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Sub-item 12(a) of the provisional agenda  
(GC(XXXVI)/1001)

## MEASURES TO STRENGTHEN INTERNATIONAL CO-OPERATION IN MATTERS RELATING TO NUCLEAR SAFETY AND RADIOLOGICAL PROTECTION

### (a) REVISION OF THE BASIC SAFETY STANDARDS FOR RADIATION PROTECTION

#### Report by the Board of Governors and the Director General

#### Introduction

1. Last year a progress report on the revision of the Basic Safety Standards for Radiation Protection which is being conducted in the light of the 1990 recommendations of the ICRP was submitted to the General Conference in document GC(XXXV)/INF/295.<sup>1/</sup> In resolution GC(XXXV)/RES/551, the Conference, endorsing the policy and procedure for the revision of the Basic Safety Standards outlined in that document, requested the Board of Governors and the Director General to keep it informed about the progress made.

2. The present report, which should be read in conjunction with the report in document GC(XXXV)/INF/295, describes the progress made by the Joint (FAO-Agency-ILO-NEA/OECD-PAHO-WHO) Secretariat<sup>2/</sup> in the preparation of new basic safety standards since last year's session of the General Conference.

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<sup>1/</sup> See the Attachment to the present report.

<sup>2/</sup> See paragraph 8 of GC(XXXV)/INF/295.

New draft texts<sup>3/</sup>

3. A second draft text served as a working paper for a meeting of the Joint Secretariat, an ICRP liaison group and a CEC liaison group held in December 1991. Following that meeting, the Joint Secretariat - with the help of consultants - produced a third draft. This draft was an expanded one, covering not only requirements regarding protection against ionizing radiation exposures assumed to occur with certainty, but also requirements regarding the safety of radiation sources, which involve the potential for accidental exposures.

4. The expanded draft was reviewed at an IAEA-convened meeting held in February 1992 and attended by experts from nine countries, an ILO expert, representatives of the ICRP, the CEC and the IAEA's Standing Advisory Group on the Safe Transport of Radioactive Materials (SAGSTRAM), representatives and consultants of the Joint Secretariat and a number of observers. There was general agreement at the meeting that it was right to expand the Basic Safety Standards in order to cover requirements regarding the safety of radiation sources. A new title reflecting the expansion is being considered; at present, the proposed new title is "Basic Safety Standards: International Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources".

5. The resulting draft was sent to those who had attended the February meeting, whose observations were reflected in a "Preliminary Draft of the Basic Safety Standards".

Comments from member States of the sponsoring organizations

6. On behalf of the Joint Secretariat, the Agency's Director General is circulating the Preliminary Draft to all member States of the sponsoring organizations (FAO, the Agency, ILO, NEA/OECD, PAHO and WHO), to the

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<sup>3/</sup> See paragraph 12 of GC(XXXV)/INF/295.

member organizations of the Interagency Committee on Radiation Safety<sup>4/</sup> and to other relevant international organizations for comment.

Plans for the future

7. The comments received from States and other organizations will be collated by the Agency's Secretariat (acting as co-ordinator for the Joint Secretariat)<sup>5/</sup> and then reviewed by the Joint Secretariat and various liaison groups in October 1992.

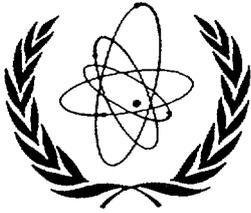
8. The resulting draft will be reviewed at a technical committee meeting to be held in December 1992. If consensus is obtained in the technical committee, the draft emerging from the meeting will be submitted to the governing bodies of the sponsoring organizations for approval. It is expected that the new basic safety standards will be published in the Agency's Safety Series in 1993.

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<sup>4/</sup> See paragraph 7 of GC(XXXV)/INF/295.

<sup>5/</sup> See paragraph 9 of GC(XXXV)/INF/295.





International Atomic Energy Agency

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## MEASURES TO STRENGTHEN INTERNATIONAL CO-OPERATION IN MATTERS RELATING TO NUCLEAR SAFETY AND RADIOLOGICAL PROTECTION

### (a) IMPLEMENTATION OF RESOLUTION GC(XXXIV)/RES/529 AND RESOLUTION GC(XXXIII)/RES/508

#### Progress report on the revision of the Basic Safety Standards for Radiation Protection<sup>1/</sup>

#### Introduction

1. In operative paragraph 2 of resolution GC(XXXIV)/RES/529, the General Conference last year urged the Secretariat and the Board to pursue the strategy outlined in the report contained in document GC(XXXIV)/919.

