responsible for inspection the Government has no objection, but if it would entail the establishment of some further body to which appeal could be made, the Government would have to study the matter further.

Austria. The right referred to in paragraph 2 should be recognised not only in the case of workers but also of their representatives in the undertaking (works councils) and this paragraph should be worded as follows: "2. National laws or regulations shall provide for the right of workers and of their representatives in the undertaking (works councils) to . . .".

Canada. The Government suggests that the word "oblige" be replaced by "require" in paragraph 1.

France. According to the interpretation of the Office in presenting the proposed texts (see Report IV (1), page 51), the "safety procedures" mentioned in paragraph 1 correspond to the provisions of works rules. Application of this provision is governed by Article 16, which requires member States to take such steps, including the provision of appropriate penalties, as may be necessary. In practice this is a matter
which raises both legal and psychological difficulties. Although in France these regulations are subject to approval by the labour inspectorate, the provision of penalties is strictly governed both by law and by the obligations resulting from collective agreements. There remains the possibility of taking disciplinary measures, against which the persons concerned would have the right to appeal.

**Federal Republic of Germany.** The Government recalls the provisions of the Works Constitution Act, under which the provisions of paragraph 2 could be applied.

**India.** Taken together with Article 16, the provisions of this Article would not be inconsistent with national practice since Indian laws, such as the Mines Act, 1954, and the Factories Act, 1948, do not exclude workers from the penalty provisions contained therein.

**Kuwait.** The workers have an obligation towards the employer to comply with the safety procedures mentioned in paragraph 1; the employer must take all necessary measures, including the provision of penalties for non-observance, to ensure this compliance, for which he is responsible to the competent authority.

**Netherlands.** In the Netherlands non-observance of an "internal regulation" is not a punishable offence though it may lead to a disciplinary measure imposed by the employer. In extreme cases it is even possible to dismiss a worker.

**Office Commentary**

**Paragraph 1**

In its presentation of the proposed texts, the Office sought the views of governments on this provision. In particular there was the question of whether the "provision of . . . penalties" prescribed in Article 16 (a) would apply to non-observance by the workers of safety procedures (see Report IV (1), pages 51-52). The Governments of Australia, India, Kuwait and the Netherlands stated that there would be no problem in applying this provision in their countries. The Government of France, however, emphasised the difficulties of providing penalties for non-observance of provisions which, as the Office states, are part of works rules. This matter is dealt with in the commentary on Article 16.

As regards the observation of the Government of Canada, the word "required" certainly seems better than the word "obliged". The word "required", moreover, is the term used with the same intention in other ILO instruments, for example in Paragraph 14 (2) of the Benzene Recommendation, 1971 (No. 144). This change affects only the English text.

**Paragraph 2**

The Government of Austria would like it to be specified that representatives of workers in the undertaking also should have the rights in question. The wording of this paragraph does not seem to exclude these representatives, provided that they work in the undertaking. The Government of Australia is anxious to know whether the term "appropriate bodies" implies the setting up of a special appeal body. If one refers to the discussion on this point in the Conference Committee, the aim of this provision clearly seems to have been to enable workers to draw the
attention of the employer or the inspectorate to any failure to observe the provisions of the Convention. In conclusion, no change has been made at this stage to the text of this Article.

**PART III. PREVENTIVE AND PROTECTIVE MEASURES**

**Article 8**

1. The competent authority shall establish criteria for determining the hazards of exposure to air pollution, noise and vibration in the working environment and, where appropriate, shall specify limits on the basis of these criteria.

2. In the elaboration of the criteria and the determination of the exposure limits the competent authority shall take into account the opinion of technically competent persons nominated by the most representative organisations of employers and workers concerned.

3. The criteria and exposure limits shall be established, supplemented and revised regularly in the light of current knowledge and data.

**Observations on Article 8**

**Australia.** The Government supports this provision. However, it considers that the intention of paragraph 2 would be clearer if, instead of the words "elaboration of criteria and the determination of the exposure limits", the words "establishment of criteria and exposure limits" were employed.

**Austria.** Since the criteria referred to in paragraph 1 will be established only in a few countries by scientific bodies and will be taken up by the other countries, the last phrase of paragraph 2 should be deleted.

**Belgium.** In paragraph 2, the words "take into account the opinion of" should be replaced by the word "consult". The suggestion that such an opinion must be taken into account has compulsory overtones which would restrict the power of decision of the competent authority.

**Finland.** The exposure limits provided for in this Article are meaningless unless measurements are carried out to determine the situation prevailing in the working environment. A provision similar to that of Paragraph 3 (1) of the Recommendation should therefore be included.

**Federal Republic of Germany.** There may be some argument as to which of the organisations referred to in paragraph 2 are the most representative. The Article also raises the question of which opinion the authority should take into account when the experts do not agree among themselves.

**India.** The mere establishment of criteria regarding health hazards and fixing of exposure limits would not suffice to meet the aim of the instrument if guidelines were not also provided with respect to the monitoring of the working environment. A fourth paragraph should therefore be added to this Article, as follows: "The nature, frequency and other conditions of monitoring of air pollution, noise and vibration in the working environment shall be prescribed by the competent authority. The monitoring activities shall be carried out under the employer’s responsibility."

Kuwait. The term "exposure limits" could be construed as indicating the maximum concentration. The term "exposure levels" would therefore be preferable.

Norway. The Government is of the opinion that this Article must be understood as imposing no obligation on the ratifying States for fixing permissible levels in the form of binding provisions. This is only one of several measures that must be taken to improve the working environment, but it must be regarded as an essential means of furthering this objective.

Sri Lanka. As regards paragraph 3, international assistance in the form of laboratory equipment and staff training will be essential.

Sweden. The competent authority points out that scientific documentation on injury caused by vibration is still almost non-existent.

Office Commentary

Paragraph 1

The Government of Kuwait suggests substituting the term "exposure levels" for "exposure limits" in order to prevent any confusion with "maximum limits". This point was already raised when the matter was discussed by the Conference Committee, which eventually adopted the present wording of Article 8. At this stage, therefore, it should be left to the Conference to decide whether or not it wishes to reconsider the matter. The Government of Norway is of the view that this provision should not be construed as obliging countries to fix permissible levels. During the consideration of this point in Committee (see Report IV (1), page 14, paragraph 49), the need to allow governments a certain degree of flexibility in applying the provision was discussed. The present wording of paragraph 1, to the effect that limits shall be specified "where appropriate", should guarantee such flexibility as regards government decisions in this respect.

Paragraph 2

The Government of Belgium feels that the expression "shall take into account" may imply an obligation on the part of the competent authority and thus restrict its power of decision. It therefore suggests using the word "consult" instead. This particular wording has often been used in the past, particularly when reaffirming the need for there to be a dialogue between the competent authority and the interested parties. In the case of this paragraph, however, taking into account the opinion of technically competent persons would not seem to suggest any limitation whatsoever on the power of decision of the competent authority. The Government of the Federal Republic of Germany fears that there may be some disagreement in determining which of the employers’ and workers’ organisations are the most representative and wonders what decision the competent authority would take when the experts themselves differ. With regard to the first point, it would suffice to refer to the criteria adopted for similar consultations provided for in other ILO instruments. As to the second point, it is ultimately the competent authority which has to make the decision that it considers the most appropriate, taking into account the technical opinions it has received, even when they differ. The Government of Austria suggests deleting the second part of paragraph 2 on the grounds that many
countries are not in a position to carry out the appropriate research themselves for establishing permissible levels. However, there seems to be no reason why the competent authority should not hear the views of the representatives of the employers and workers before reaching a decision on any list that may already exist. At this stage, therefore, the Office does not wish to propose any change in the wording of this Article.

Proposed New Paragraph

The Governments of Finland and India would like a provision similar to that of Paragraph 3 (1) of the proposed Recommendation, concerning the procedure for monitoring the occupational hazards covered by the instrument, to be added to this Article. Bearing in mind the great variety of health hazard situations that may exist in the establishments and workshops of a country, on the one hand, and the rapid technological progress being made and new methods being used in monitoring the working environment, on the other, the Office is of the opinion that it would very often be difficult for the competent authority to specify exactly how this monitoring should be carried out. This is an objective which would seem more appropriate to a Recommendation. Furthermore, the wording of Article 15 is such as to allow the competent authority to supervise the conditions under which the monitoring is carried out and, where appropriate, decide how this should be done.

Article 9

National laws or regulations shall provide that the exposure of workers to air pollution, to noise and to vibration in the working environment shall be kept within the limits referred to in Article 8—

(a) by technical measures;
(b) by supplementary administrative measures, where the technical measures alone do not provide sufficient protection.

Observations on Article 9

Australia. In the present state of technological knowledge, it may be difficult to fix limits for vibration.

Belgium. Subparagraph (b) should be amended to read: "by supplementary administrative measures and by labour organisation methods, where the technical measures alone do not provide sufficient protection ".

Federal Republic of Germany. In subparagraph (b), the words " administrative measures " should be replaced by " organisational measures ", since the measures concerned have to do with the running of the operations and the organisation of work.

Office Commentary

The Governments of Belgium and of the Federal Republic of Germany would like subparagraph (b) to specify that the measures taken include those relating to the organisation of work. However, it would seem that all measures other than technical measures can be regarded as being broadly covered by the expression " administrative measures ". If the paragraph were to be made more precise, it might
raise serious problems of definition which could ultimately limit its scope. The Office therefore does not consider it desirable to modify the wording of subparagraph (b) at this stage, although the Conference may decide to consider the matter.

Article 10

1. National laws or regulations shall provide that, in taking the measures required by Article 9, priority shall be given to the prevention of occupational hazards in the working environment due to air pollution, noise and vibration.

2. Where such measures do not make it possible to bring air pollution, noise and vibration within the limits referred to in Article 8—
   (a) the employer shall supply workers with suitable personal protective equipment and shall maintain that equipment;
   (b) the employer shall provide appropriate training in the use and maintenance of such equipment, so that workers can comply with relevant instructions; and
   (c) no worker shall be required or allowed to work without such protective equipment.

Observations on Article 10

Australia. It is questionable whether priority should be given to the prevention of these hazards. There are others, for example carcinogenic hazards, which should perhaps have a higher priority.

Belgium. In paragraph 2 (c), delete the words “or allowed”. Employers cannot force workers to work without protective equipment. It is therefore inadvisable to provide for any kind of authorisation to do so since its granting entails a procedure and any violation may raise difficulties as to the application of penalties.

Byelorussian SSR. Another paragraph should be added concerning the need for any new establishment or production process to take safety standards into account both at the planning stage and at the operational stage. Moreover, the text of Paragraphs 6 and 7 of the proposed Recommendation should be added to Part III of the Convention.

Czechoslovakia. Paragraph 2 (c) should be modified as follows: “The employer shall be required not to permit workers to work if they do not use the personal protective equipment provided for them”.

Federal Republic of Germany. In paragraph 2 (c), the words “such protective equipment” should be replaced by “the protective equipment placed at his disposal”, so that workers are not obliged to stop working because no protective equipment is available.

Netherlands. The workers’ organisations propose adding the word “technically” before “possible” in paragraph 2. However, the Government and the employers’ organisations find the text acceptable as it stands. The workers’ organisations further propose the addition of a new Article to the effect that health hazards should not be spread outside the undertaking, for example, in the form of dangerous waste substances. However, the Government and the employers’ organisations do not feel it is necessary to add such an Article.

Sweden. Since the measures indicated in paragraph 2 are also preventive, the word “prevention” in paragraph 1 should be replaced by “elimination of hazards
at source”, in order to emphasise the difference between the various types of prevention. In paragraph 2, it should be made quite clear that personal protective equipment is mainly to be regarded as a temporary measure to be taken while technical solutions to a problem are being evolved.

Ukrainian SSR. A new paragraph should be added to the Article to the effect that any new establishment and production process must take safety standards into account both at the planning and at the operational stage. Moreover, the text of Paragraphs 6 and 7 of the proposed Recommendation should be added to Part III of the Convention.

USSR. A new paragraph should be added to this Article to the effect that any new establishment and production process must take safety standards into account both at the planning and at the operational stage. Moreover, in order to make the instrument more effective, the text of Paragraphs 6 and 7 of the proposed Recommendation, which deal with the replacement of harmful substances and processes by less harmful or harmless substances and processes, should be added to Part III of the Convention.

United Kingdom. The provision contained in paragraph 2 (c) is too rigid. It fails to allow for emergency action or for exposure to dust which presents a long-term health risk and where the use of respiratory protective equipment for part of the working day could reduce the time-weighted exposure for the working spell to below the specified limit, although the actual concentration in air may be in excess of the limit specified. These points could be met by deleting the words “or allowed” adding at the end of the subparagraph the words “except in emergency”.

