

**Meeting of Experts on Safety and Health  
in Coal Mines**Geneva  
8-13 May 2006

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## Final report

### Introduction

1. At its 292nd Session (March 2005), the Governing Body decided to convene a Meeting of Experts on Safety and Health in Coal Mines. The Meeting was held in Geneva from 8 to 13 May 2006.
2. The agenda of the Meeting was to revise the existing code of practice on safety and health in coalmines and agree on follow-up action.

### Participants

3. Eight experts were appointed by the Governments of Australia, China, Germany, India, Poland, Russian Federation, South Africa and United States, eight after consultation with the Employers' group and eight after consultation with the Workers' group of the Governing Body. Twenty-three experts attended the Meeting.
4. Several observers also attended the Meeting representing: the International Confederation of Free Trade Unions; the International Federation of Chemical, Energy, Mine and General Workers' Unions and the International Organisation of Employers.
5. A list of participants is annexed to this report.

### Opening addresses

6. The Secretary-General of the Meeting, Ms. Johanna Walgrave, opened the Meeting, welcoming participants on behalf of the Director-General and the Executive Director of the Social Dialogue Sector. Coal was of great importance for many countries' economies, as it was the most widely used energy source in electricity generation and an essential input to most steel production. At the same time, coalmining, in particular underground coalmining, continued to be a dangerous occupation with numerous accidents resulting from the use of machines or explosives, geological peculiarities and dangers inherent to coal itself. The code of practice on safety and health in underground coalmines was not intended to replace national legislation nor accepted standards, but to provide valuable guidance to those engaged, through social dialogue, in the framing of relevant provisions and to elaborate programmes of prevention or protection at national or enterprise level. The wealth of expertise and practical experience available at the Meeting were essential for creating an

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instrument of use to all who have responsibility for safety and health management, both in the public and private sectors. The wide dissemination and implementation of such code of practice would further a safety culture to the benefit of the entire coalmining community.

7. The Chairperson of the Meeting, Ms. May Hermanus, welcomed the participants. The challenging task of the Meeting of Experts was to discuss and adopt a code of practice on safety and health in underground coalmines, which would become a helpful tool to prevent many of the deaths, accidents and illnesses occurring in coalmines worldwide. Following an overview of the contents of the draft code, she underlined the importance of the international composition of the Meeting, given that coal resources were widely distributed around the globe and coalmining took place under very different local conditions. Geographic balance would ensure that specific contexts of national or regional industries were taken into account and thus contribute to the success of the Meeting.
8. The Executive Secretary explained the background of the Meeting with reference to the decision of the Governing Body at its 292nd Session in March 2005. The reasons for such revision were changes in the industry, technological changes, societal changes and changes in the field of occupational safety and health policies. After giving examples of the innovations introduced in the text, the Executive Secretary provided the experts with a detailed commentary on the draft code. Attention was also drawn to the fact that the text built on several existing ILO instruments, such as the Safety and Health in Mines Convention, 1995 (No. 176), the Safety and Health in Mines Recommendation, 1995 (No. 183), the code of practice on safety and health in the iron and steel industry (2005) and, most prominently, the original code of practice on safety and health in coalmines (1986).

## General discussion

9. The Meeting generally agreed that the code did not purport to replace national laws and regulations but only to provide guidance.
10. The spokesperson for the Worker experts stated that, in the main, the draft text was acceptable to his group. Since guidance should, in particular, be provided for countries that sought assistance in preparing their relevant regulatory framework, the code should be globally applicable and not only speak to member States with advanced regulatory systems. Furthermore, the text should reference the principles contained in existing instruments, in order not to reopen debates on resolved issues. Attention should also be paid to the general duties of the parties concerned, which needed to be aligned with Convention No. 176. With regard to the technical content, the main concern was to lay down a set of minimum standards that would be workable and provide guidance internationally. A merely outcome-based instrument would not serve that purpose.
11. The spokesperson for the Employer experts stated that occupational safety and health in the mining industry was of utmost concern to his group. It should be acknowledged that, since 1986, the industry had undergone a substantial philosophical change in occupational safety and health management. This was reflected in Convention No. 176 and in the Guidelines on occupational safety and health management systems (2001), but was not sufficiently taken into account in the draft text. In recognition of the demonstrable improvements achieved, the code should provide guidance to sound occupational safety and health governance; describe the organization of occupational safety and health between regulators, employers and workers; specify the minimum occupational safety and health system requirements to be put in place; and identify the duties of workers with regard to health and safety. The Employer experts would prefer a higher-level document with its content covered in a series of guidance notes highlighting significant risks and setting minimum outcomes on issues such as engineering control, administrative controls, training, recording and notification,

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and monitoring. Moreover, the draft code would not improve occupational safety and health as long as it did not allow for an occupational safety and health systems approach and behavioural change of individuals.

12. The Government expert from the United States, speaking also on behalf of the other Government experts, recognized that the document was of more importance to countries that had only recently started to develop regulatory systems. The United States was ready to continue to provide assistance to countries in this respect. Given the significant increase in the use of contractors in the mining industry, the Government experts agreed that the issue of contractors and, in particular, the relationship employer-contractor needed to be addressed. The document should both be outcome-based and contain prescriptive provisions to ensure as a minimum occupational safety and health operations.
13. The Government expert from Germany recalled that technological and societal changes had been the rationale for redrafting the existing document. The main change that had occurred in occupational safety and health policy was to move away from prescriptive measures to more responsibility for the social partners. The present voluminous draft went against this trend.
14. The Government expert from Australia considered that the code should contain the basis for risk management, identify and enunciate the obligations of the parties concerned, and ensure that the introduction of new technologies should not be impeded by prescriptive measures.
15. A Government expert from South Africa found that the main objective was to set minimum standards. The document should also capture the impact of coalmines on neighbouring communities.
16. The Chairperson summarized the comments on the draft text submitted to the Office. Brazil had underlined the importance of issues such as mine fires, explosions, ventilation and emergency procedures. Germany had requested that the Guidelines on occupational safety and health management systems should be taken into account in Chapter 4. Finally, Poland had suggested that consideration be given to hazards related to rock bursts, roof falls and radiations.

## **Glossary**

17. The Meeting agreed that a definition was necessary for “small mines” and agreed to use the following one: “For the purposes of the code of practice, a small mine is a mine which employs few people with low levels of output and investment of capital or as defined by the competent authority.”
18. The Meeting agreed to delete the definitions of “asbestos” and “asbestos dust”, as these terms were not used in the code.
19. The Meeting agreed to delete the definition of “CPD” as the term was used only once in the code and was defined at that point.
20. The Meeting agreed that the term “employer” should have the same definition as that used in the Convention on Safety and Health in Mines, 1995 (No. 176), which stated that an employer was any physical or legal person who employed one or more workers in a mine and, as the context required, the operator, the principal contractor, contractor or subcontractor. The Meeting further decided to replace “manager” with “employer”, except in cases where a reference to “manager” was specifically called for.