2. In that report it was stated that the Agency would adopt a dynamic approach with respect - inter alia - to promoting regulatory consistency, and in this connection reference was made to the regulatory implications of the revised basic recommendations of the International Commission on Radiological Protection (ICRP).<sup>2/</sup>

<sup>1/</sup> The current (1982) edition of the Basic Safety Standards for Radiation Protection was co-sponsored by the International Labour Organisation (ILO), the World Health Organization (WHO), the Nuclear Energy Agency of the Organisation for Economic Co-operation and Development (NEA/OECD) and the Agency.

<sup>2/</sup> ICRP unanimously approved new recommendations in November 1990, and they were subsequently issued as ICRP Publication No. 60.

ICRP recommendations as basis for Agency standards

3. The Board first approved Agency health and safety measures in March 1960.<sup>3/</sup> In footnote [1] of the approved text it was stated that "The Agency's basic safety standards ..... will be based, to the extent possible, on the recommendations of the International Commission on Radiological Protection (ICRP)". The Board approved the first version of the Agency's Basic Safety Standards for Radiation Protection (BSS) in June 1962.<sup>4/</sup> It approved a revised version of the BSS in September 1965<sup>5/</sup> and a further revised version in September 1981<sup>6/</sup>.

4. In giving its approval in September 1965, the Board authorized the Director General ", after obtaining the necessary advice and taking into account in particular the important work done in this field by the International Commission on Radiological Protection, to arrange for ..... such changes of detail in the Standards .... as would be needed from time to time to keep the Standards technically up to date .....".

5. Thus, the philosophy behind all editions of the BSS has been based on the latest recommendations of the ICRP.

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3/ The Agency's Health and Safety Measures were issued in document INFCIRC/18. They were revised in 1975, and - after approval by the Board in February 1976 - the revised measures were issued as the Agency's Safety Standards and Measures in document INFCIRC/18/Rev.1.

4/ The Agency's Basic Safety Standards for Radiation Protection have been published as Safety Series No. 9.

5/ This version of the BSS was published, with some changes, as the 1967 Edition of Safety Series No. 9.

6/ This version of the BSS was published in 1982 and subsequently approved by the Governing Body of ILO, noted in the records of WHO's Executive Board and adopted by the Steering Committee for Nuclear Energy of NEA/OECD (see footnote 1/ earlier in this paper).

### Plans to revise the BSS

6. In paragraph H.6 of the Agency's Programme and Budget for 1991 and 1992 (document GC(XXXIV)/917), it was noted that the ICRP was about to issue a major revision of its basic recommendations for radiation protection and that the BSS would need to be updated. Revision of the BSS in the light of the latest ICRP recommendations was provided for in Project H.1.01 ("Basic safety principles, criteria and standards for radiation protection").

### The Interagency Committee on Radiation Safety

7. In order that there might be a formal mechanism for consultation and collaboration in radiation safety matters with the competent organs of the United Nations and with the specialized agencies (as envisaged in Article III A.6 of the Statute), the Secretariat promoted the formation of an Interagency Committee on Radiation Safety (IACRS), which was constituted early in 1990.<sup>7/</sup> The IACRS aims – inter alia – to promote consistency in radiation safety principles and standards. The current members are the Commission of the European Communities (CEC), the Food and Agriculture Organization of the United Nations (FAO), ILO, NEA/OECD, the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), WHO and the Agency; the ICRP, the International Commission on Radiation Units and Measurements (ICRU) and the International Radiation Protection Association (IRPA) have observer status.

### The Joint Secretariat

8. For the revision of the BSS, the IACRS recently established a Joint Secretariat which includes representatives of the four international organizations which co-sponsored the current edition of the BSS (ILO, WHO, NEA/OECD and the Agency) and two other organizations – FAO and the Pan American Health Organization (PAHO).<sup>8/</sup>

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<sup>7/</sup> See page 86 of document GC(XXXV)/953, the Annual Report for 1990.