Office Commentary

Paragraph 1

The Government of Australia considers that other hazards might require a higher priority in respect of preventive action. However, this paragraph refers to the provisions of Article 9 and it is therefore appropriate that it should refer, first of all, to the hazards covered by the instrument. The Government of Sweden would like a clearer distinction made between the different approaches to the problem of prevention envisaged in paragraphs 1 and 2 and proposes that, in paragraph 1, the word “prevention” should be replaced by “elimination of hazards at source”. However, it is quite clear from the report of the Conference Committee (Report IV (1), page 16, paragraph 56) that the word “prevention” means “the elimination of hazards at source”, and therefore covers entirely the points raised by the Government.

Paragraph 2

Three Governments commented on subparagraph (c). The Governments of Belgium and of Czechoslovakia would like the wording to be changed without altering the sense. The Government of the United Kingdom would like the provision to be made more flexible. In each case, one of the effects of the modification suggested would be to delete the words “or allowed”. However, this wording is the result of a specific decision by the Committee (see Report IV (1), page 16, para-
graph 57) and it does not therefore seem appropriate at this stage to amend paragraph 2 along the lines suggested.

The Government of the Federal Republic of Germany proposes restricting the scope of the provision considerably by referring only to protective equipment placed at the disposal of the workers. The Government of Czechoslovakia proposes a new wording for the paragraph which does not seem to modify the sense of the provision. The Office has examined these proposals but, in view of the lengthy discussion to which this point gave rise in Committee, does not consider it advisable at this stage to make any changes in the wording of the paragraph.

The Governments of the Byelorussian SSR, the Ukrainian SSR and the USSR propose the addition of a new paragraph stipulating that any new establishment or production process must take safety standards into account at both the planning and operational stages. However, when a member State ratifies a Convention, all new establishments or processes would normally be expected to meet the standards laid down in application of the obligations of the Convention. It does not therefore seem appropriate at this stage to add a new paragraph along the lines suggested.

The same Governments also suggest that the text of Paragraphs 6 and 7 of the proposed Recommendation, dealing with the replacement of harmful substances and processes by other less harmful or harmless substances and processes, should be added to the end of this part of the Convention. Although it recognises the merit of this proposal, the Office does not consider it advisable at this stage to include a new provision along these lines in the proposed Convention; however, the Conference itself will decide whether to reconsider this matter.

**Article 11**

1. National laws or regulations shall provide for the supervision at suitable intervals, on conditions and in circumstances determined by the competent authority, of the health of workers exposed or liable to be exposed to occupational hazards due to air pollution, noise or vibration in the working environment.

2. National laws or regulations shall provide that the supervision provided for in paragraph 1 of this Article shall be free of cost to the worker concerned.

**Observations on Article 11**

**Australia.** See the observation on Article 5, paragraph 4. If the proposal of the Government is accepted, Article 11 would become unnecessary. Alternatively, the text proposed for Article 5, paragraph 4, could be substituted for Article 11 and the present text of Article 5, paragraph 4, deleted.

**Canada.** In paragraph 1, the word “supervision” should be replaced by the words “medical surveillance”.

**Sweden.** These provisions are not to be interpreted too widely but must be confined to cases where particularly serious occupational hazards are thought to exist.

**Office Commentary**

With regard to the observation of the Government of Australia, see the Office Commentary on Article 5, paragraph 4. The proposal of the Canadian Government relates specifically to the English text and seems to be essentially a drafting change.
For its part, the Office does not consider the inclusion of the word “medical” as indispensable, since the provision clearly refers to the state of health. The Government of Sweden suggests that the scope of this provision should be restricted to cases where particularly serious hazards exist. As it is worded at present, paragraph 1 provides that the supervision of the state of health of the workers shall be on conditions and in circumstances determined by the competent authority. Member countries would therefore seem to have every freedom to define the categories of workers, the types of exposure or other aspects in respect of which this obligation is accepted. Consequently, it would not seem appropriate to include specification as to the degree of hazard in this paragraph, as this might raise problems of interpretation.

**Article 12**

National laws or regulations shall provide that the use of processes to be specified by the competent authority, which involve exposure of workers to occupational hazards in the working environment due to air pollution, noise or vibration, shall be notified to the competent authority and that the competent authority, as appropriate, may authorise the use on prescribed conditions or prohibit it.

**Observations on Article 12**

**Cyprus.** After the word “processes”, add “substances and agents”.

**Sweden.** See the observation on Article 11. The competent authority should specify the processes concerned after consultation with the employers’ and workers’ organisations.

**United Kingdom.** If marine transport is to be included in the scope of the Convention, the individual assessment of ships on a large scale by the competent authority would present considerable difficulty.

**Office Commentary**

If “substances and agents” were specified in this Article, as suggested by the Government of Cyprus, it would modify the sense of the provision substantially. The preventive measures referred to in this Part of the instrument are aimed essentially at processes that are liable to be a source of hazards rather than at the substances or agents themselves. It would therefore seem inappropriate at this stage to include such a specification in the Article. As to the proposal of the Government of Sweden to refer to consultation with employers’ and workers’ organisations, Article 5, paragraph 1, explicitly refers to such collaboration in applying the provisions of the Convention. It does not therefore seem necessary to make any special mention of the fact in this Article.

**Article 13**

National laws or regulations shall provide for all persons concerned to be adequately—

(a) informed of potential occupational hazards in the working environment due to air pollution, noise and vibration; and

(b) instructed in the measures available for the prevention and control of, and protection against, those hazards.
Observation on Article 13

_Sri Lanka._ International assistance for the development of a national information service centre on occupational health and environmental pollution would be essential.

Office Commentary

The Office has received no observation on the substance or wording of this Article, which has therefore not been changed in the proposed Convention.

Article 14

Measures taking account of national conditions and resources shall be taken to promote research in the field of prevention and control of hazards in the working environment due to air pollution, noise and vibration.

Observations on Article 14

_Australia._ It would be impossible for a provision of this nature to be enforced. It should therefore be transferred to the Recommendation.

_Canada._ It is debatable whether this provision should be included in the Convention or dealt with in the Recommendation.

_Kuwait._ This provision concerns the future of many developing countries where manpower and technical facilities are lacking. Research into this area is becoming extremely complex and is time-consuming and expensive. The provision would be more appropriate in the Recommendation, as was the case in the original Office text.

_Sri Lanka._ International assistance will be needed for collaborative research.

Office Commentary

The Government of Kuwait proposes transferring this provision to the proposed Recommendation, essentially in the light of the situation in developing countries. The Government of Canada also wonders whether this provision should be included in the Convention or in the Recommendation, and the Government of Australia proposes transferring it to the Recommendation because it considers it impossible to enforce. This matter was discussed at length in the Conference Committee, whose members were divided as to whether it should be included in the proposed Convention or in the proposed Recommendation (see Report IV (1) page 20, paragraph 75). However, it was eventually decided to include it in the proposed Convention. This being so, it would seem advisable to leave it to the Conference to decide whether it wishes to reconsider the matter.

PART IV. MEASURES OF APPLICATION

Article 15

National laws or regulations shall provide that, on conditions and in circumstances determined by the competent authority, the employer shall appoint a competent person, or use a competent outside service or service common to several undertakings, to deal with matters pertaining to the prevention and control of air pollution, noise and vibration in the working environment.
Observations on Article 15

Australia. Previous Articles have placed on the employer the responsibility for the health of his employees. Accordingly, it should not be necessary to require him to appoint somebody to carry out the control, irrespective of the degree of the hazard or extent of the operations. Moreover, the phrase “outside service or service common to several undertakings” would read better as follows: “outside service that may be common to several undertakings”.

Czechoslovakia. At the end of the Article the phrase “when he is not able to do so himself” should be added.

Finland. The legislation in force in Finland does not comply in every respect with the provisions of this Article. However, this would not be an obstacle to further discussion of the matter.

Norway. If the employer appoints an outside person or service to deal with these matters, it should not relieve him of his responsibility for the working environment. This view of the Government is shared by the most representative employers’ and workers’ organisations.

Sweden. If the obligation for the employer to use a person or an outside service applies only when the competent authority has decided on investigations at a certain place of work, this provision does not seem to pose any difficulty as regards ratification. If, on the other hand, the provision means that a permanent safety service must be established in firms within the framework of occupational health services, difficulties will arise since Sweden does not have and does not intend to introduce any legislation concerning occupational health services. Moreover, the introduction of such a service in a firm cannot be prescribed by any authority as these questions are governed by collective agreements. If the latter is the correct interpretation, it would be desirable for the Article to be rephrased so as to include other ways of applying the provision, such as that mentioned in Paragraph 2 of Recommendation No. 112. It would in any case be preferable to transfer this provision to the Recommendation.

Office Commentary

As the Government of Norway points out, the fact that an employer appoints a person or outside service to deal with matters of prevention does not relieve him of his responsibilities in this connection.

The Government of Sweden fears that the provision is intended to establish a special works or inter-works service within the framework of occupational health services and would like the provision to be transferred to the Recommendation. The wording of the Article and its place in the proposed instruments were discussed at length by the Conference Committee (see Report IV (1), page 21, paragraph 77), which eventually decided to include it in the proposed Convention along with an introductory clause to make it more flexible. In the view of the Committee, this clause should enable the competent authority to determine for itself on what conditions and in what circumstances it should apply the provision. It should therefore be left to the Conference to decide whether or not it wishes to reconsider the matter.
A minor drafting change has been made in the text following the deletion of the reference to national laws or regulations.

Article 16

Each Member shall—

(a) by laws or regulations or any other method consistent with national practice and conditions take such steps, including the provision of appropriate penalties, as may be necessary to give effect to the provisions of this Convention;

(b) provide appropriate inspection services for the purpose of supervising the application of the provisions of this Convention, or satisfy itself that appropriate inspection is carried out.

Observations on Article 16

Australia. In the view of the Government, the provision contained in subparagraph (b) is sufficient to ensure the application of the provisions of the instrument, and Article 5, paragraph 4, and Article 11 should therefore be omitted.

France. The measures which Member countries are required to take to guarantee the application of the provisions of the instrument include, in subparagraph (a), the provision of appropriate penalties. This raises complex problems, particularly in respect of compliance with safety instructions by workers, since in such cases (see the observation on Article 7) the works rules apply. In France, the drafting of these rules is governed by regulations and subject to approval by the labour inspector. Moreover, the French Labour Code expressly prohibits any employer from imposing fines on persons who fail to observe a works rule. Other provisions stipulate exceptions to this general rule and specify the form and limits of such fines. Apart from imposing fines, the undertaking normally exercises disciplinary authority, which, however, is limited and subject to legal control. In practice, the exercise of this disciplinary power sometimes raises serious difficulties. It would therefore seem preferable to replace the phrase "take such steps, including the provision of appropriate penalties, as may be necessary" in subparagraph (a) by "take all necessary steps".

Kuwait. This provision has to do with inspection services, which were dealt with in Article 5, paragraph 4. The Government suggests that the latter be transferred to Article 16 as paragraph 1, bearing in mind the observations made in this connection.

Office Commentary

Subparagraph (a)

The foregoing observations and those made in connection with Article 7 indicate that the governments which replied to the question raised by the Office in its presentation of the proposed texts (see Report IV (1), pages 51-52) have no objection in principle to the wording of this subparagraph, except for the Government of France, which questions whether "the provision of appropriate penalties" in respect of workers is desirable in the event of failure to comply with the provisions of Article 7, paragraph 1. The situation in France, as the Government's observation indicates, is probably similar to that in other countries where laws or practice regulate the content and drafting of certain provisions of works rules. The provision of penalties can in many cases be regulated by laws or regulations, by special provisions included
in collective agreements, or by precedent. However, subparagraph (a) refers to the provision of penalties as one of the measures that can be taken to ensure the application of the provisions of the Convention. It is not compulsory for such a measure to be taken in respect of each individual provision. Moreover, the term "appropriate penalties" is flexible enough to cover a wide range of possibilities, including the warnings or disciplinary measures that the management of an undertaking is authorised by laws or practice to take in the event of failure to comply with safety and prevention measures. It is therefore not considered desirable, at this stage, to make any changes in this provision, although the Conference will decide whether or not it wishes to reconsider the matter.