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21. The Meeting amended the definition of goaf to read: “Goaf or gob: The parts of a mine from which the coal has already been removed with the intention of allowing the roof to collapse.”
  22. The Meeting agreed to delete the phrase “or where personal injury requires only first-aid treatment” from the definition of “incident”, in order to resolve an inconsistency between the definitions of “incident”, “occupational accident” and “occupational injury”.
  23. The Meeting decided to include the following definition of the term “manager”: “A competent and appointed person legally responsible for the management and technical direction of the mine whether he/she is the employer or a person appointed by the employer.”
  24. The Meeting agreed to delete the definition of “PMF” as the term was used only once in the code and was defined in the code.
  25. The Meeting decided to replace “supervisor” by “supervisory official” while retaining the definition.

## **1. General provisions**

26. In order to reflect the diversity of the underground coalmining industry, and to acknowledge that the code could not be assumed to comprehensively address every risk and hazard associated with such a diverse industry, the Meeting agreed to insert a new section 1.1, entitled “Background”. After further discussion and at the Employer experts’ suggestion, the Meeting decided to include in this section wording to underline that the practical recommendations of the code were not only intended for the use of the competent authority and the employer, but also of the workers. The section on “Objectives” became section 1.2, and the intent of paragraph 1.1.1 of that section was moved into the new “Background” section to form the new paragraph 1.1.6. Paragraph 2.1.3, as amended, became the new paragraph 1.1.1. The sections on “Application and purpose” and “Reference to other ILO instruments” were agreed upon and renumbered accordingly.

## **2. Industry characteristics**

### **2.1. Underground coalmining**

27. The spokesperson for the Employer experts suggested deleting the last phrase of paragraph 2.1.1, as it gave the incorrect impression that mining was often carried out in unsafe and unhealthy conditions and painted the mining industry in the worst possible light. The Government and Worker experts stated however, that this text correctly recognized the difference between modern mines with safe practices, and other mines that were unsafe and unhealthy. In addition, it was noted that the phrase in question referred only to mines that were dug by hand and where coal was extracted and transported by hand. After further discussion, the Meeting agreed to retain the phrase, but to delete the word “often”.
28. The Office noted that there had been an error in paragraph numbering and that the second paragraph 2.1.2 should be numbered 2.1.3, and would henceforth be referred to as such.
29. The spokesperson for the Employer experts stated that paragraph 2.1.2 should be deleted, as it was inaccurate and created the impression that mining was the worst possible industry. The Government and Worker experts agreed that the phrase “without disturbing the basic

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integrity of the surrounding strata” was inaccurate and could be deleted, however the rest of the paragraph was accurate and should be retained. At the suggestion of the Employer experts, the Meeting agreed to amend the first sentence of 2.1.2 to read “In underground mines the shape and size of the workplace, with no natural light or natural ventilation, changes on a continuous basis.” The phrase “if not properly controlled” was added at the end of the second sentence. In addition, the order of the two sentences was reversed to cast the paragraph in a more positive light.

30. The spokesperson for the Employer experts emphasized the need to change references in paragraph 2.1.3, which were “red flags” that did not necessarily reflect the facts of the industry at present and which cast the industry in a negative light. The code should seek to be forward-looking and reflect changing attitudes within the industry. The Government and Worker experts stated that the draft text was accurate and correctly reflected the fact that mining had historically been a high-risk activity. While the draft text provided a clear juxtaposition between historical events and subsequent improvements, recent events showed that there were still improvements to be made and these “red flags” were therefore appropriate. After further discussion, the Meeting agreed to amend the first sentence of 2.1.3 to read “Historically, underground coalmining has been one of the highest risk activities as far as the safety and health of the workforce are concerned.” In the second sentence, the words “Fortunately”, “massive” and “intensive” were deleted, as these were relative terms that did not add to the text. Finally, for reasons of clarity, the phrase “those in all stages of the coal chain” was replaced by “competent authorities, employers, workers and their representatives.”

## **2.2. Occupation hazards**

31. Paragraph 2.2.1 was agreed upon without changes.

## **Part I. National framework**

### **3. General duties**

#### **3.1. Cooperation**

32. Paragraph 3.1.1 was agreed upon without changes.
33. At the suggestion of the Employer experts, the Meeting agreed to amend the first sentence of paragraph 3.1.2 to read “... relating to the identification of hazards and the elimination or control of risks to safety ...”, as this was more modern language.
34. Paragraph 3.1.2(i) and (ii) were agreed upon without changes.
35. At the suggestion of the Worker experts, it was agreed to include the words “Manufacturers and” before “Suppliers”, in paragraph 3.1.2(iii), as manufacturers should also have the same obligations. At the suggestion of the Government experts, it was agreed to delete the word “unusual” before “hazards”, as this distinction was unnecessary.

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### **3.2. Competent authority**

- 36.** At the request of the Worker experts, the Office clarified that the text of this section was based on the code of practice on safety and health in the iron and steel industry. In that code, specific reference had not been made to the duties of Governments, as it was felt that such language would have been overly prescriptive. If the Meeting felt such a reference was necessary however, sections 2.1.1 and 2.1.2 of the 1986 code of practice on safety and health in coalmines could be used as a starting point.
- 37.** Clause 3.2.1(ii) was amended to read "... statutory provisions for the identification of hazards and the elimination or control of risks in the production ...", in keeping with the changes agreed upon in paragraph 3.1.2.
- 38.** At the suggestion of the Employer experts, the Meeting agreed to delete the word "approved" in paragraph 3.2.2, since it was not clear what body was approving these codes of practice and not all national legislation allowed the possibility of approving codes of practice. At the suggestion of the Worker experts, the paragraph was further amended to read "... procedures for consultation with and dissemination of information to employers, workers and their representatives".
- 39.** The Employer experts expressed concern that paragraph 3.2.3 was redundant, as it referred to issues already covered in the relevant ILO Conventions of chemical safety and classification. In order to ensure consistency the Meeting agreed to add the phrase "in accordance with the provisions of relevant ILO Conventions, and taking into account the need to harmonize such systems internationally" to paragraph 3.2.3. The reference to international harmonization in 3.2.3(iii) was thus deleted.
- 40.** Paragraph 3.2.4 was agreed upon without changes.
- 41.** The Meeting agreed to amend 3.2.5(i) to read "... certain hazardous practices, processes or substances ..." and 3.2.5(ii) to read "... before any such restricted practices, processes and substances ...", since workplace practices could be a different category.
- 42.** Paragraphs 3.2.5(iii) and 3.2.6 were agreed upon without changes.