<sup>8/</sup> Although the CEC is not represented in the Joint Secretariat, it is expected that compatibility of the next revised version of the BSS with Article 31 of the Euratom Treaty will be assured through the IACRS, of which – as stated in paragraph 7 – the CEC is a member.

9. The Joint Secretariat, the work of which is co-ordinated by the Agency, is responsible for supervising the revision of the BSS. A group of consultants has been commissioned to prepare, under its guidance, a draft revised version. The group is seen as a "core", which may call on other experts in specific fields when that is necessary in order to fill gaps or for reasons of balance.

#### Policy for revision of BSS

10. The Joint Secretariat has established the following policy for drafting revised BSS:

- (i) The resulting BSS should be fully consistent with the new ICRP recommendations, unless there are compelling reasons for some degree of inconsistency as regards some points.
- (ii) The BSS should, as far as possible, be written in regulatory language – i.e. as concise statements of regulatory requirements which can be applied more or less directly in the preparation of national regulations. Any explanatory material which is necessary for clarifying the intent of the statements should be included in a section separate from that containing those statements.
- (iii) The ICRP should not be involved in preparing the draft. However, an ICRP liaison group is helping the Joint Secretariat to interpret the new ICRP recommendations and assess the consistency of the BSS with these recommendations
- (iv) The BSS should
  - o take account of recent developments in scientific knowledge and recent orientations in radiation protection principles and concepts as expressed in the new ICRP recommendations;

- o give guidance to national authorities on translating the principles and concepts into regulatory requirements and guidelines;
  - o indicate the radiation protection requirements for Agency operations or operations undertaken by Agency Member States with the assistance of the Agency or the other international organizations involved, or under their control or supervision, or, at the request of a member State of any of those organizations, for any of that State's activities in the field of atomic energy.
- (v) The BSS should give guidance as regards
- o the features of regulatory regimes for radiation protection;
  - o the radiation protection standards to be applied when introducing and following any practice which may increase the radiation risk of people, either by increasing actual exposures or by increasing the potential for receiving an exposure;
  - o the radiation protection standards to be applied when intervention is required in order to reduce, de facto, existing exposures of people.
- (vi) The guidance should be addressed primarily to national authorities responsible for radiation protection, but also to radiation protection specialists and others with responsibilities for radiation protection in their own operations.

#### **Revision procedure**

11. An extended outline for the first draft of the revised BSS was approved by the Joint Secretariat in April 1991, and the first draft was completed by the group of consultants at the end of June.

12. The first draft is being reviewed by the Joint Secretariat and the ICRP liaison group. In the light of their observations, the group of consultants will prepare a second draft which will be submitted for comment to the organizations represented in the IACRS. The comments of these organizations will be reviewed at a meeting of the Joint Secretariat with the group of consultants and the ICRP liaison group in December 1991. The draft resulting from this meeting will be submitted to an advisory group<sup>9/</sup> for review before official circulation to Member States. Comments from Member States will be consolidated by the Joint Secretariat, and a revised draft will be submitted to the advisory group for revision and approval. The first meeting of the advisory group is expected to take place in March 1992.

13. It is expected that the other organizations represented in the Joint Secretariat will approach the revision of the various drafts from different perspectives - for example, WHO and PAHO will focus on radiation protection in the medical uses of radiation; ILO will be mindful of the reactions of employer and worker groups; and FAO will be particularly interested in intervention measures relating to food and agriculture. NEA/OECD will involve its Committee on Radiation Protection and Public Health (CRPPH) and its Core Task Group on ICRP matters, which includes representatives of its Committee on Nuclear Regulatory Activities and its Committee on the Safety of Nuclear Installations; the Radioactive Waste Management Committee of NEA/OECD will also be involved as appropriate. When the revised BSS reach the stage of official submission to the international organizations for adoption, in the case of NEA/OECD the formal review will be carried out by its CRPPH.

14. The final step in this procedure will be the formal adoption of the revised BSS by the governing bodies of the sponsoring international organizations, including the Agency's Board of Governors, and its publication by the Agency in the Safety Series.

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<sup>9/</sup> It is envisaged that the advisory group will consist of: experts nominated by Member States; experts nominated by the organizations represented in the Joint Secretariat; and observers of interested governmental organizations not represented in the Joint Secretariat and of relevant international non-governmental organizations.