Subparagraph (b)

The Government of Australia considers that the provisions of this subparagraph render those of Article 5, paragraph 4, and Article 11 superfluous and propose that the latter be deleted. As far as Article 5, paragraph 4, is concerned, there would not appear to be any duplication since it is intended to specify one of the ways of ensuring that the inspection provided for under subparagraph (b) is fully effective and serves an educational purpose. As for Article 11, this is presumably supposed to provide an additional indirect means of controlling the effectiveness of the measures adopted and, above all, an efficient method of detecting any potentially harmful effects before they can cause irreversible or irreparable damage. It would therefore not seem appropriate at this stage to delete Article 5, paragraph 4, and Article 11. In the opinion of the Government of Kuwait, Article 5, paragraph 4, should be transferred to Article 16. Although the Office agrees with the Government of Kuwait that these articles all deal with labour inspection, their purpose is different, which is why they appear in different parts of the proposed Convention. It does not therefore seem appropriate, at this stage, to change the wording of this subparagraph, although the Conference may decide to reconsider the matter.

Observations on the Proposed Recommendation concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration

General Observations

Finland. Provided that the instrument takes national legislation and current trends regarding practical solutions sufficiently into account and permits the making of reservations on certain points, its application would not seem to create any obstacle.

Sweden. The proposed Recommendation concentrates too much on conventional and established technology. It would have been of value if the Recommendation had placed more emphasis on the need to develop new technologies for preventive purposes. The reference to standards for emission levels in Paragraph 9 (1) is a step in the right direction. The importance attached to medical examinations (Part III)

1 The observations are preceded by the relevant text as given in Report IV (1). Provisions on which no observations were made have not been reproduced.
may lead to an overestimation of the significance of such examinations. The competent authority is given the task of developing systems whereby medical information and exposure data can be recorded for epidemiological research, but it is not made clear that all these data must be based on uniform methodology and carefully selected parameters. On the other hand, specific medical examinations combined with exposure determinations are important aids in the work of prevention. The Government would like this section to be more closely in line with the modern view of technical and medical preventive measures. Moreover, in view of the special standards that would be needed for the application of this principle to shipping, the Government feels that a separate Recommendation should be drawn up for shipping.

Office Commentary

Two governments have made general observations on the proposed Recommendation. The Government of Finland would like as much latitude as possible to be given to national legislation and practice in respect of the application of the principles of the instrument. It would seem that the few changes that have been made in the text of the Recommendation in the light of the observations of Governments, and particularly the deletion in certain Paragraphs of the reference to national laws or regulations, should enable every member State to choose the most suitable method of implementing the provisions of the instrument.

The Government of Sweden would have liked the proposed Recommendation to reflect a more modern approach to the various problems of prevention and their solution. Thus although it welcomes the provision concerning the control of emission levels, it fears that too much importance is given to the preventive role of medical examinations, although it admits that they are useful in determining a prevention policy. The Office is aware that the various aspects of prevention dealt with in the proposed Recommendation will be effective only in so far as they are made part of a dynamic and comprehensive prevention policy and of a joint and wholehearted effort in which the competent authorities, the employers and workers and their organisations collaborate constructively to achieve the desired objectives. It is at this point that the various technical provisions fall into proper perspective and become mutually supporting. In the Office's opinion, the proposed instrument is a positive and major contribution towards a proper awareness of the objectives to be achieved and towards a better co-ordination of the contribution that each of the parties involved should make in order to improve the working environment.

The Government of Sweden further proposes that a new instrument relating specifically to shipping should be drawn up. The feeling that the provisions of the present proposed instruments cannot easily be applied to shipping is shared by other Governments (see, for example, the observation of the United Kingdom in connection with Article 1 of the proposed Convention). It is left to the Conference to decide on the matter.

The General Conference of the International Labour Organisation,
Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Sixty-third Session on 1 June 1977, and
Noting the terms of existing international labour Conventions and Recommendations which are relevant, and, in particular, the Protection of Workers' Health
Recommendation, 1953, the Occupational Health Services Recommendation, 1959, the Radiation Protection Convention and Recommendation, 1960, the Guarding of Machinery Convention and Recommendation, 1963, the Employment Injury Benefits Convention, 1964, the Hygiene (Commerce and Offices) Convention and Recommendation, 1964, the Benzene Convention and Recommendation, 1971, and the Occupational Cancer Convention and Recommendation, 1974, and 
Having decided upon the adoption of certain proposals with regard to working environment: atmospheric pollution, noise and vibration, which is the fourth item on the agenda of the session, and 
Having determined that these proposals shall take the form of a Recommendation supplementing the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, 
adopts this day of June of the year one thousand nine hundred and seventy-seven the following Recommendation, which may be cited as the Working Environment (Air Pollution, Noise and Vibration) Recommendation, 1977;

Observations on the Preamble

Australia. In the fourth paragraph, the term "atmospheric pollution" should be replaced by the term "air pollution".

Austria. In the light of Paragraph 26 (b), reference should be made to the observations on the Preamble to the proposed Convention.

Office Commentary

The observations of the Governments of Australia and Austria concern two points that have already been dealt with in connection with the Preamble to the proposed Convention. For the same reasons, the Office does not consider it appropriate, at this stage, to make any changes in the proposed texts.

I. Scope

1. (1) To the greatest extent possible, the provisions of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, and of this Recommendation should be applied to all sectors of economic activity.

   (2) Measures should be taken to give self-employed persons protection in the working environment analogous to that provided for in the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, and in this Recommendation.

Observation on Paragraph 1

France. It is difficult to see how the protection afforded to employees can be extended to self-employed persons. However, the labour inspectorate and expert bodies could offer their services to self-employed workers in an advisory capacity if they were asked to do so.

Office Commentary

Since the Office has received no observations relating to the substance or wording of these provisions, the text of Paragraph 1 has not been modified.
II. PREVENTIVE AND PROTECTIVE MEASURES

2. When the criteria and limits referred to in Article 8 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, are established and revised, account should be taken of the possible increase in occupational hazards where several harmful factors simultaneously affect a worker at the workplace.

Observation on Paragraph 2

Federal Republic of Germany. Existing knowledge is not yet sufficiently advanced for criteria to be established for assessing the hazards that arise when several harmful factors simultaneously affect a worker at the workplace.

Office Commentary

The point made by the Government of the Federal Republic of Germany is relevant, but it can be hoped that rapid progress will be made in this respect. For this reason, the provision refers to the revision of criteria and limits. There being no other observations, the text of this Paragraph remains unchanged.

3. (1) The competent authority should prescribe the nature, frequency and other conditions of monitoring of air pollution, noise and vibration in the working environment to be carried out on the employer’s responsibility.

(2) Special monitoring in relation to the exposure limits referred to in Article 8 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should be undertaken in the working environment whenever machinery or installations are first put into use and whenever they are significantly modified.

Observations on Paragraph 3

Australia. See the observation on Article 4 of the Convention. Not enough data are available on vibration.

Austria. Subparagraph (1) should provide only that the competent authority must make the employer responsible for monitoring the factors referred to and the nature and frequency of exposure to the hazard. In subparagraph (2), it would seem sufficient to insist on the monitoring of machinery and installations that expose workers to the hazards in question.

Belgium. At the end of subparagraph (2), add the words “or new processes are introduced”.

Cyprus. In subparagraph (2), after the words “machinery or installations”, add “process or method of work”.

Office Commentary

As regards subparagraph (1) the Government of Austria would like the employer to be left free to organise the monitoring in whatever way he deems fit. The Office feels that although, on the one hand, it would seem easier to adapt monitoring procedures to the different and sometimes changing situations in undertakings if the application of this provision were made suitably flexible, it might, on the other hand, result in
monitoring being haphazard and sometimes even inappropriate, with similar situations being monitored differently and the degree of hazard possibly being underestimated. The Office does not therefore intend, at this stage, to make any changes in the wording of subparagraph (1), although the Conference will decide whether or not it wishes to consider the matter.

As to subparagraph (2), it does not seem essential to add any further specifications as the Governments of Belgium and Cyprus propose. In fact, any change in the method of work normally entails a modification and adaptation of the machinery and installations, and this eventuality is already covered by the provision. The Office does not therefore intend, at this stage, to modify the text of subparagraph (2).

4. National laws or regulations should place upon the employer the duty to arrange for equipment used to monitor air pollution, noise and vibration in the working environment to be regularly inspected, maintained and calibrated.

Observations on Paragraph 4

Australia. See the observation on Paragraph 3.

Belgium. See under Article 4 of the proposed Convention. The reference to national laws or regulations should be deleted. The same observation applies to Paragraphs 6, 7, 9 and 10.

Sri Lanka. Equipment for environmental monitoring of pollutants, noise and vibration is not available locally nor is it within the means of the average industrial establishment.

United Kingdom. In this Paragraph and in Paragraphs 6, 7, 9, 10 and 25, the methods of achieving the objectives set out are specified as "national laws or regulations" but in Paragraph 26 the methods for applying the whole Recommendation are set out as "laws or regulations or any other methods consistent with national practice and conditions". Repetition and ambiguity could be avoided by placing dependence upon Paragraph 26 and removing from the other Paragraphs any reference to the method of achieving the objectives.

Office Commentary

As it did in the case of the proposed Convention, the Office has taken into account the observation regarding the references to national laws or regulations which occur in several Paragraphs of the proposed Recommendation. These references have been deleted wherever it has seemed appropriate to do so.

5. The workers and the inspection services should be afforded access to the records of the monitoring of the working environment and to the records of inspection, maintenance and calibration of apparatus and equipment used therefor.

Observation on Paragraph 5

Austria. The workers' representatives in the undertaking (works council) should be accorded the same rights as the workers themselves.
**Office Commentary**

The observation of the Government of Austria is similar to that made in connection with Article 7 of the proposed Convention, and the same commentary applies. There being no other observations, no change has been made in the text of this Paragraph.

6. National laws or regulations should provide that substances recognised as harmful by the competent authority and liable to be airborne in the working environment should, as far as possible, be replaced by less harmful or harmless substances.

**Observations on Paragraph 6**

*Netherlands.* The principle contained in this Paragraph is of a general nature. The Government therefore suggests that the words "substances recognised as harmful by the competent authority and" be replaced by "harmful substances".

*United Kingdom.* This Paragraph is too restrictive in that it only applies to substances "recognised as harmful by the competent authority". The implication is that employers do not need to take action until the competent authority has designated a substance as harmful. The Government considers that all substances which give rise to atmospheric pollution should be replaced by safer substitutes. The phrase "recognised as harmful by the competent authority and liable to be airborne in the working environment" should therefore be replaced by "which give rise to atmospheric pollution".

**Office Commentary**

The two observations on this Paragraph emphasise the difficulty for the competent authority of drawing up and maintaining lists of harmful substances liable to be airborne in the working environment and which should therefore be replaced.

The Office recognises that this objection is relevant and that it draws attention to a difficulty that could be a serious obstacle to the application of the provisions of the Recommendation, owing mainly to the possible rigidity of the administrative procedure for drawing up and revising these lists. Furthermore, as the Government of the Netherlands points out, this provision should be more general and establish a greater distinction between the scope of the Recommendation and that of the Convention. Consequently, in addition to deleting the reference to "national laws and regulations" in accordance with the decision on Paragraph 4, the Office has made the necessary changes in the light of this observation, while referring at the same time to the definitions given in Article 3 of the proposed Convention. The beginning of this paragraph now reads as follows: "Substances which are harmful to health or otherwise dangerous and which are . . .".

7. National laws or regulations should provide that processes involving air pollution, noise or vibration in the working environment which exceed the limits referred to in Article 8 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should be replaced as far as possible by processes not involving such air pollution, noise and vibration.
Observations on Paragraph 7

Belgium. See under Paragraph 4. The word *opérations* in the French text (English text: “processes”) suggests one stage in a manufacturing process and is therefore not general enough. Several factors should be covered, such as the nature of the source of the pollution, the manufacturing process, the operation and the adaptation of the installations (or of part of them) to the working environment.

Netherlands. This provision is of a general nature. The Government proposes that the words “which exceed the limits referred to in Article 8” should be replaced by “as defined in Article 3”.

United Kingdom. As it stands, this Paragraph adds very little to Article 9 of the proposed Convention, which provides that the exposure of workers should be kept within the limits specified in Article 8. The objective here should be to keep hazards to a minimum, even if the specified limits are not exceeded. It would therefore be preferable to omit the phrase “which exceeds the limits” and to replace the words “not involving such” by “involving less or no”.

Office Commentary

As regards the observation of the Government of Belgium, it should be noted that the word *opérations* is used in a general sense and is intended to cover the various factors referred to. Here again, as in the case of a similar observation concerning Article 9 of the proposed Convention, the danger of any kind of enumeration is that it will be incomplete and raise problems of definition that often have the effect of limiting the scope of the term which it is supposed to clarify. However, the Office has noticed that the term *opérations* used in this Paragraph is different from that employed in a similar sense in Article 12 of the proposed Convention. For consistency’s sake, and to bring the English and French texts closer together, the word *opérations* in the French text has been replaced by *procédés*, which is employed in Article 12 of the proposed Convention.