### **3.3. Labour inspectorates**

- 43.** Concern was expressed by some Government and Employer experts that the title of section 3.3 could lead to confusion, as it was not clear what was meant by labour inspectorates. Although the glossary provided a definition, each State had the right to decide how to organize its inspection bodies. The Meeting agreed to make section 3.3 a subsection of 3.2 to show that "inspection" services derived their authority from the competent authority, but were a separate body.
- 44.** The Worker experts stated that in 3.3.1(a), enforcement should be one distinct concept and carrying out inspections and monitoring should be another distinct concept. Therefore these two elements belonged in two separate subparagraphs. The meeting therefore agreed that subparagraph (a) should read "enforce all relevant laws and regulations at underground coalmines" and a new subparagraph (b) should be inserted to read "periodically carry out inspections in the presence of the employers' and workers' representatives, and monitor compliance with all relevant laws and regulations at underground coalmines;". All subsequent subparagraphs were renumbered accordingly and agreed upon without any further changes.

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45. Paragraph 3.3.2(a) was agreed upon without changes.
  46. The Meeting agreed to change 3.3.2(b) for grammatical reasons to read "... findings of inspections and the required remedial action".
  47. Paragraph 3.3.2(c) and (d) were agreed upon without changes.
  48. At the suggestion of the Worker experts, the Meeting agreed to the addition of a new subparagraph (e) based on paragraph 5.2(e) of the Safety and Health in Mines Convention, 1995 (No. 176), to read "have the authority to suspend or restrict mining activities on safety and health grounds, until the condition giving rise to the suspension or restriction has been corrected".

### **3.4. Employers**

49. The Employer experts suggested amending the title of this section to read "Employers' responsibilities and rights" and to rework the section to reflect employers' responsibilities as laid out in the Safety and Health in Mines Convention, 1995 (No. 176). The Meeting agreed to this proposal.
50. The Meeting discussed the issue of contractors, within the context of employers' rights and responsibilities. Some experts thought that the definition of "employer" provided in the glossary did not fully reflect the manner in which mines operated today and this could lead to confusion in terms of accountability. The Employer experts clarified that there was no desire on the part of employers to derogate from their responsibilities; it was rather a question of how responsibility was delegated under national law. The Meeting agreed that the issue of contractors required further tripartite discussion and was too large an issue to be fully dealt with by this Meeting. The issue was flagged as one that required additional attention from the ILO.

### **3.5. Workers' duties and rights**

51. The Worker experts proposed changing the title of section 3.5 to read "Workers' rights and responsibilities" and to replace the text of section 3.5 with text adapted from Articles 13.1, 13.2, 13.5 and 14 of the Safety and Health in Mines Convention, 1995 (No. 176). The Meeting agreed to this proposal.

### **3.6. General responsibilities of suppliers, manufacturers and designers**

52. The Worker experts noted that, in paragraph 3.6.1(a), rather than satisfying themselves that machinery, equipment and substances did not entail safety and health dangers, suppliers, manufacturers and designers should "ensure" that this was the case. The Meeting agreed and "satisfy themselves" was replaced by "ensure".
53. At the suggestion of the Employer experts, the Meeting agreed to amend 3.6.1(b)(i) to read "information concerning their requirements for the correct installation and use ...".
54. The Meeting agreed to 3.6.1(b)(ii) without any changes.

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55. At the suggestion of the Employer experts, the Meeting agreed to amend 3.6.1(b)(iii) to read “information on how to eliminate or control risks arising from the identified hazards associated with the products”.

### **3.7. General responsibilities and rights of contractors**

56. The Worker experts expressed some concern that the title of this section was misguided as the section contained only the responsibilities of contractors, but not their rights. In the interest of equal treatment, however, the Meeting agreed to leave the heading unchanged.

57. The Meeting agreed to reword the end of paragraph 3.7.1(b) to read “... which should include provisions for identifying hazards and measures to eliminate and control the risks”.

58. At the suggestion of the Worker experts, the Meeting agreed to delete paragraph 3.7.2(d) as there was some concern about making reference to repeated violations of contractual obligations and it was felt this was a complex issue that was not fully reflected by this paragraph.

59. The remaining provisions of this section were agreed upon without changes.

## **4. Occupational safety and health management systems; reporting, recording and notification of work-related injuries and diseases, ill health and incidents; occupational health services**

### **4.1. Introduction**

60. Section 4.1 was agreed upon without changes.

### **4.2. OSH management systems**

61. At the suggestion of the Employer experts, the Office agreed to insert a reference in paragraph 4.2.1 to the online version of the ILO *Guidelines on occupational safety and health management systems, ILO-OSH 2001*, to ensure that the users of the code would have easy access to this document.

62. Paragraph 4.2.2(a) was agreed upon without changes.

63. In paragraph 4.2.2(b), the Meeting agreed to replace “executing” by “employer” since the term “executing organization” was not used or defined elsewhere in the code and could therefore be confusing.

64. The Meeting agreed to add a new paragraph (c) to read “worker participation”. The two subsequent paragraphs were renumbered accordingly and agreed upon without changes.



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### **4.3. Reporting, recording and notification of work-related injuries and diseases, ill health and incidents**

65. Paragraph 4.3.1 was agreed upon without changes.
66. The Government experts expressed concern that paragraph 4.3.2 did not indicate who should receive the reports, records and notifications of workplace injuries and diseases. For completeness and clarity, the code should provide guidance on where these reports were to be sent.
67. Following informal consultations, the Government experts proposed new text, to be inserted before paragraph 4.3.1, to read “It should be the obligation of the employer to notify the competent authority of all serious work-related injuries, diseases, ill health and incidents in a timely manner”. The Meeting agreed to this text, with the addition of the phrase “as specified by the competent authority” at the end, to address the Worker experts’ concerns on the ambiguity of the term “timely”.

### **4.4. Occupational health services**

68. Section 4.4 was agreed upon without changes.

## **Part II. Safe underground coalmining operations**

### **5. Industry-specific prevention and protection**

69. The spokesperson for the Employer experts stressed the need for consistency in the language used in the code. Throughout Chapter 5, various similar terms, such as “to the lowest practicable level by all appropriate means” or “as far as practicable”, were used to mean the same thing. These phrases needed to be standardized and should be replaced with “where practicable” in all relevant instances. Ultimately, the Meeting agreed that the standardized phrase to be used throughout the text would be “as far as practicable”.
70. The Government expert from Australia stated that the title “Isolation, substitution, engineering controls”, used several times in Chapter 5, should be changed to “Hazard control methods”. Following the principles of risk management, the levels of controls were applicable not only to the higher controls, but also to the lower controls, such as administrative controls and use of personal protective equipment (PPE). The Meeting agreed that this heading should be changed throughout the text. The Government expert from Australia also noted that an option for areas of control was missing in paragraph 5.2.2.3.2 and proposed adding a new clause to read “establish remote control systems”. The Meeting agreed to this proposal.
71. During its discussion of Chapter 5, the Employer experts noted that difficulties arose as a result of basing the text of this code on the code of practice on safety and health in the iron and steel industry, as not all the elements brought over from that code were relevant to the underground coalmining industry. In addition, Chapter 5 attempted to provide more detail than was practicable. The code should provide guidance to allow for repeated and

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continuous risk management. The draft text was not based on a risk-based systems approach however, and was not consistent with risk management.