The observations of the Governments of the Netherlands and of the United Kingdom raise the fundamental issue of how far the obligations of a Convention and of a Recommendation extend. Obviously, as has constantly been proved in practice, the provisions of a Recommendation are often wider and more comprehensive than those defined in a Convention, the scope of which is sometimes restricted to certain specific points.

The Office therefore agrees with the two Governments about the scope of the Recommendation and with their desire to make a distinction between the two instruments in this respect. In addition to deleting the reference to “national laws or regulations”, and in the light of the definitions contained in Article 3 of the proposed Convention, Paragraph 7 has been modified as follows: the words “which exceed the limits referred to in Article 8” have been replaced by “as defined in Article 3” and the words “not involving such” have been replaced by “involving less or no”.

8. The competent authority should determine the substances of which the manufacture, supply or use in the working environment should be prohibited or made subject to its specific authorisation, requiring compliance with particular measures of prevention or protection.
Observations on Paragraph 8

Belgium. The word "importation" should be inserted before the word "manufacture".

United Kingdom. It is not clear whether the word "supply" could be extended to include importation. The Conference Committee was in agreement on the principle that importation should be covered by the Recommendation. It would therefore be preferable to insert the word "importation" after "manufacture".

Office Commentary

The point raised by the Governments of Belgium and of the United Kingdom regarding the inclusion of a reference to "importation" in this provision was discussed in Committee. It was felt that the word "supply" was sufficiently general to cover all aspects of the marketing or transfer in any manner of a product, and the decision as to whether or not to include the word "importation" in the Paragraph was referred to the Committee's Drafting Committee. The latter eventually decided that the term was not necessary and Paragraph 8, as worded above, was adopted by the Committee. The Office does not therefore feel it appropriate to propose any changes in the wording of the Paragraph at this stage.

9. (1) In appropriate cases the competent authority should approve standards for the emission levels of machinery and installations as regards air pollution, noise and vibration.

(2) National laws or regulations should require those standards to be attained as appropriate by—
(a) design; or
(b) built-in devices; or
(c) effective technical measures during installation.

(3) An obligation to ensure compliance with these standards should be placed on the manufacturer or the supplier of the machinery or installations.

Observations on Paragraph 9

Australia. Methods of implementation would include suitable noise rating of machines and their labelling, the setting of standards for various categories of machines, the specification of noise limits in tenders and contracts for machines, and the setting up of noise control committees in factories, etc. Compliance with subparagraph (3) would often be difficult to achieve in countries with a federal system.

Austria. The competent authority should be able not only to approve standards but also to establish them itself.

Belgium. See under Paragraph 4. Subparagraph (3) should be completed by a reference to the importer and installer.

German Democratic Republic. No instrument or process can be manufactured, supplied or used if it does not comply with the provisions of regulations on the protection of workers and on fire prevention. The manager of an undertaking must be able to produce a health and safety protection certificate and a fire prevention certificate duly approved by a quality control and protection committee.
Kuwait. The provisions of this Article have to do with the major principles of control. Although no machines are being produced at present in Kuwait, the application of these provisions could raise difficulties. Currently, such steps are taken in the course of the licensing of new factories. The machines and processes are licensed by the Occupational Health Section in the light of their probable emission levels.

Netherlands. The provisions of subparagraph (3) are not complete and, consequently, not clear. The obligation referred to in subparagraph (2) (a) will in actual practice always be placed on the manufacturer, but in the case of the obligations referred to in clauses (b) and (c) in the same subparagraph, several persons can be involved, including the builder of the plant where the machine is to be installed, the installer and the user of the machinery or equipment. It is open to question whether the Recommendation should deal with this problem so exhaustively. It might be preferable to delete subparagraph (3).

Sri Lanka. At the International Symposium on Impacts of Industrialisation and Ergonomics in Asia, held in Tokyo on 27 September 1976, it was suggested that action be taken to develop an international instrument prescribing that machinery exported to developing countries should conform at least to minimum safety and health standards prevailing in the country of manufacture. An instrument of this nature is necessary because the proposed Recommendation does not allow the competent authority of the country to take any action affecting the manufacturer.

United Kingdom. Subparagraph (1) refers to emission levels as regards air pollution. These emission levels depend on the way in which the machinery or installations are used and on the nature of the material being processed. It would be better to refer simply to emissions into either the working environment or the general environment. The obligation referred to in subparagraph (3) is already reflected in United Kingdom legislation, but its application has had to be restricted for practical reasons. Where the standard cannot be met, other methods of the kind specified in Paragraph 25 are needed. It would be desirable, therefore, in subparagraph (2), to insert the words “as far as possible” after “attained”. With regard to subparagraph (3), the notion of “importation” should be included, as was agreed by the Conference Committee in connection with Paragraph 8. The question of the dual responsibility of the supplier and of the employer in respect of the application of standards laid down by the competent authority does not raise serious problems. If a supplier fails to meet his obligations, the employer is still responsible for ensuring the safety of his workers.

Office Commentary

Subparagraph (1)

The Government of Austria would like the competent authority to be entitled to establish the relevant standards itself. In the opinion of the Office, the wording of this provision is not restrictive since the competent authority is required to approve standards, whether or not it has set them itself.

The Government of the United Kingdom would like the standards to apply to the working environment and not to the machinery and installations. However, there is reason to fear that such an approach would substantially restrict the effectiveness of
this provision and that it would in any case imply a major change in the standpoint from which it was drafted, that is to say essentially from that of the adoption of preventive measures by the suppliers of the machines. The Office does not consider it desirable at this stage to reword the Paragraph, although the Conference itself may decide to consider the matter.

Subparagraph (2)

The Government of the United Kingdom proposes that the words “as far as possible” should be included after “attained”, on the grounds that the application of this provision may come up against serious difficulties. It should be noted that, with the proposed new wording of this subparagraph, the deletion of the reference to national laws or regulations makes the provision more flexible than before; furthermore, what is involved here is a principle intended to serve as a guideline in the design of machinery and installations so that they can be operated in such a way as to conform to the standards of the instrument; finally, a similar proposal was considered by the Conference Committee during the discussion of this point (see Report IV (1), pages 25-26, paragraphs 104-106) but was discarded. For all these reasons, it would not seem appropriate at this stage to alter the text of the Paragraph along the lines suggested.

Subparagraph (3)

With regard to the proposal of the Governments of Belgium and of the United Kingdom to include a reference to the importer and installer, see the commentaries on a similar proposal in respect of Paragraph 8 above. It should also be noted that the Conference Committee discussed this point and eventually decided to mention only the manufacturer and supplier (see Report IV (1), page 26, paragraph 107).

In the opinion of the Government of the Netherlands, persons other than the manufacturer and supplier could be regarded as responsible for compliance with the standards, according to which of the methods listed in subparagraph (2) was used, and it suggests that it might be preferable to delete the subparagraph. However, the entire Paragraph deals with the technical standards to be met by the machinery or installations. By making the manufacturer or supplier responsible for compliance with these standards, the provision virtually poses the problem from the actual design stage of the machinery and serves as an incentive to those responsible for research to find technical solutions that are compatible with the relevant standards. As to the observation of the Government of Sri Lanka, the Guarding of Machinery Convention, 1963 (No. 119), and the corresponding Recommendation (No. 118) largely take into account the concern expressed by the Asian countries in so far as those instruments are applied there. Consequently, the Office does not consider it appropriate at this stage to make any changes in the wording of the Paragraph other than to delete the reference to national laws or regulations in subparagraph (2).

10. National laws or regulations should make the manufacture, supply or use of machines and installations which cannot for technical reasons meet the requirements of Paragraph 9 of this Recommendation subject, on prescribed conditions, to authorisation by the competent authority, requiring compliance with other appropriate technical or administrative protective measures.
Observations on Paragraph 10

Australia. The Government proposes that the Paragraph should be replaced by the following text: “Where the requirements of Paragraph 9 of this Recommendation cannot be met for technical reasons acceptable to the competent authority, national laws or regulations should require that approved measures are taken to provide protection against occupational hazards in the working environment due to air pollution, noise and vibration.” Moreover, the huge administrative structure that would have to be set up if Paragraph 10 were to be adhered to would be extremely costly.

German Democratic Republic. In respect of certain installations or of the emission of harmful substances, noise and vibration, the supervisory body can authorise temporary exceptions if the parties concerned apply supplementary protective measures. The application of these measures is controlled by the supervisory bodies.

Netherlands. The phrase “on prescribed conditions” is as obscure as the phrase “according to prescribed procedures” that appeared in Point 29 of the proposed Conclusions with a view to a Recommendation (see Report IV (1), page 42). In the opinion of the Government, the phrase should be deleted. On the other hand, the workers’ organisations are in favour of keeping the present wording.

United Kingdom. The proposed amendment to Paragraph 9 (2) above, together with Paragraph 25, would enable the competent authority to intervene in situations where such action was necessary, and this would be preferable to a blanket provision requiring intervention in every case. The Government therefore proposes that the words “on prescribed conditions” be replaced by “where appropriate”.

Office Commentary

The Government of Australia proposes a new wording for this Paragraph. In view of the implications of such a change, the Office does not consider it appropriate, at this stage, to substitute it for the existing text, although the Conference may decide to consider the matter during the second discussion.

The Governments of the Netherlands and of the United Kingdom propose, for different reasons, to delete or to replace the phrase “on prescribed conditions”. This matter was already discussed by the Conference Committee (see Report IV (1), page 26, paragraphs 109-110), and the present wording was eventually adopted. It does not seem appropriate at this stage to delete the Paragraph or to amend it along the lines suggested by the Government of the United Kingdom, the latter proposal being linked to an amendment to Paragraph 9 which has not been taken up at this point. Apart from the deletion of the reference to “national laws or regulations”, therefore, the text of this Paragraph remains unchanged.

13. The competent authority should, when necessary for the protection of the workers’ health, establish a procedure for the approval of personal protective equipment.

Observations on Paragraph 13

Belgium. The word “approval” should be replaced by the word “checking” since not all personal protective equipment should need to be approved.
United Kingdom. While it will sometimes be necessary to ensure that personal protective equipment meets standards of performance, it is unduly restrictive to require that in such cases the competent authority should institute a scheme of approval. It would be preferable to state the objectives and leave member States to achieve this by the processes included in Paragraph 26 (a).

Office Commentary

The Governments of Belgium and of the United Kingdom are against the idea of “approval” in this Paragraph and propose deleting it. It should be noted that according to the present wording the approval procedure is not required systematically for any type of personal protective equipment but that it is left to the competent authority to decide “when necessary” to establish such a procedure. This question was discussed by the Conference Committee, which set up a working party to draft a text in this respect. This text, as amended by the Committee, was adopted in its present form. It does not seem advisable at this stage to change it, though the Conference will decide whether it wishes to reconsider the matter.

14. In pursuance of Article 9, subparagraph (b), of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, the competent authority should, as appropriate, provide for or promote, in consultation with employers’ and workers’ organisations, the reduction of exposure through suitable systems or schedules of work organisation, including the reduction of working time without loss of pay.

Observation on Paragraph 14

Austria. A reduction of working time without loss of pay would amount to wage regulation, which—at least in Austria—would constitute inadmissible interference likely to restrict the right to bargain collectively of the organisations of employers and workers empowered to reach collective agreements.

Office Commentary

The observation of the Government of Austria refers to the current practice in that country as regards wage fixing. No other government has submitted observations on this Paragraph, which has therefore not been changed.

15. In prescribing measures for the prevention and control of air pollution, noise and vibration in the working environment, the competent authority should take account of the relationship between the protection of the working environment and the protection of the general environment.

Observation on Paragraph 15

Sri Lanka. This Paragraph implies the establishment of air pollution monitoring stations and the development of community noise protection criteria. If international aid is available in these areas, it would be possible to comply with this requirement.

Office Commentary

The observation of the Government of Sri Lanka refers to the difficulties that might be encountered by certain States in giving effect to this provision. There being
III. SUPERVISION OF THE HEALTH OF WORKERS

16. (1) The supervision of the health of workers provided for in Article 11 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should include, as determined by the competent authority—

(a) a pre-assignment medical examination;
(b) periodic medical examinations at suitable intervals;
(c) biological or other tests or investigations which may be necessary to control the degree of exposure and supervise the state of health of the worker concerned;
(d) medical examinations or biological or other tests or investigations after cessation of the assignment which, when medically indicated, should be carried out on a regular basis and over a prolonged period.

(2) The competent authority should require that the results of any such examinations or tests be made available to the worker, and at his request to his personal physician.

Observations on Paragraph 16

Austria. In so far as the expression “cessation of the assignment” in subparagraph (1) (d) implies the cessation of the employment relationship, it is not possible to prescribe medical examinations under the laws and regulations on the protection of workers. One must therefore consider whether the examinations mentioned in clause (d) should be provided for under the social security system. The wording of subparagraph (2) appears too wide in scope and should be modified to indicate that the competent authority may communicate the results of the examinations to the worker when this is in the latter’s interests.

France. The provision in subparagraph (1) (d) concerning the continuation of medical supervision after cessation of the assignment raises the problem of which authority would be responsible, particularly in the case of workers having left their country of employment. International agreements between national social security systems will no doubt have to be established on this matter in the future.

German Democratic Republic. The examinations referred to in this Paragraph are covered by laws and regulations, and the effects of harmful substances on workers for whom medical supervision is thus provided are subsequently followed up, at the end of their activities, by the state health services.

Kuwait. The Government has strong reservations regarding subparagraph (1) (d) since a large proportion of manpower in Kuwait is made up of migrants. In practice medical check-ups are provided for certain categories of workers at the termination of their employment. The workers are given a medical report and a note for their future employers regarding the type of exposure to which they have been subjected during their employment. Facilities for medical examinations or biological tests or investigations are made available and workers are encouraged to make use of these facilities during their stay in the country. Those away from the country may make use of the medical facilities in the new country but nothing has been organised in this connection.
Netherlands. As regards subparagraph (1) (d), the Government considers that, so long as the person concerned is still in paid employment, the employer may be obliged to ensure that the employee is examined periodically. This employer may be the person in whose firm the exposure referred to in Article 11 of the Convention took place (see also Paragraph 19 below) but it may also be a different employer. By means of a system of registration, as referred to in Paragraph 18 below, statutory provision can be made for this problem within the framework of the laws and regulations on preventive measures. If, however, the employee stops working, he alone is responsible for his state of health. His family doctor (see subparagraph (2)) may assist him. In this case the competent authority can do no more than to ensure that the necessary facilities are available so that the medical and other examinations referred to in subparagraph (1) (d) can take place. The workers' organisations are of the opinion that, since the harmful effects of certain substances will appear only after a long latency period, supervision of the workers' health should also include a periodic medical examination of all workers who have been exposed to harmful substances in a prior assignment, whether or not with the same employer. The cost of these periodic medical examinations should be borne by the employer responsible, through his negligence, for the exposure to dangerous substances.

Sweden. It is unlikely to be feasible for rules to be issued concerning examination after cessation of the assignment, as provided for in subparagraph (1) (d).

United Kingdom. In subparagraph (1) the expression "as determined by the competent authority" avoids any obligation to incorporate all four aspects of medical supervision which might not always be appropriate and will sometimes be extremely difficult, if not impossible, in practice. With regard to subparagraph (1) (d), there would be serious practical difficulties in carrying out medical examinations etc. over a prolonged period after cessation of the assignment. Most of these difficulties could be overcome by changing the wording to read "making available" such examinations. While employers might normally be expected to be given responsibility for continuing medical supervision, difficulties would arise in practice in such cases as when an employer ceases to operate. Such cases should be settled by the competent authority.

Office Commentary

Subparagraph (1)

The Government of Kuwait reserves its position with regard to this subparagraph since a large proportion of the labour force of the country is made up of migrants. The Government of the United Kingdom considers that, since this is a matter to be decided by the competent authority, it is not necessary for the text to specify the various types of examination to be carried out. It seems nevertheless that the aim of this subparagraph is to draw up a sort of model plan to be applied by countries so as to ensure the effective and systematic medical supervision of workers exposed to health hazards at a level of risk which makes the competent authority deem such supervision necessary. The subparagraph provides guidelines allowing both for effective supervision of the workers' state of health and for the keeping of comparable data for studying the harmfulness of working environments.
Moreover, in view of the variety of risks of exposure, the Conference Committee certainly seems to have emphasised the need to impart the necessary flexibility to this provision (see Report IV (1), pages 28-29, paragraph 124). This is what it had in mind in interpreting the expression *dans les cas déterminés*, in the French version, as applying both to the categories of workers and to the types of medical examination. It does not therefore seem advisable to delete these specific details from the paragraph. Most of the observations concern clause *(d)*, which prescribes the continuation of investigations after cessation of the assignment. Without going into detail over each observation, it is to be noted that two aspects in particular held the attention of the governments; the fact that these examinations seem to be compulsory ("should be carried out") and the manner of applying the provision. As regards the former point, reference is made to the difficulties that might arise in having these examinations carried out after cessation of the assignment, particularly in the case of migrant labour; the Governments of the Netherlands and of the United Kingdom suggest that the notion of these examinations being compulsory should be replaced by that of "making available" the medical facilities in question. As regards the latter point, the Governments of Austria and France consider that it will be possible to apply the provision only through the social security systems. It should be noted that the examinations are prescribed only in cases where they are found to be necessary for medical reasons, which may justify their being made compulsory. The Office realises that the application of this provision is likely to raise certain difficulties as regards organisation and administration but this is a new approach to the problem of protecting the health of workers who, because of their work, are exposed to particular hazards. Practical experiments are being carried out in certain countries with certain limited groups of workers exposed to the risk of cancer caused by chemical products and ionising radiation. This work will no doubt have to be extended to other types of risks and other groups of workers in so far as it is not technically possible to keep in check the aggressive agents dealt with in the proposed Recommendation. In view of the lengthy discussion of these questions which took place when the Conference Committee examined these points, and in view also of the agreement reached on the texts of this subparagraph, the Office does not consider it desirable to make any changes at this stage.

**Subparagraph (2)**

The Government of Austria would like the scope of this provision to be limited to cases in which the results of the examination justify the person concerned being informed. It should be noted that the question of informing workers of the results of the examinations they have undergone, in accordance with subparagraph (1), was the subject of amendments when this point was being considered by the Conference Committee, the present text being the outcome of this discussion. Consequently it does not seem advisable at this stage to make any changes.

18. (1) The competent authority should develop a system of records of the medical information obtained in pursuance of Paragraph 16 of this Recommendation and should determine the manner in which it is to operate. Provision should be made for the maintenance of such records for an appropriate period of time to assure their availability for epidemiological and other research.

(2) To the extent determined by the competent authority, the records should include information on occupational exposure to air pollution, noise and vibration in the working environment.
Observations on Paragraph 18

Australia. The Government suggests amending the first line of subparagraph (1) to read "The competent authority should develop or require to be developed a system of records . . .". Furthermore, in order to carry out meaningful surveys, medical examinations would have to be undertaken in some instances after the worker had left the undertaking. This should be made clear in Paragraphs 16 (1), 17 and 21 (3).

United Kingdom. The availability of medical information should be restricted to those who need to have access to it. The system of records and the manner of its operation would have to take account of the need to restrict access as well as making the medical information available.

Office Commentary

As regards the observation made by the Government of Australia, it should be emphasised that the developing of a system of records by the competent authority would tend to ensure uniformity of presentation of the data and facilitate their comparability. As to the necessity of continuing examinations after the worker has left the undertaking, this follows logically from the terms of Paragraph 16 (1) (d) "after cessation of the assignment".

The Government of the United Kingdom would like there to be some restriction on access to the information resulting from the medical examinations. This could probably be dealt with under the measures that would have to be taken by the competent authority regarding the storing and use of the information. Consequently no change is proposed to the text of this Paragraph at this stage.

19. Where continued assignment to work involving exposure to air pollution, to noise or to vibration is found to be medically inadvisable, every effort should be made, consistent with national practice and conditions, to provide the worker concerned with suitable alternative employment or to maintain his income through social security measures or otherwise.

Observations on Paragraph 19

Australia. The Government agrees with this provision in principle. Nevertheless, it finds the expression "to maintain his income" unduly restrictive and would like it replaced by "to provide some monetary allowance".

Libyan Arab Republic. The Government proposes deleting this Paragraph since it is difficult to maintain the same income through social security benefits, which are lower than normal wages.

Office Commentary

As regards the observation of the Government of Australia, it should be noted that the expression used in the text, "to maintain his income", also covers, according to the case, the monetary allowances to which the Government refers. The suggestion to delete the Paragraph, made by the Government of the Libyan Arab Republic, seems to stem from the system of allowances provided under this country’s social security scheme. There being no other observations on this Paragraph, the text remains unchanged in the proposed Recommendation.
IV. TRAINING, INFORMATION AND RESEARCH

21. (1) The competent authority should take measures to promote the training and information of all persons concerned with respect to the prevention and control of, and protection against, existing and potential occupational hazards in the working environment due to air pollution, noise and vibration.

(2) Workers' representatives should be informed and consulted in advance by the employer on projects, measures and decisions which are liable to have harmful consequences on the health of workers, in connection with air pollution, noise and vibration in the working environment.

(3) Before being assigned to work liable to involve exposure to hazards of air pollution, noise or vibration, workers should be informed by the employer of the hazards, of safety and health measures, and of possibilities of having recourse to medical services.

Observations on Paragraph 21

Federal Republic of Germany. In subparagraph (2), the word "consulted" should be replaced by "heard". See also the observation of the Government in connection with Article 5, paragraph 2, of the proposed Convention.

Hungary. The Government suggests adding the following provision to the proposed Recommendation: "The employer should provide the workers with training aiming at the prevention of occupational hazards in work time or out of it but at all times paying the average wage."

Office Commentary

The observation of the Federal Republic of Germany aims at specifying in subparagraph (2) that the workers' representatives referred to are from the undertaking. Furthermore, the Government once again raises the question whether the word "consulted" is really suitable for this provision. Similar observations were submitted by certain Governments in respect of Article 5 of the proposed Convention and reference should be made to the Office commentary on the subject. In particular, as regards the expression "workers' representatives", the Office proposes, in line with Article 5, paragraph 4, to change this to "Representatives of the workers of the undertaking".

As regards the observation of the Government of Hungary, it is to be noted that the method whereby the employer is responsible for training workers during working hours is one of the training possibilities characteristic of certain countries. By leaving it to the competent authority to take the necessary measures to ensure this training, it would seem that each country would be able to adopt the most suitable method. It is not proposed at this stage to introduce any changes in the wording of this Paragraph.

22. (1) The competent authority should promote, assist and stimulate research in the field of prevention and control of hazards in the working environment due to air pollution, noise and vibration, with the assistance, as appropriate, of international and national organisations, including employers' and workers' organisations.

(2) All concerned should be informed of the objectives and the results of such research.
Observation on Paragraph 22

Austria. It seems desirable to inform not only the persons concerned but also other interested circles of the objectives and results of the research. It is therefore proposed that subparagraph (2) should provide also for publication of the results.

Office Commentary

The Government of Austria would like subparagraph (2) to specify that the information derived from research in the areas covered by the instrument should be published. The present wording does not exclude the publication of these results. It does not therefore seem necessary, at this stage, to amend the text in question.

23. Employers’ and workers’ organisations should take positive action to carry out programmes of training and information with respect to the prevention and control of, and protection against, existing and potential occupational hazards in the working environment due to air pollution, noise and vibration.

Observation on Paragraph 23

Federal Republic of Germany. The wording of this provision obliges the employers’ and workers’ organisations themselves to set up training programmes in respect of protective measures. In the Federal Republic of Germany these tasks are normally entrusted to official services. The employers’ and workers’ organisations should be completely free to decide whether or not they wish to set up such programmes.

Office Commentary

The Government of the Federal Republic of Germany points out that employers’ and workers’ organisations should be free to decide how to run their educational programmes. It should be recalled that the Employers’ and Workers’ members of the Conference Committee did not express any reservations on this provision. Having received no other comments on the subject, the Office does not consider it advisable at this stage to propose amendments to this Paragraph.

24. Workers’ representatives in undertakings should have the facilities and necessary time to play an active role in respect of the prevention and control of, and the protection against, occupational hazards in the working environment due to air pollution, noise and vibration.

Observation on Paragraph 24

Federal Republic of Germany. See the observation on Article 5, paragraph 2, of the proposed Convention.

Office Commentary

The Government of the Federal Republic of Germany would like it to be possible to implement these provisions without being obliged to have recourse to laws or regulations. However, the references to laws or regulations which originally appeared in certain Paragraphs of the proposed Recommendation have been deleted. Application of the provisions of the Recommendation is thus governed by Paragraph 26,
which specifies other ways apart from laws and regulations. It does not therefore seem necessary to amend the text of Paragraph 24, which thus remains unchanged in the proposed Recommendation.