- 72.** The Worker experts acknowledged that there might be some shortcomings in the draft text, but stated that it nonetheless contained crucial information. The Meeting should seek to remove obvious inaccuracies, but the text should be retained.
- 73.** Following informal consultations, the Meeting agreed that the code needed to accommodate the different approaches used in different countries. Over the past 25 years, there had been a shift to the risk identification and risk control approach. This approach was reflected in Annex I. However, for countries that used other approaches, the provisions in sections 5.2 to 5.5 remained valid. These sections could also be used as examples of how one might apply a risk management approach. Thus, as a way of ensuring continuity in the text, and to cover the diverse range of situations, the Meeting agreed that sections 5.2 to 5.5 should be moved to a new Chapter 6.
- 74.** As part of this shifting of text, certain additional changes were made. The title of Part II was changed to “Methodology for identifying hazards and addressing risks”. The title of Chapter 5 was changed to “Prevention and protection”. The title of section 5.1 was changed to “Industry-specific safety and health hazards”. The phrase “but are not limited to” was added to the end of paragraph 5.1.1(1). The remainder of paragraph 5.1.1(1) and all of paragraph 5.1.1(2) were agreed upon without changes. The text from Annex I was inserted as a new section 5.2, entitled “Hazard identification, risk assessment and control” and a new heading, “5.2.1 General principles”, was added.
- 75.** At the suggestion of the Employer experts, the Meeting agreed to create a new heading before Chapter 6: “Part III: Provisions for safe underground coalmining operations”. The spokesperson for the Employer experts also proposed new wording that would ensure a smooth transition from Part II to Part III. After several amendments, the Meeting agreed on the following text to be added at the end of Part II of the code: “Whilst the proper application of the hazard identification, risk assessment and control process should lead to acceptable safety and health outcomes, additional matters associated with the operation of an underground coalmine should be addressed. These are addressed in Part III of this code.” The concluding paragraph accommodated various concerns by only indirectly referring to HIRAC (hazard identification, risk assessment and control) and conceding that the process needed to be supplemented. Furthermore, the Meeting agreed to insert at the beginning of Part III the phrase “The following provisions are provided as a guideline for safe underground coalmining operations.” This introductory sentence would make clear that after qualifying the status of the code and introducing provisions on risk assessment, the intent was to provide guidelines on how to deal with a variety of hazards.

## **6. Surveyors and plans (new Chapter 15)**

- 76.** The Employer experts noted that Chapters 6 through 20 were very technical in nature. It would be difficult for the Meeting to agree on levels and values in those chapters that would be valid in all mining contexts. The Employer experts therefore proposed placing a new paragraph at the beginning of each chapter from Chapters 6 to 20, which would indicate that where laws and regulations did not contain prescription, that chapter would provide guidance.
- 77.** In addition, the Employer experts stated that some of these chapters followed a risk-based approach, while others took a more prescriptive approach. In order to acknowledge this difference in format and approach, it would be beneficial to place these two sets of chapters in separate sections. The Worker experts stated that reformulating certain chapter

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headings would better address this issue. Separating the chapters in the manner suggested by the Employer experts was not a straight-forward task, as certain chapters that used headings such as “hazard description” and “hazard control” actually contained fairly prescriptive language. The Government experts agreed that some chapters seemed to contain both approaches in a single chapter and thus trying to separate the chapters into two sections was not the best solution. Instead, the Government experts suggested leaving the text where it was, but developing introductory text that could contextualize the difference in approaches.

**78.** Following informal consultations, the Meeting agreed to insert the following lead-in paragraph at the beginning of each chapter that followed a prescriptive approach (Chapters 6, 7, 8, 9, 10, 11, 12, 15, 21, 22 and 23), with the bracketed text referring to the relevant chapter’s subject: “Where national laws, regulations and standards do not contain prescription or contain ineffective or outdated prescription as to [chapter heading], this chapter provides guidance. The provisions outlined in this chapter should be used in conjunction with the proper application of a hazard identification, risk assessment and control process.” The following lead-in paragraph was to be inserted at the beginning of each chapter that followed a risk-based approach (Chapters 13, 14, 16, 17, 18, 19, 20 and 24), with the bracketed text referring to the relevant chapter’s subject: “Where national laws, regulations and standards do not contain prescription or contain ineffective or outdated prescription as to [chapter heading], this chapter provides guidance. The provisions outlined in this chapter, which include some reference to a hazard identification, risk assessment and control process, should be used in conjunction with the proper application of such a process.” Finally, so as to give the code a logical order, the chapters of the code were reordered. The chapters that followed a risk-based approach were placed after Chapter 6 and renumbered as Chapters 7-14. The chapters that followed a prescriptive approach became Chapters 15-25.

**79.** Sections 6.1 and 6.2 were agreed upon without changes.

### **6.3. Plans: General**

**80.** At the suggestion of the Employer experts, the Meeting agreed to insert, in paragraph 6.3.4, the words “or plans” after “a plan”, as in case of large mines it would be difficult to include all escape routes on a single map.

### **6.4. Faulty plans**

**81.** In paragraph 6.4.1, the spokesperson for the Employer experts requested that, prior to the suspension or restriction of mining activities due to a deficient map, the mine operator be given the opportunity to correct the condition. The Meeting however decided to leave the language as is, since the detailed procedures to be followed by the competent authority were dealt with in national legislation, and it was not up to the Meeting to qualify the general powers of the competent authority.

**82.** Section 6.5 was agreed upon without changes.

### **6.6. Small mines**

**83.** At the suggestion of the Employer experts, the Meeting agreed to delete paragraph 6.6.1, as the term “small mines” was not defined in the code, and the risks of lacking or faulty plans were already catered for in section 6.

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## **7. Commencement and cessation of mining operations (new Chapter 16)**

### **7.1. Commencement and cessation of mining operations**

**84.** The Meeting decided that paragraph 6.3.6(2) had no linkage to mine plans and should be moved to the beginning of this section, thus becoming new paragraph 7.1.1.