25. National laws or regulations should provide for such measures as are necessary to be taken to ensure that, in connection with the use at a workplace of a substance liable to be harmful to health or otherwise dangerous, adequate information is available on—
(a) the results of any relevant tests relating to the substance; and
(b) the conditions required to ensure that, when properly used, it is without danger to the health of workers.

Observations on Paragraph 25

Australia. It is felt that the use of the word “ensure” in clause (b) is too strong, for in occupational medicine it is rarely, if ever, possible to ensure that the use of a substance is without danger. The Government recommends the following alternatives: “ensure as far as practicable” or “take the best possible means to ensure”.

Hungary. The Government considers that a provision should be added to draw the attention of the International Labour Office and of member States to the exchange of information and experience on up-to-date equipment and modern machinery providing healthy working conditions; it should also encourage international cooperation in the field of health protection and accident prevention.

Office Commentary

The observation of the Government of Australia aims at rendering more flexible the statement implied in clause (b) that any substance can be used without risk if the preventive measures are properly used. This should indeed be the result of the application of the preventive measures the principles of which are laid down in the instrument. If, despite the application of these measures, hazards were to remain in respect of the use of a given substance, the provisions of Paragraph 8 would then apply.

The Government of Hungary would like to add a further provision calling for exchanges of information and co-operation on prevention at the international level. It would seem difficult to require member States which apply an international instrument to assume obligations that are generally the outcome of direct negotiations between countries on the basis of bilateral or multilateral agreements. For its part, the Office has already set up a system of information which seems to correspond to the Government’s wishes. This is the International Occupational Safety and Health Information Centre, which periodically publishes abstracts on the subject and, upon request, supplies lists of references or the texts of technical or medical articles on the subject from a large number of countries. The services provided by this Centre would certainly seem, on the whole, to correspond to the information needs referred to by the Government of Hungary.

V. MEASURES OF APPLICATION

27. In giving effect to the provisions of this Recommendation the competent authority should act in consultation with the most representative organisations of employers and workers concerned, and, as appropriate, manufacturers’ organisations.
Observations on Paragraph 27

Belgium. The end of the Paragraph should be amended to read “manufacturers’ and importers’ organisations”.

Sweden. See the observation under Article 5 of the proposed Convention. The words “in consultation” should be replaced by the words “after consultation”. In addition, suppliers (importers) should be mentioned after “manufacturers’ organisations”.

United Kingdom. As obligations are to be placed upon suppliers and importers, their organisations should also be included for consultation, as appropriate.

Office Commentary

The Governments of Belgium and the United Kingdom would like reference to be made also to other occupational categories. In this connection see the commentary on Paragraph 8.

The Government of Sweden reiterates the observations it made in respect of Article 5 of the proposed Convention. See the commentary in respect of this Article.

No change has been made at this stage to the wording of this Paragraph.

28. (1) The provisions of this Recommendation which relate to the design, manufacture and supply of machines and equipment to an approved standard should apply forthwith to newly manufactured machinery and equipment.

(2) The competent authority should, as soon as possible, specify time limits appropriate to their nature for the modification of existing machines and equipment.

Observations on Paragraph 28

Austria. Since changes in the construction of machinery and equipment may entail considerable expenditure, subparagraphs (1) and (2) should provide for a suitable transition period.

Cyprus. Application of the provision in subparagraph (2) will raise great difficulties. The time limits should correspond to the life of the machinery and equipment now in service.

Office Commentary

The observations of the Governments of Austria and of Cyprus relate to the time limits to be granted for modifying machinery. It should be noted that the competent authority is given full freedom to specify these time limits so as to take account of the various factors involved, including those mentioned by the two Governments.

There being no other observations, no change has been made to the wording of this Paragraph.
PROPOSED TEXTS
The following are the English versions of (A) the proposed Convention concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration and (B) the proposed Recommendation concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration, which are submitted as a basis for discussion of the fourth item on the agenda of the 63rd Session of the Conference.

A. Proposed Convention concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration

The General Conference of the International Labour Organisation,
Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Sixty-third Session on 1 June 1977, and
Noting the terms of existing international labour Conventions and Recommendations which are relevant and, in particular, the Protection of Workers’ Health Recommendation, 1953, the Occupational Health Services Recommendation, 1959, the Radiation Protection Convention and Recommendation, 1960, the Guarding of Machinery Convention and Recommendation, 1963, the Employment Injury Benefits Convention, 1964, the Hygiene (Commerce and Offices) Convention and Recommendation, 1964, the Benzene Convention and Recommendation, 1971, and the Occupational Cancer Convention and Recommendation, 1974, and

Having decided upon the adoption of certain proposals with regard to working environment: atmospheric pollution, noise and vibration, which is the fourth item on the agenda of the session, and

Having determined that these proposals shall take the form of an international Convention,

adopts this day of June of the year one thousand nine hundred and seventy-seven the following Convention, which may be cited as the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977:

PART I. SCOPE AND DEFINITIONS

Article 1

1. This Convention applies to all sectors of economic activity.
A. Projet de convention concernant la protection des travailleurs
contre les risques professionnels dus à la pollution de l’air,
au bruit et aux vibrations sur les lieux de travail

La Conférence générale de l’Organisation internationale du Travail,
Convoquée à Genève par le Conseil d’administration du Bureau international du
Travail, et s’y étant réunie le 1er juin 1977, en sa soixantième session;
Notant les conventions et recommandations internationales pertinentes, et
notamment la recommandation sur la protection de la santé des travail­
leurs, 1953; la recommandation sur les services de médecine du travail, 1959; la convention et la recommandation sur la protection contre les radia­
tions, 1960; la convention et la recommandation sur la protection des machines, 1963; la convention sur les prestations en cas d’accidents du travail et de maladies professionnelles, 1964; la convention et la recom­
mandation sur l’hygiène (commerce et bureaux), 1964; la convention et la recom­
mandation sur le benzène, 1971, et la convention et la recomman­
dation sur le cancer professionnel, 1974;
Après avoir décidé d’adopter diverses propositions relatives au milieu de travail:
pollution atmosphérique, bruit et vibrations, question qui constitue le qua­
trième point à l’ordre du jour de la session;
Après avoir décidé que ces propositions prendraient la forme d’une convention
internationale,
adopte, ce jour de juin mil neuf cent soixante-dix-sept, la convention ci­
après, qui sera dénommée Convention sur le milieu de travail (pollution de l’air,
bruit et vibrations), 1977.

Partie I. Champ d’application et définitions

Article 1

1. La présente convention s’applique à tous les secteurs d’activité économique.
2. A Member ratifying this Convention may, after consultation with the representative organisations of employers and workers concerned, where such exist, exclude from the application of the Convention particular sectors or branches of economic activity in respect of which special problems of a substantial nature arise.

3. Each Member which ratifies this Convention shall list in the first report on the application of the Convention submitted under article 22 of the Constitution of the International Labour Organization any categories which may have been excluded in pursuance of paragraph 2 of this Article, giving the reasons for such exclusion, and shall state in subsequent reports the position of its law and practice in respect of the categories excluded, and the extent to which effect has been given or is proposed to be given to the Convention in respect of such categories.

**Article 2**

1. Each Member may accept the obligations of this Convention separately—

(a) in respect of air pollution;

(b) in respect of noise;

(c) in respect of vibration.

2. Each Member shall specify in its ratification in respect of which of the categories of hazards it accepts the obligations of the Convention.

3. Each Member which has not on ratification accepted the obligations of this Convention in respect of all the categories of hazards shall subsequently, when it is satisfied that conditions permit this, notify the Director-General of the International Labour Office that it accepts the obligations of the Convention in respect of a category or categories previously excluded.

**Article 3**

For the purpose of this Convention—

(a) the term “air pollution” covers all air contaminated by substances, whatever their physical state, which are harmful to health or otherwise dangerous;

(b) the term “noise” covers all sound which can result in hearing impairment or be harmful to health or otherwise dangerous;

(c) the term “vibration” covers any vibration which is transmitted to the human body through solid structures and is harmful to health or otherwise dangerous.

**PART II. GENERAL PROVISIONS**

**Article 4**

1. National laws or regulations shall prescribe that, as appropriate, measures be taken for the prevention and control of, and protection against, occupational hazards in the working environment due to air pollution, noise and vibration.
2. Tout Membre qui ratifie la présente convention peut, après consultation des organisations représentatives des employeurs et des travailleurs intéressées, s'il en existe, exclure de l'application de la convention des secteurs ou branches particuliers de l'activité économique lorsque cette application soulève des difficultés particulières.

3. Tout Membre qui ratifie la convention devra, dans le premier rapport sur l'application de celle-ci qu'il est tenu de présenter en vertu de l'article 22 de la Constitution de l'Organisation internationale du Travail, indiquer, avec motifs à l'appui, les catégories qui ont été l'objet d'une exclusion en application du paragraphe 2 du présent article et exposer, dans les rapports ultérieurs, l'état de sa législation et de sa pratique quant auxdites catégories, en précisant dans quelle mesure il a été donné effet ou il est proposé de donner effet à la convention en ce qui concerne les catégories en question.

Article 2

1. Tout Membre peut accepter les obligations prévues par la présente convention séparément:
   a) en ce qui concerne la pollution de l'air;
   b) en ce qui concerne le bruit;
   c) en ce qui concerne les vibrations.

2. Tout Membre devra spécifier dans son instrument de ratification les catégories de risques pour lesquelles il accepte les obligations prévues par la convention.

3. Tout Membre qui n'a pas, lors de sa ratification, accepté les obligations prévues par la présente convention pour toutes les catégories de risques devra, par la suite, lorsqu'il estimera que les circonstances le permettent, informer le Directeur général du Bureau international du Travail qu'il accepte les obligations prévues par la convention à l'égard d'une ou plusieurs catégories précédemment exclues de son acceptation.

Article 3

Aux fins de la présente convention:

a) l'expression « pollution de l'air » vise tout air contaminé par des substances qui sont nocives pour la santé ou dangereuses à d'autres égards, quel que soit leur état physique;

b) le terme « bruit » vise tout son qui peut entraîner une perte d'audition ou être nocif pour la santé ou dangereux à d'autres égards;

c) le terme « vibrations » vise toutes vibrations transmises au corps humain par des structures solides et qui sont nocives pour la santé ou dangereuses à d'autres égards.

Partie II. Dispositions générales

Article 4

1. La législation nationale devra prescrire que, dans les cas appropriés, des mesures seront prises sur les lieux de travail pour prévenir les risques professionnels dus à la pollution de l'air, au bruit et aux vibrations, les limiter et protéger les travailleurs contre ces risques.
2. Provisions on the practical implementation of the measures so prescribed may be adopted through technical standards, codes of practice and other appropriate methods.

**Article 5**

1. In giving effect to the provisions of this Convention, the competent authority shall act in consultation with the most representative organisations of employers and workers concerned.

2. Representatives of employers and workers shall be associated with the elaboration of provisions on the practical implementation of the measures prescribed in pursuance of Article 4.

3. Provision shall be made for as close a collaboration as possible at all levels between employers and workers in the application of the measures prescribed in pursuance of this Convention.

4. Representatives of the employer and representatives of the workers of the undertaking shall have the opportunity to accompany inspectors supervising the application of the measures prescribed in pursuance of this Convention, unless the inspectors consider that this may be prejudicial to the performance of their duties.

**Article 6**

1. Employers shall be made responsible for compliance with the prescribed measures.

2. Without prejudice to the responsibility of each employer for the health and safety of his employees, employers shall be encouraged to collaborate in obtaining the desired standards whenever two or more of them undertake activities simultaneously at one workplace.

**Article 7**

1. Workers shall be required to comply with safety procedures relating to the prevention and control of, and protection against, occupational hazards due to air pollution, noise and vibration in the working environment.

2. Workers shall have the right to present proposals, to obtain information and training and to appeal to appropriate bodies so as to ensure protection against occupational hazards due to air pollution, noise and vibration in the working environment.

**PART III. PREVENTIVE AND PROTECTIVE MEASURES**

**Article 8**

1. The competent authority shall establish criteria for determining the hazards of exposure to air pollution, noise and vibration in the working environment and, where appropriate, shall specify limits on the basis of these criteria.
2. Les modalités d’application des mesures prescrites pourront être adoptées par voie de normes techniques, de recueils de directives pratiques ou par d’autres voies appropriées.

Article 5
1. En donnant effet aux dispositions de la présente convention, l’autorité compétente devra agir en consultation avec les organisations les plus représentatives d’employeurs et de travailleurs intéressées.
3. Une collaboration aussi étroite que possible devra être instituée à tous les niveaux entre employeurs et travailleurs pour l’application des mesures prescrites en vertu de la présente convention.
4. Des représentants de l’employeur et des travailleurs de l’entreprise devront avoir la possibilité d’accompagner les inspecteurs lorsqu’ils contrôlent l’application des mesures prescrites en vertu de la présente convention, à moins que l’inspecteur n’estime que cela risque de porter préjudice à l’efficacité du contrôle.