**85.** Sections 7.2 and 7.3 were agreed upon without changes.

## **8. Means of access and egress, including hoisting of persons and material (new Chapter 17)**

### **8.1. Provision of means of access and egress**

**86.** After some discussion following a suggestion by the Employer experts, the Meeting agreed to replace “As far as reasonably practicable” in 8.1.3(1) with “Wherever practicable”.

**87.** The Employer experts suggested deleting paragraph 8.1.3(2), as it was not always possible to provide two main intake airways in the manner prescribed by the code. In addition, the issue was sufficiently covered in 8.1.3(3). The Government and Worker experts did not support this proposal. Providing two intake airways was sometimes difficult, but it was important to indicate that it was preferable. In cases where it was not possible, 8.1.3(3) provided flexibility and additional guidance. The Employer experts suggested that, rather than deleting 8.1.3(2), perhaps the phrase “where practicable” could be added. After further discussion, the Meeting ultimately decided to insert the phrase “as far as practicable in all mines” at the beginning of paragraph 8.1.3(1); to replace “new” by “all” in clause (2) and to use the term “as far as practicable” in clause (3).

**88.** The Meeting agreed to delete paragraph 8.1.11(b), as it did not add any value to the text.

## **9. Roads (new Chapter 18)**

**89.** Chapter 9 was agreed upon without changes.

## **10. Haulage and transport (new Chapter 19)**

**90.** Sections 10.1 and 10.2 were agreed upon without changes.

### **10.3. Haulage: General provisions**

**91.** At the suggestion of the Government experts, the Meeting agreed to delete paragraph 10.3.5(3)(b) and (c), since manholes did not need to be life sustaining or have first-aid equipment, while refuge chambers would be dealt with in another section.

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92. For reasons of consistency, the Meeting agreed to delete the provision on whitewashing contained in paragraph 10.3.6(2).

93. Section 10.4 was agreed upon without changes.

### **10.5. Mechanical haulage: General provisions**

94. At the suggestion of the Employer experts, the Meeting agreed that the provision on roof protection for the driver cabin of mine locomotives contained in paragraph 10.5.2(i), should be deleted on grounds of practicability.

95. In order to take into account situations where equipment was not approved by national authorities and where national requirements did not exist, but rather specifications were set by a body such as the European Union, the Meeting agreed to amend paragraph 10.5.7 to read "... they should be of a type approved or conform to specifications set out by the competent authority". This same language was introduced to paragraphs 10.5.8(2), 10.8.10, 12.6.1(1), 12.7.1(1), 12.12.3, 14.4.1(8)(a), 14.6.1(1), 15.2.1 and 19.5.2. For this same reason, the Meeting agreed to delete "national" from paragraphs 12.6.1(2), 13.2.4(2) and 13.2.4(3).

96. Section 10.6 was agreed upon without changes.

### **10.7. Storage-battery locomotives and battery equipment**

97. The Employer experts expressed concern about the level of detail in paragraph 10.7.3 and the accuracy of the numbers cited. The Meeting agreed that the technical specifications were not necessary; however, the intent of protecting against fire initiation in battery charging stations should be retained. The paragraph was therefore amended to read: "Battery-charging stations should be housed in non-combustible structures or areas; and be equipped with fire-detection and fire-suppression systems as defined in section 16.4, which would activate an audible and visible alarm at the battery charging station and a control room from where a suitable response could be coordinated."

### **10.8. Diesel vehicles, including locomotives and trackless vehicles**

98. At the suggestion of the Employer experts, the Meeting agreed to delete the wording at the end of paragraph 10.8.1(a) "and to levels which will not cause bodily harm".

99. The Employer experts expressed concern about the impossibility to fulfil the provisions in paragraph 10.8.2(b), (d) and (e), since the necessary technology was not available at present. The Meeting therefore agreed to add to the chapeau of paragraph 10.8.2 the words "... where technologically feasible:".

100. Following a suggestion of the spokesperson for the Employer experts to delete paragraph 10.8.3, the Worker experts reminded that the code was a voluntary document, the purpose of which was to share knowledge and provide guidance for best practices. The Meeting agreed to keep clause (a) as is and replace in clause (c) "stringent" with the word "effective". Clause (b) was amended to read "diesel fuel storage, transportation and fuelling underground take place under controlled conditions which suitably consider the associated risks", as it was considered that these dangerous operations were inevitable and

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should be closely monitored. In clause (d), the Meeting agreed to add the words “and/or other suitable fire suppression devices” to cater for cases where the automatic fire-suppression device was defect.

**101.** Section 10.9 was agreed upon without changes.

### **10.10. Conveyors**

**102.** After a proposal of the Employer experts to delete paragraph 10.10.1.(2)(c) and (e) because of the specific figures contained in it, the spokesperson for the Worker experts cautioned that thresholds played an important role in a non-prescriptive framework and should generally be retained unless technologically not feasible. The Meeting agreed to retain the wording, as it considered the enounced limits as appropriate.

**103.** The Government experts felt the need to address the issues of slippage and sequencing of conveyors. The Meeting agreed to insert the following new paragraph after 10.10.12: “Belt conveyor systems should include appropriate protection against slippage and unplanned stoppage of belts.”

**104.** Sections 10.11 to 10.15 were agreed upon without changes.

### **10.16. Conveyors transporting persons**

**105.** The Employer experts expressed concerns about paragraph 10.16.3(a), as it did not take into account that belt conveyors were not always stopped, and persons were sometimes boarding or alighting on moving conveyors. In order to ensure the safety of this practice, the Meeting agreed to add the following wording: “If not feasible, measures should be taken to ensure the safety of persons boarding, being transported and alighting on belt conveyors.”

## **11. Support of roof and walls (new Chapter 20)**

**106.** Sections 11.1 to 11.3 were agreed upon without changes.

### **11.4. Powered supports/longwall shields: General provisions**

**107.** The Employer and Government experts felt that paragraph 11.4.1 should be deleted, since the design of support systems was the responsibility of the manufacturer and should be left to professional engineers. The responsibility of the competent authority only came into play in case of inspection. The Worker experts expressed concern that the lack of standardization and certification might compromise the integrity of support systems.

**108.** The Meeting agreed to replace points 11.4.1 and 11.4.2 with the following text proposed by the Worker experts:

11.4.1. It should be the duty of the employer to ensure that powered support is of adequate strength and designed in accordance with appropriate standards.

11.4.2. Where necessary, the competent authority, on safety and health grounds, should specify appropriate standards for powered support.

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109. Sections 11.5 to 11.7 were agreed upon without changes.

## **12. Ventilation (new Chapter 21)**

### **12.1. General provisions**

110. Some Government experts expressed concern that, according to paragraph 12.1.3, a place was not considered safe if the air contained less than 19.5 per cent oxygen. A number of countries had set the safe oxygen level at 19 per cent as provided in the old code. Considering that the revised code of practice was a non-binding document that would provide guidance for best practices, the Meeting decided to keep the figure of 19.5 per cent.
111. At the suggestion of the Employer experts, the Meeting agreed to delete, in paragraph 12.1.7(2), the phrase “National laws or regulations should prohibit any new mines or new development of existing mines from being connected to other mines where ventilation would be joined.”, since it was common practice to have one ventilation plan for multiple interconnected mines.
112. The Meeting also decided to replace, in paragraph 12.1.9(1), the word “seal” with “stoppings”, as this language was more appropriate in the context of cross-cuts.
113. The Worker experts urged the Meeting to reconsider, in the light of the mine fatality in Sago (West Virginia, United States), the appropriateness of the figure of 1.4 bar (20 pounds per square inch) in paragraph 12.1.10. An ongoing investigation into the accident appeared to indicate that the static horizontal pressure to be resisted by seals needed to be higher. After further discussion, the Meeting concluded that the level of safe pressure depended on the risk of explosion. The second sentence of paragraph 12.1.10 was thus amended to read: “Seals containing non-explosive or inertized atmosphere should be built to withstand a static horizontal pressure of at least 1.4 bar (20 pounds per square inch). Where the atmosphere might become explosive, it is recommended that the seals should be built to withstand a static horizontal pressure of at least 3.4 bar (50 pounds per square inch).”
114. The Employer experts suggested deleting paragraph 12.1.14, because it was common practice to have non-automatic doors in mines. The Meeting recognized however the need for man doors to be self-closing, contrary to airlock or haulage doors. The spokesperson for the Employer experts felt the intent was to avoid the risk of inadvertently leaving a door open.
115. The Meeting agreed to replace point 12.1.14 with the following text: Doors should be designed to prevent them being left open inadvertently.
116. The Employer experts felt that paragraph 12.1.18 was in the wrong place. The Meeting agreed that the paragraph should become the new 16.3.9.

### **12.4. Ventilation of working districts/sections and working places**

117. At the suggestion of the Employer experts, the Meeting agreed to add the phrase “except for advancing longwall mining” at the end of paragraph 12.4.2(1).

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## **12.5. Mine ventilation fans**

- 118.** The Employer experts indicated that paragraph 12.5.1(2) was redundant text. The Government experts did not believe it to be redundant, but disagreed that the competent authority should be responsible for determining the needs for a reserve ventilation fan. After some discussion, the Meeting agreed to amend the paragraph to read "... the employer should consider the need for a reserve ventilation fan that would be available ...".
- 119.** In light of the safety and health issues related to the size of the mine, the Meeting adopted the Worker experts' proposal to reword point 12.5.2 to place the responsibility on the employer to ensure the availability of a reserve ventilation fan and agreed to add a new paragraph (3) which would empower the competent authority to require a reserve ventilation fan to be available.
- 120.** The Employer experts wished to insert the word "stationary" before the words "diesel powered" in paragraph 12.11.1(6), in order to exclude locomotives or monorails from the scope of this paragraph. There was strong feeling from the rest of the experts however, that all equipment should automatically shut down when methane concentration reached 2 per cent. The text was left unchanged.
- 121.** All other sections of Chapter 12 were accepted without any changes.

## **13. Flammable coal dust (new Chapter 7)**

- 122.** The Meeting accepted the content of Chapter 13 without any changes.

## **14. Respirable dust (new Chapter 8)**

### **14.5. Allowable maximum respirable dust concentrations**

- 123.** The Employer expert from Germany questioned the levels given in paragraph 14.5.1(2)(a). In his country, the threshold level was higher and yet there was not a higher rate of silicosis. Several experts indicated that national thresholds on this issue varied from country to country. The Meeting finally agreed to redraft the entire section for purposes of logical flow and so that the text would provide, on the one hand, guidance as to the contents of national laws and regulations, and on the other hand, guidance in the absence of national laws and regulations. The Meeting also decided that the text should, instead of setting out certain thresholds, refer to the current applicable WHO standard.
- 124.** At the suggestion of the Employer experts, the text in point 14.5(3) was amplified to reflect a similar approach to respirable crystalline silica concentrations as that adopted for respirable dust concentrations. The maximum exposure level of 0.1 mg per cubic metre was retained.
- 125.** This approach offered three levels of protection: national laws and regulations, where such existed; an employer-provided control programme which effectively demonstrated the absence of dust- or crystalline silica-related disease; or as a minimum, compliance with a specific technical standard.



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## **14.7. Medical supervision**

- 126.** At the suggestion of the Worker experts, the Meeting agreed to amend paragraph 14.7.2 to read “Miners who are diagnosed with evidence of dust-related occupational diseases contemplated in 14.1.2 should ... .”

## **15. Lamps and lighting (new Chapter 22)**

### **15.3. Lighting and illumination underground**

- 127.** Discussion of point 15.3.1(2)(c) clarified the intention of the passage that illumination should be provided at points of entry and egress.
- 128.** In point 15.3.7, the reference to footlamberts was converted to its metric equivalent.
- 129.** The reference to whitewashing in point 15.3.9 was replaced by a requirement that specified places be well illuminated.

## **16. Mine fires (new Chapter 9)**

### **16.1. Hazard description**

- 130.** The Meeting adopted the Employer experts’ proposal that references to “ignition” in 16.1.1 be replaced by the word “heat”.

### **16.2. Hazard control**

- 131.** At the Employer experts’ suggestion, the Meeting agreed that the fire prevention and emergency response plan referred to in point 16.2.1 should be approved by the competent authority.

### **16.3. General provisions**

- 132.** The Meeting agreed to use, in paragraphs 16.3.3 and 16.3.4, the phrase “in all mines, as far as practicable”.
- 133.** The Meeting agreed that hydraulic fluid, referred to in point 16.3.8 should conform to standards, as specified by national laws and regulations or the competent authority.

### **16.5. Fire-fighting equipment**

- 134.** It was agreed that points 16.5.1(5) and (6) did not require the installation of dual water lines. The important point was that the water lines should be parallel to belt conveyors and haulage tracks. One water line could serve both.
- 135.** Following the proposal of the Government experts, it was agreed to cut the words “or gases, or create an oxygen deficiency” in point 16.5.5, because CO<sub>2</sub> fire extinguishers were used in the event of electrical fires.

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## **16.6. Storage of flammable materials**

136. The Meeting adopted the Employer experts' proposal to replace the words "closed metal" by "suitably designed and constructed" in point 16.6.3.