Article 6
1. Les employeurs seront tenus d’appliquer les mesures prescrites.
2. Sans préjudice de la responsabilité de chaque employeur à l’égard de la santé et de la sécurité des travailleurs qu’il emploie, les employeurs devront être encouragés à collaborer pour atteindre les normes souhaitées chaque fois que plusieurs d’entre eux se livrent simultanément à des activités sur un même lieu de travail.

Article 7
1. Les travailleurs seront tenus de respecter les consignes de sécurité destinées à prévenir les risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail, à les limiter et à assurer la protection contre ces risques.
2. Les travailleurs auront le droit de présenter des propositions, d’obtenir des informations et une formation et de recourir à l’instance appropriée pour assurer leur protection contre les risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail.

Partie III. Mesures de prévention et de protection

Article 8
1. L’autorité compétente devra fixer les critères permettant de définir les risques d’exposition à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail et, le cas échéant, devra préciser, sur la base de ces critères, les limites d’exposition.
2. In the elaboration of the criteria and the determination of the exposure limits the competent authority shall take into account the opinion of technically competent persons nominated by the most representative organisations of employers and workers concerned.

3. The criteria and exposure limits shall be established, supplemented and revised regularly in the light of current knowledge and data.

Article 9

The exposure of workers to air pollution, to noise and to vibration in the working environment shall be kept within the limits referred to in Article 8—

(a) by technical measures;

(b) by supplementary administrative measures, where the technical measures alone do not provide sufficient protection.

Article 10

1. In taking the measures required by Article 9, priority shall be given to the prevention of occupational hazards in the working environment due to air pollution, noise and vibration.

2. Where such measures do not make it possible to bring air pollution, noise and vibration within the limits referred to in Article 8—

(a) the employer shall supply workers with suitable personal protective equipment and shall maintain that equipment;

(b) the employer shall provide appropriate training in the use and maintenance of such equipment, so that workers can comply with relevant instructions; and

(c) no worker shall be required or allowed to work without such protective equipment.

Article 11

1. There shall be supervision at suitable intervals, on conditions and in circumstances determined by the competent authority, of the health of workers exposed or liable to be exposed to occupational hazards due to air pollution, noise or vibration in the working environment.

2. The supervision provided for in paragraph 1 of this Article shall be free of cost to the worker concerned.

Article 12

The use of processes to be specified by the competent authority, which involve exposure of workers to occupational hazards in the working environment due to air pollution, noise or vibration, shall be notified to the competent authority and the competent authority, as appropriate, may authorise the use on prescribed conditions or prohibit it.
2. Lors de l’élaboration des critères et de la détermination des limites d’exposition, l’autorité compétente devra prendre en considération l’avis de personnes qualifiées du point de vue technique, nommées par les organisations les plus représentatives d’employeurs et de travailleurs intéressées.

3. Les critères et les limites d’exposition devront être fixés, complétés et révisés à des intervalles réguliers à la lumière des connaissances et des données nouvelles.

**Article 9**

L’exposition des travailleurs à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail devra rester dans les limites visées à l’article 8:

a) grâce à des mesures techniques;

b) grâce à des mesures administratives complémentaires, lorsque les mesures techniques ne permettent pas de réaliser une protection suffisante.

**Article 10**

1. En prenant les mesures requises par l’article 9, priorité devra être donnée à la prévention des risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail.

2. Lorsque de telles mesures ne permettent pas de ramener la pollution de l’air, le bruit et les vibrations aux limites visées à l’article 8:

a) l’employeur devra fournir aux travailleurs un équipement approprié de protection individuelle et devra entretenir cet équipement;

b) l’employeur devra dispenser aux travailleurs une formation appropriée relative à l’utilisation et à l’entretien de cet équipement, de sorte qu’ils puissent se conformer aux instructions données à cet égard;

c) aucun travailleur ne devra être obligé ni autorisé à travailler sans cet équipement de protection.

**Article 11**

1. L’état de santé des travailleurs exposés ou susceptibles d’être exposés aux risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail devra être soumis à une surveillance, à des intervalles appropriés, dans les circonstances et conformément aux modalités fixées par l’autorité compétente.

2. La surveillance prévue au paragraphe 1 du présent article ne devra entraîner aucune dépense pour le travailleur intéressé.

**Article 12**

La mise en œuvre de procédés — spécifiés par l’autorité compétente — entraînant l’exposition de travailleurs aux risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail devra être notifiée à l’autorité compétente et cette autorité pourra, le cas échéant, l’autoriser selon des modalités déterminées ou l’interdire.
Article 13

All persons concerned shall be adequately—

(a) informed of potential occupational hazards in the working environment due to air pollution, noise and vibration; and

(b) instructed in the measures available for the prevention and control of, and protection against, those hazards.

Article 14

Measures taking account of national conditions and resources shall be taken to promote research in the field of prevention and control of hazards in the working environment due to air pollution, noise and vibration.

PART IV. MEASURES OF APPLICATION

Article 15

On conditions and in circumstances determined by the competent authority, the employer shall be required to appoint a competent person, or use a competent outside service or service common to several undertakings, to deal with matters pertaining to the prevention and control of air pollution, noise and vibration in the working environment.

Article 16

Each Member shall—

(a) by laws or regulations or any other method consistent with national practice and conditions take such steps, including the provision of appropriate penalties, as may be necessary to give effect to the provisions of this Convention;

(b) provide appropriate inspection services for the purpose of supervising the application of the provisions of this Convention, or satisfy itself that appropriate inspection is carried out.

B. Proposed Recommendation concerning the Protection of Workers against Occupational Hazards in the Working Environment Due to Air Pollution, Noise and Vibration

The General Conference of the International Labour Organisation,
Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Sixty-third Session on 1 June 1977, and

Noting the terms of existing international labour Conventions and Recommendations which are relevant, and, in particular, the Protection of Workers'
Article 13

Toutes les personnes intéressées :

a) devront être informées de manière adéquate des risques professionnels susceptibles de se présenter sur les lieux de travail du fait de la pollution de l'air, du bruit et des vibrations ;

b) devront également avoir reçu des instructions adéquates quant aux moyens disponibles pour prévenir ces risques, les limiter et protéger les travailleurs contre ces risques.

Article 14

Des mesures, tenant compte des conditions et des ressources nationales, devront être prises pour promouvoir la recherche dans le domaine de la prévention et de la limitation des risques dus à la pollution de l'air, au bruit et aux vibrations sur les lieux de travail.

Partie IV. Mesures d'application

Article 15

Selon les modalités et dans les circonstances fixées par l'autorité compétente, l'employeur devra être tenu de désigner une personne compétente, ou avoir recours à un service compétent extérieur ou commun à plusieurs entreprises, pour s'occuper des questions de prévention et de limitation de la pollution de l'air, du bruit et des vibrations sur les lieux de travail.

Article 16

Chaque Membre devra :

a) prendre, par voie de législation ou par toute autre méthode conforme à la pratique et aux conditions nationales, les mesures nécessaires, y compris l'adoption de sanctions appropriées, pour donner effet aux dispositions de la convention ;

b) charger des services d'inspection appropriés du contrôle de l'application des dispositions de la convention ou vérifier qu'une inspection adéquate est assurée.

B. Projet de recommandation concernant la protection des travailleurs contre les risques professionnels dus à la pollution de l'air, au bruit et aux vibrations sur les lieux de travail

La Conférence générale de l'Organisation internationale du Travail, convoquée à Genève par le Conseil d'administration du Bureau international du Travail, et s'y étant réunie le 1er juin 1977, en sa soixante-troisième session ;

Notant les conventions et recommandations internationales pertinentes, et notamment la recommandation sur la protection de la santé des travail-

Having decided upon the adoption of certain proposals with regard to working environment: atmospheric pollution, noise and vibration, which is the fourth item on the agenda of the session, and

Having determined that these proposals shall take the form of a Recommendation supplementing the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977,

adopts this day of June of the year one thousand nine hundred and seventy-seven the following Recommendation, which may be cited as the Working Environment (Air Pollution, Noise and Vibration) Recommendation, 1977:

I. SCOPE

1. (1) To the greatest extent possible, the provisions of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, and of this Recommendation should be applied to all sectors of economic activity.

(2) Measures should be taken to give self-employed persons protection in the working environment analogous to that provided for in the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, and in this Recommendation.

II. PREVENTIVE AND PROTECTIVE MEASURES

2. When the criteria and limits referred to in Article 8 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, are established and revised, account should be taken of the possible increase in occupational hazards where several harmful factors simultaneously affect a worker at the workplace.

3. (1) The competent authority should prescribe the nature, frequency and other conditions of monitoring of air pollution, noise and vibration in the working environment to be carried out on the employer's responsibility.

(2) Special monitoring in relation to the exposure limits referred to in Article 8 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should be undertaken in the working environment whenever machinery or installations are first put into use and whenever they are significantly modified.

Après avoir décidé d'adopter diverses propositions relatives au milieu du travail: pollution atmosphérique, bruit et vibrations, question qui constitue le troisième point à l'ordre du jour de la session;

Après avoir décidé que ces propositions prendraient la forme d'une recommandation complétant la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977,

adopte, ce jour de juin mil neuf cent soixante-dix-sept, la recommandation ci-après, qui sera dénommée Recommandation sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977.

I. CHAMP D'APPLICATION

1. (1) Dans la mesure du possible, les dispositions de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, et de la présente recommandation devraient s'appliquer à tous les secteurs d'activité économique.

(2) Des mesures devraient être prises pour assurer aux travailleurs indépendants, sur les lieux de travail, une protection analogue à celle prévue dans la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, et dans la présente recommandation.

II. MESURES DE PRÉVENTION ET DE PROTECTION

2. Lors de la fixation et de la révision des critères et des limites mentionnés à l'article 8 de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, il conviendrait de tenir compte de l'accroissement éventuel des risques professionnels lorsque plusieurs facteurs nocifs affectent simultanément un travailleur sur les lieux de travail.

3. (1) L'autorité compétente devrait prescrire la nature, la fréquence et les autres modalités de la surveillance de la pollution de l'air, du bruit et des vibrations sur les lieux de travail, exécutée sous la responsabilité de l'employeur.

(2) Des contrôles spéciaux quant aux limites d'exposition spécifiées à l'article 8 de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, devraient être effectués sur les lieux de travail chaque fois que des machines ou des installations sont mises en service ou qu'elles ont subi des modifications importantes.
4. It should be the duty of the employer to arrange for equipment used to monitor air pollution, noise and vibration in the working environment to be regularly inspected, maintained and calibrated.

5. The workers and the inspection services should be afforded access to the records of the monitoring of the working environment and to the records of inspection, maintenance and calibration of apparatus and equipment used therefor.

6. Substances which are harmful to health or otherwise dangerous and which are liable to be airborne in the working environment should, as far as possible, be replaced by less harmful or harmless substances.

7. Processes involving air pollution, noise or vibration in the working environment as defined in Article 3 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should be replaced as far as possible by processes involving less or no air pollution, noise and vibration.

8. The competent authority should determine the substances of which the manufacture, supply or use in the working environment should be prohibited or made subject to its specific authorisation, requiring compliance with particular measures of prevention or protection.

9. (1) In appropriate cases the competent authority should approve standards for the emission levels of machinery and installations as regards air pollution, noise and vibration.

   (2) Those standards should be attained as appropriate by—

   (a) design; or

   (b) built-in devices; or

   (c) effective technical measures during installation.

   (3) An obligation to ensure compliance with these standards should be placed on the manufacturer or the supplier of the machinery or installations.

10. The manufacture, supply or use of machines and installations which cannot for technical reasons meet the requirements of Paragraph 9 of this Recommendation should be made subject, on prescribed conditions, to authorisation by the competent authority, requiring compliance with other appropriate technical or administrative protective measures.

11. The provisions of Paragraphs 9 and 10 of this Recommendation should not relieve the employer of his obligations in pursuance of Article 6 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977.

12. The employer should ensure the regular inspection and maintenance of machines and installations, with respect to the emission of harmful substances, dust, noise and vibration.

13. The competent authority should, when necessary for the protection of the workers' health, establish a procedure for the approval of personal protective equipment.
4. L'employeur devrait avoir l'obligation de veiller à ce que les appareils utilisés pour surveiller les niveaux de la pollution de l'air, de bruit et de vibrations sur les lieux de travail soient régulièrement vérifiés, entretenus et étalonnés.