## **16.8. Procedure in case of fire**

137. The Worker experts stressed the need to communicate defined procedures and to cross reference the emergency response plan mentioned in point 16.8.1 with conditions listed in point 16.2.1. The Meeting agreed to insert the phrase "and effectively communicate to all affected persons" after "develop", and then following "an emergency procedure", to insert "covering the elements contained in 16.2.1".
138. Following the proposal of a Government expert, it was agreed to reword point 16.8.7 as follows: "The employer should make preparatory arrangements so that when sealing operations become necessary, in all or part of the mine, they can be done safely." This would clarify responsibilities and specify the intended coverage.
139. A Government expert proposed to add a new sub-point (3) to introduce a reference to airlocks, which could be an important safety measure as suggested in the previous day's exposition. Worker and Employer experts sought clarification as to applicability of airlocks in vertical shaft mines. The Government expert noted that airlocks could be used in vertical shaft mines, for instance to seal off the entrance at the bottom of the shaft. The Meeting agreed to insert a qualifying clause at the beginning so that the new point would read: "Where practicable, at least one of the surface entry seals should include an airlock to allow entry to or exit from the mine".

## **17. Inrushes of water, gas or other material (new Chapter 10)**

### **17.2.1. General provisions**

140. The Meeting adopted the Employer experts' proposal to insert the word "near" before the word "where" in the third line of point 17.2.1.3(1).
141. The Meeting agreed to replace "those" by "these potential hazards" to clarify the meaning of point 17.2.1.4(a).
142. The Meeting adopted the Government experts' suggestion to replace the phrase "of the procedures" with "by the plan of working" in point 17.2.1.4(d) to provide greater clarity on the application of the training.

## **18. Electricity (new Chapter 11)**

### **18.2.1. General procedures**

143. On the proposal of the Employer experts, who felt that the provision should cover all relevant equipment, it was agreed to rephrase point 18.2.1.1(c) as follows: "require each employer to maintain a register of all equipment in use and intended to be used in the mine".

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144. The Meeting adopted the Employer experts' proposal to replace the word "equipment" in point 18.2.1.11 by "distribution infrastructure", which would cover equipment, cables, and the supply system. In order for the section on plans to include a cross-reference to this, a new point 6.3.7 would be added.

### **18.3.2. Earthing (grounding) systems**

145. The Meeting agreed with a Government expert's proposal to add a new point 18.3.2.3: "Adequate electrical protection should be provided against earth faults".

### **18.3.5. Flexible cables**

146. A new point 18.3.5.5 was added regarding the determination of specifications for the design, maintenance and use of flexible cables, which would take into account various regulatory regimes, including that of the European Union.

## **18.5. Operating regulations**

147. On the proposal of a Government expert, it was agreed to change the subtitle to "Operating requirements".

## **19. Machinery and plant (equipment)** (new Chapter 12)

### **19.2. Hazard control**

148. For clarity and to cover relevant contexts, the Meeting adopted the proposal of the Employer experts to replace "civil engineer" by "competent engineer" in point 19.2.7.
149. The Meeting adopted the proposal of the Employer experts to replace "competent authority" by "relevant authority" in point 19.2.11.

### **19.5. Boiler and steam plant**

150. Following a Government expert's proposal to include a reference to regulatory measures concerning steam boilers as a new point 19.5.7, an Employer expert suggested using wording similar to that adopted in point 10.5.7. It was so agreed.

### **19.7. Cranes and lifting gear**

151. Typographical errors ("crab" instead of "grab") were corrected.

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## **20. Explosives and shottfiring (new Chapter 13)**

### **20.4. Issue, return and recording of explosives and detonators**

**152.** On the proposal of a Government expert, it was agreed to strike “of a type specified by the competent authority” from point 20.4.9(1) in keeping with the elimination of references to competent authority where this was ambiguous or inappropriate.

### **20.15. Additional precautions during shottfiring**

**153.** Rather than delete point 20.15.1(2), as suggested by the Government experts, it was agreed to replace the previous text with wording proposed by the Worker experts that would allow the competent authority to direct amendments to be made in the interests of safety, on the understanding that the reference was to guidance to be provided in the course of inspection.

**154.** The Meeting considered and then adopted a proposal of the Government experts to add a new point 20.15.12: “When a mine is closed down, or when operations are suspended with the intention of closure, no explosives should be left underground.”, following clarification regarding suspension of operations.

## **21. Competence, education and training (new Chapter 23)**

**155.** Due to redundancies and duplications in the draft, the Meeting reworded this chapter for improved readability. The experts, inter alia, decided to add an introductory section to provide background, as well as a section on the responsibility of the employer to provide training.

## **22. Personal protective equipment (PPE) (new Chapter 24)**

### **22.1. General provisions**

**156.** The Worker experts noted that paragraph 22.1.5 did not provide information on what would occur if an examination should indicate that PPE was not in good condition. The Government experts noted that the paragraph also did not indicate who should be examining PPE. The Meeting therefore agreed to amend the paragraph as follows: “PPE should be examined periodically by the user to ensure that it is in good condition, and replaced or repaired as necessary by the employer, at no cost to the user.

**157.** The Meeting agreed to delete the phrase “such as asbestos” from paragraph 22.1.14, as it was not relevant to the underground coalmining industry.

### **22.5.2. Self-contained self-rescue devices**

**158.** The Worker expert from the United States stated that, based on experience, self-contained self-rescue devices designed to protect persons for one hour actually offered a much

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shorter period of protection. Thus, the text of paragraph 22.5.2.1(1) was insufficient. After some discussion, the Meeting agreed to add the following text to the end of the paragraph: “Additional self-rescue devices should be properly stored in various locations underground to allow miners added protection for escape from the furthest distance underground to the surface or, in the event of escape being blocked or not possible, to a safe refuge chamber underground, from which persons will be rescued by a suitable means of access.”

## **22.7. Protection from falls**

**159.** At the Government experts’ suggestion, the Meeting agreed to replace the term “traffic lanes”, in paragraph 22.7.1, with the term “roadways”, to be consistent with standard terminology.

## **22.8. Work clothing**

**160.** At the Employer experts’ suggestion, the Meeting agreed to amend paragraph 22.8.2(b) to read “... resist catching fire and, in as far as technology provides, not discharge static electricity”.

## **23. Contingency, emergency preparedness and rescue (new Chapter 25)**

### **23.1. General**

**161.** In paragraph 23.1.4, the Worker experts proposed to add the following wording to address a possible failure of telephone lines in emergency situations: “As far as practicable, the employer should ensure the integrity of the relevant communication systems in the event of fire, roof falls, explosions, inundations or other potential damage. Furthermore, the introduction of new communication technologies – e.g. new forms of tracking devices, wireless communications etc. – should be considered.” The Meeting agreed with the proposal.

### **23.2. First aid and medical care**

#### **23.2.3. Underground first-aid arrangements**

**162.** The Employer experts expressed concern that this section was overly prescriptive and provided for one particular type of first-aid strategy, although there were other strategies that could be put in place.

**163.** For the purposes of flexibility, the Meeting agreed to amend paragraph 23.2.3.2 as follows: “First-aid personnel should each carry a first-aid pouch which should contain at least the following items in usable condition:” and retain clauses (a) to (d). It was further decided to amend paragraph 23.2.3.3 to read “The employer should establish sufficient and suitable additional first-aid facilities to ensure adequate treatment beyond that provided under paragraph 23.2.3.2 prior to timely transportation as may be required.” and to delete clauses (a) to (o). Also, the following general provision was inserted at the beginning of section 23.2: “The employer should provide adequate first-aid arrangements, facilities and personnel appropriate for dealing with potential injury or harm resulting from hazards encountered underground. As far as practicable, appropriate means and trained personnel

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to provide first aid should be readily available at all times when persons are at work underground.”

### **23.2.7. Reporting of injuries**

**164.** At the Employer experts’ suggestion the Meeting agreed to amend paragraph 23.2.7.1 to read “... before leaving the mine and should receive adequate treatment or referral as necessary, even if the injury ...”.

## **24. Surface buildings, other structures and traffic ways (new Chapter 14)**

**165.** At the Employer experts’ suggestion, the Meeting agreed to amend the title of this chapter to read “Surface buildings, other surface structures and surface roads”. This was done for clarity and to be consistent with standard terminology.

### **24.2. Hazard control**

#### **24.2.1. Safety of buildings and related structures**

**166.** Following a suggestion by the Employer experts, and after some discussion to clarify terminology, the Meeting agreed to amend 24.2.1.6 to read “... should not operate on coal stockpiles where voids may exist, without safety equipment ...”.

#### **24.2.2. Traffic ways**

**167.** The Meeting agreed to amend the section title to read “Surface roads”, to be consistent with the changes made to the chapter title.

#### **24.2.4. Impoundments (dams and lagoons)**

**168.** At the Employer experts’ suggestion, the Meeting agreed to replace 24.2.4.5 by the following text: “The employer should appoint a competent person to be responsible for the maintenance and security of each impoundment.”

## **25. Work organization (new Chapter 26)**

### **25.1. Job safety analysis**

**169.** At the Government experts’ suggestion, the Meeting agreed to add a sentence at the end of paragraph 25.1.1 to read “Where a job safety analysis doesn’t identify suitable controls to protect worker safety, the task should not be undertaken.”

### **25.4. Prohibition of persons working alone**

**170.** At the Employer experts’ suggestion, the Meeting agreed to delete the words “Prohibition of” from the title of this section, and to replace paragraph 25.4.1 with the following text: “The employer should take appropriate measures for the protection of workers working

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alone or in isolation.” This language was in line with Article 11 of the Safety and Health in Mines Convention, 1995 (No. 176).

## **25.6. General duties and conduct**

- 171.** Following a suggestion made by the Employer experts, the Meeting agreed to change the first words of paragraph 25.6.1 to read “All persons who ...”. In order to link this responsibility to a person’s training, the phrase “in accordance with their competence,” was added to the beginning of paragraph 25.6.1(a).
- 172.** At the Employer experts’ suggestion, 25.6.10 was amended to read “No person should work in a mine in a state of intoxication, as determined by an appropriate standard.”
- 173.** At the suggestion of the Worker experts, the Meeting agreed that, after Chapter 25 on work organization, a new chapter (Chapter 27) dealing with safety and health committees should be inserted, since the subject had been omitted from the draft code. The text was amended to cater for concerns expressed by the Employer experts that training for committee representatives should be limited to items necessary to perform their functions. The Meeting further decided to use and define the term “preventative safety and health culture” in accordance with the conclusions concerning a “Global strategy on occupational safety and health” adopted at the 91st Session of the International Labour Conference (2003). Concerns of some Government and Employer experts about an excessive involvement of the competent authority in industry tripartite committees were accommodated by means of avoiding procedural details on their establishment and leadership.

## **26. Special protection (new Chapter 28)**

### **26.1. Social protection**

- 174.** The Employer experts suggested deleting this section, as social protection was not an occupational safety and health issue. The Worker experts felt these were very important provisions that needed to remain in the code. After further discussion, the Meeting agreed on the following wording for paragraph 26.1.1(a): “be protected by a safety and health policy determined by agreement between the employer and workers”. This language accommodated the concerns expressed by the Employer experts that an employment contract covered many issues that did not only link to occupational safety and health, and that not all employment arrangements were handled through employment contracts.

### **26.2. Working hours**

- 175.** The Employer experts suggested amending paragraph 26.2.3 to read “Any changes in work schedules that could affect safety and health should be preceded by consultation with the workers and their representatives.” The Meeting agreed with the proposal.

### **26.3. Carrying of matches, smokers’ materials and lighters, and search for contraband**

- 176.** At the Workers experts’ suggestion, the Meeting agreed to replace the word “contraband” in the section title by the term “prohibited articles”. This brought the English version of the code in line with the French version.

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177. At the Employer experts' suggestion, the Meeting agreed to replace the word "established" by the word "encouraged", in paragraph 26.3.2.

## 27. Personal hygiene (new Chapter 29)

178. The Employer experts suggested deleting the words "and towels or other drying equipment" from paragraph 27.1. After discussion, the Meeting agreed to amend the paragraph as follows: "The employer should provide adequate washing facilities, including hot and cold or warm running water, together with soap or other cleaning materials and towels or other appropriate drying arrangements."

## Bibliography

179. The bibliography was agreed upon with the inclusion of the ILO "Global strategy on occupational safety and health" in the section of relevant publications.

## Annexes

180. The Meeting agreed to move the contents of Annex I into Chapter 5, and the subsequent annexes were renumbered accordingly.
181. The Meeting agreed to Annexes II and III without any changes.
182. The Employer experts expressed concern that Annex IV omitted certain important elements of the ILO *Guidelines on occupational safety and health management systems, ILO-OSH 2001*, namely those on management of change, contracting and purchasing. The Meeting agreed that the Office would amend this annex to reflect all the elements of *ILO-OSH 2001*.
183. The Meeting agreed to amend the first sentence of paragraph 1.1 of Annex V to read "This annex gives a general introduction to exposure limits for the use of the competent authorities, employers, workers and others ...".

## Recommendations for ILO follow-up action

184. The Meeting made a number of recommendations for ILO follow-up action.

## Adoption of the code and of the report

185. After examining the text of the draft revised code of practice on safety and health in coalmines, the experts adopted the code.
186. After examination of the draft report, the experts adopted it. Thereafter the experts adopted the report, the revised code of practice and the recommendations for ILO follow-up action.

Geneva, 13 May 2006.

(Signed) Ms. May Hermanus,  
Chairperson.



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**List of participants**  
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