5. Les dossiers relatifs à la surveillance du milieu de travail, ainsi qu'à la vérification, à l'entretien et à l'étalonnage des appareils et matériels utilisés à ces fins, devraient être ouverts aux travailleurs et aux services d'inspection.

6. Les substances nocives pour la santé ou dangereuses à d'autres égards et susceptibles d'être mises en suspension dans l'air sur les lieux de travail devraient dans la mesure du possible être remplacées par des substances moins nocives ou inoffensives.

7. Les opérations entraînant la pollution de l'air ou produisant du bruit ou des vibrations sur les lieux de travail tels que définis à l'article 3 de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, devraient, dans la mesure du possible, être remplacées par des opérations qui n'engendrent que peu ou pas de pollution de l'air, de bruit ou de vibrations.

8. L'autorité compétente devrait déterminer les substances dont la production, la mise en circulation ou l'utilisation sur les lieux de travail doivent être interdites ou soumises à une autorisation expresse de sa part, exigeant l'application de telles ou telles mesures de prévention ou de protection.

9. (1) Dans les cas appropriés, l'autorité compétente devrait approuver des normes pour les niveaux d'émission pour les machines et les installations en ce qui concerne la pollution de l'air, le bruit et les vibrations.

(2) Ces normes devraient être satisfaites, selon les cas, par:

a) la manière dont ces machines et installations sont conçues;

b) l'incorporation de dispositifs adéquats;

c) des mesures techniques efficaces au cours de l'installation.

(3) Obligation de satisfaire à ces normes devrait être faite au fabricant ou à celui qui met en circulation des machines ou des installations.

10. La fabrication, la mise en circulation ou l'utilisation de machines et installations qui ne pourraient pas, pour des raisons inhérentes à la technique, être conformes au paragraphe 9 devraient être soumises dans des conditions déterminées à une autorisation de l'autorité compétente exigeant l'application d'autres mesures de protection techniques ou administratives appropriées.

11. Les dispositions des paragraphes 9 et 10 ne devraient en aucune manière dispenser l'employeur de l'application de l'article 6 de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977.

12. L'employeur devrait veiller à ce que les machines et les installations fassent l'objet d'une vérification et d'un entretien réguliers quant à l'émission de substances nocives, de poussières, de bruit et de vibrations.

13. L'autorité compétente devrait, au besoin, fixer, pour protéger la santé des travailleurs, une procédure d'homologation des équipements de protection individuelle.
14. In pursuance of Article 9, subparagraph (b), of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, the competent authority should, as appropriate, provide for or promote, in consultation with employers' and workers' organisations, the reduction of exposure through suitable systems or schedules of work organisation, including the reduction of working time without loss of pay.

15. In prescribing measures for the prevention and control of air pollution, noise and vibration in the working environment, the competent authority should take account of the relationship between the protection of the working environment and the protection of the general environment.

III. SUPERVISION OF THE HEALTH OF WORKERS

16. (1) The supervision of the health of workers provided for in Article 11 of the Working Environment (Air Pollution, Noise and Vibration) Convention, 1977, should include, as determined by the competent authority—

(a) a pre-assignment medical examination;
(b) periodic medical examinations at suitable intervals;
(c) biological or other tests or investigations which may be necessary to control the degree of exposure and supervise the state of health of the worker concerned;
(d) medical examinations or biological or other tests or investigations after cessation of the assignment which, when medically indicated, should be carried out on a regular basis and over a prolonged period.

(2) The competent authority should require that the results of any such examinations or tests be made available to the worker, and at his request to his personal physician.

17. The supervision provided for in Paragraph 16 of this Recommendation should be carried out as far as possible in working hours and should be free of cost to the worker.

18. (1) The competent authority should develop a system of records of the medical information obtained in pursuance of Paragraph 16 of this Recommendation and should determine the manner in which it is to operate. Provision should be made for the maintenance of such records for an appropriate period of time to assure their availability for epidemiological and other research.

(2) To the extent determined by the competent authority, the records should include information on occupational exposure to air pollution, noise and vibration in the working environment.

19. Where continued assignment to work involving exposure to air pollution, to noise or to vibration is found to be medically inadvisable, every effort should be made, consistent with national practice and conditions, to provide the worker concerned with suitable alternative employment or to maintain his income through social security measures or otherwise.
14. En application de l'article 9, alinéa b), de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, l'autorité compétente devrait, le cas échéant, encourager ou prescrire, en consultation avec les organisations d'employeurs et de travailleurs, la réduction de l'exposition par l'application de systèmes ou de modes appropriés d'organisation du travail, y compris la réduction de la durée du travail sans perte de salaire.

15. En prescrivant des mesures de prévention et de limitation de la pollution de l'air, du bruit et des vibrations sur les lieux de travail, l'autorité compétente devrait tenir compte du lien qui existe entre la protection du milieu de travail et la protection de l'environnement général.

III. SURVEILLANCE DE L'ÉTAT DE SANTÉ DES TRAVAILLEURS

16. (1) La surveillance de l'état de santé prévue à l'article 11 de la convention sur le milieu de travail (pollution de l'air, bruit et vibrations), 1977, devrait comprendre, dans les cas déterminés par l'autorité compétente:

a) un examen médical préalable à l'affectation;

b) des examens périodiques à des intervalles appropriés;

c) des examens ou investigations d'ordre biologique ou autre nécessaires pour évaluer l'exposition du travailleur et surveiller son état de santé;

d) des examens médicaux, biologiques ou autres examens ou investigations après cessation de l'affectation qui, dans des cas justifiés du point de vue médical, devraient être effectués sur une base régulière et pendant une période prolongée.

(2) L'autorité compétente devrait exiger que les résultats de ces examens ou de ces investigations soient communiqués au travailleur et, si celui-ci le désire, à son médecin traitant.

17. La surveillance de l'état de santé prévue au paragraphe 16 de la présente recommandation devrait avoir lieu, autant que possible, pendant les heures de travail et ne pas entrainer de dépenses pour les travailleurs.

18. (1) L'autorité compétente devrait élaborer un système d'enregistrement des données médicales obtenues en application du paragraphe 16 de la présente recommandation et fixer les modalités de cet enregistrement. Des dispositions devraient être prises pour la conservation de ces données pendant une période appropriée afin qu'elles puissent être disponibles aux fins de recherches épidémiologiques et autres.

(2) Dans la mesure fixée par l'autorité compétente, l'enregistrement devrait porter sur les données concernant l'exposition des travailleurs à la pollution de l'air, au bruit et aux vibrations sur les lieux de travail.

19. Lorsque le maintien d'un travailleur à un poste qui implique l'exposition à la pollution de l'air, au bruit ou aux vibrations est déconseillé pour des raisons médicales, tous les moyens devraient être mis en œuvre, conformément à la pratique et aux conditions nationales, pour le muter à un autre emploi convenable ou pour lui assurer le maintien de son revenu par des prestations de sécurité sociale ou par toute autre méthode.
20. In implementing this Recommendation, the rights of workers under national social security or social insurance legislation should not be affected.

IV. TRAINING, INFORMATION AND RESEARCH

21. (1) The competent authority should take measures to promote the training and information of all persons concerned with respect to the prevention and control of, and protection against, existing and potential occupational hazards in the working environment due to air pollution, noise and vibration.

(2) Representatives of the workers of the undertaking should be informed and consulted in advance by the employer on projects, measures and decisions which are liable to have harmful consequences on the health of workers, in connection with air pollution, noise and vibration in the working environment.

(3) Before being assigned to work liable to involve exposure to hazards of air pollution, noise or vibration, workers should be informed by the employer of the hazards, of safety and health measures, and of possibilities of having recourse to medical services.

22. (1) The competent authority should promote, assist and stimulate research in the field of prevention and control of hazards in the working environment due to air pollution, noise and vibration, with the assistance, as appropriate, of international and national organisations, including employers’ and workers’ organisations.

(2) All concerned should be informed of the objectives and results of such research.

23. Employers’ and workers’ organisations should take positive action to carry out programmes of training and information with respect to the prevention and control of, and protection against, existing and potential occupational hazards in the working environment due to air pollution, noise and vibration.

24. Workers’ representatives in undertakings should have the facilities and necessary time to play an active role in respect of the prevention and control of, and the protection against, occupational hazards in the working environment due to air pollution, noise and vibration.

25. Such measures as are necessary should be taken to ensure that, in connection with the use at a workplace of a substance liable to be harmful to health or otherwise dangerous, adequate information is available on—

(a) the results of any relevant tests relating to the substance; and
(b) the conditions required to ensure that, when properly used, it is without danger to the health of workers.

IV. FORMATION, INFORMATION ET RECHERCHE

21. (1) L’autorité compétente devrait prendre des mesures pour promouvoir la formation et l’information de toutes les personnes intéressées en matière de prévention et de limitation des risques professionnels existants et potentiels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail ainsi qu’en matière de protection contre ces risques.

(2) Les représentants des travailleurs de l’entreprise devraient être informés et consultés préalablement par l’employeur sur les projets, mesures et décisions susceptibles d’avoir des conséquences nocives sur la santé des travailleurs en relation avec la pollution de l’air, le bruit et les vibrations sur les lieux de travail.

(3) Avant d’être affectés à un travail susceptible de les exposer à des risques de pollution de l'air, de bruit ou de vibrations, les travailleurs devraient être informés par l’employeur des risques, des mesures de sécurité et de protection de la santé, ainsi que des possibilités de recourir à l’intervention des services médicaux.

22. (1) L’autorité compétente devrait promouvoir, aider et stimuler la recherche en matière de prévention et de limitation des risques dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail, avec le concours, le cas échéant, des organisations internationales et nationales, y compris les organisations d’employeurs et de travailleurs.

(2) Toutes les parties intéressées devraient être informées des objectifs et des résultats des recherches.

23. Les organisations d’employeurs et de travailleurs devraient prendre des mesures concrètes pour mettre en œuvre des programmes d’information et de formation en matière de prévention et de limitation des risques professionnels existants et potentiels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail ainsi qu’en matière de protection contre ces risques.

24. Les représentants des travailleurs dans les entreprises devraient bénéficier des facilités et du temps nécessaires pour jouer un rôle actif en matière de prévention et de limitation des risques professionnels dus à la pollution de l’air, au bruit et aux vibrations sur les lieux de travail ainsi qu’en matière de protection contre ces risques.

25. Les dispositions nécessaires devraient être prises au sujet de toute substance, utilisée sur le lieu de travail, qui est susceptible d’être nocive pour la santé ou dangereuse à d’autres égards, pour que des informations adéquates soient disponibles en ce qui concerne :

a) les résultats de tous les essais pertinents la concernant;

b) les conditions requises pour que, correctement utilisée, elle soit sans danger pour la santé des travailleurs.
V. Measures of Application

26. Each Member should—

(a) by laws or regulations or any other method consistent with national practice and conditions take such steps, including the provision of appropriate penalties, as may be necessary to give effect to the provisions of this Recommendation;

(b) provide appropriate inspection services for the purpose of supervising the application of the provisions of this Recommendation, or satisfy itself that appropriate inspection is carried out;

(c) endeavour to do so as speedily as national conditions permit.

27. In giving effect to the provisions of this Recommendation the competent authority should act in consultation with the most representative organisations of employers and workers concerned, and, as appropriate, manufacturers' organisations.

28. (1) The provisions of this Recommendation which relate to the design, manufacture and supply of machines and equipment to an approved standard should apply forthwith to newly manufactured machinery and equipment.

(2) The competent authority should, as soon as possible, specify time limits appropriate to their nature for the modification of existing machines and equipment.
V. Mesures d'application

26. Chaque Membre devrait:

a) prendre, par voie de législation ou par toute autre méthode conforme à la pratique et aux conditions nationales, les mesures nécessaires, y compris l'adoption de sanctions appropriées pour donner effet aux dispositions de la présente recommandation;

b) charger des services d'inspection appropriés du contrôle de l'application des dispositions de la présente recommandation, ou vérifier qu'une inspection adéquate est assurée;

c) s'efforcer d'agir en ce sens aussi rapidement que les conditions nationales le permettent.

27. En donnant effet aux dispositions de la présente recommandation, l'autorité compétente devrait agir en consultation avec les organisations les plus représentatives d'employeurs et de travailleurs intéressées ainsi que, le cas échéant, des organisations de fabricants.

28. (1) Les dispositions de la présente recommandation concernant la conception, la construction et la mise en circulation de machines et de matériel répondant à une norme approuvée devraient être applicables immédiatement aux machines et aux matériels nouvellement construits.

(2) Aussitôt que possible, l'autorité compétente devrait spécifier des délais appropriés, tenant compte de la nature des machines ou des matériels, pour la modification des machines et des matériels existants.