Contents

1. Introduction

The World Health Organization (WHO) and the International Atomic Energy Agency (IAEA) have common interests and a long history of collaboration in health-related areas, in particular, in the use of radiation in medical diagnosis and treatment, in radiation protection, and in human nutrition. The WHO/IAEA cooperation was strengthened by the agreement in 1988 between the Directors General of the two Organizations aimed at the improvement of planning and implementing intersecting programmes with a minimum of duplication and maximum impact. Since that time, four WHO/IAEA Consultations on all areas of collaboration had taken place. The fourth consultation was held in Vienna on 15 April 1996. This meeting was held in Geneva on 5 December 1997 as a second part of the fourth consultation.

2. Opening Remarks

The Consultation was opened, on behalf of WHO's Director General, by Dr W. Kreisel, Executive Director, and, on behalf of IAEA's Director-General, by Mr Z Domaratzki, Deputy Director General. Mr Chin-Min Lee, Special Representative and Director, WHO office for the United Nations System in Vienna, made remarks on the importance of further development of WHO/IAEA cooperation and the improvement of the mechanism of cooperation between the two Organizations. Four (4) staff members of WHO Secretariat in Geneva, two representatives of PAHO/ WHO, a representative of the WHO International Agency for Research on Cancer (IARC), and a staff member of the IAEA secretariat and a representative of IAEA in Geneva, participated in the Consultation. The list of participants and the Agenda are attached as Annexes 1 and 2, respectively.

3. Review of Activities

WHO and IAEA current and planned activities in the area of radiation protection were reviewed, including activities carried out by AMRO/ PAHO and IARC of WHO.

Current activities of the organizations focus on the development and implementation of International Basic Safety Standards; strengthening of infrastructure for radiation emergency preparedness and response; epidemiological studies of radiation health effects and evaluation of radiation risks, monitoring of radioactivity in the environment; training, education and distribution of information on radiation protection. It was noted that WHO and IAEA have closely cooperated in carrying out these activities. Several recent examples of this cooperation were mentioned including (1) the joint organization of the International Conference on Biological Effects of Low Doses of Ionizing Radiation (Seville, November 1997), and (2) the joint actions in response to the request of the Government of Georgia to assist in evaluating the radiological accident which happened

in that country in 1997 and to provide medical assistance to radiation victims; (3) jointly developed guidelines in the field of improving the radiation emergency preparedness and response; (4) a high level seminar on radiation emergency in Cuba (1997) organised by WHO/AMRO with WHO/HQ and IAEA participation.

IAEA planned activities are focussing on the further implementation of BSS through training courses and education and publications; preparation of relevant radiation protection and radiation safety documents in the framework of Committees for Radiation Protection (RASSAC), Nuclear Safety Standards (NUSSAC), Transport Safety Standards (TRANSSAC) and Waste Safety Standards (WASSAC), all of which are overseen by the Advisory Commission on Safety Standards (ACSS). IAEA will continue cooperation with WHO/IARC in order to assist in dosimetry for large-scale epidemiological investigations.

WHO planned activities are dealing with further strengthening of the infrastructure and functioning of a network on Radiation Emergency Medical Preparedness and Response (REMPAN), medical follow-up of population affected by the Chernobyl Accident (International Programme on the Health Effects of the Chernobyl Accident (IPHECA)) and Global Monitoring of Environmental Radioactivity (GERMON). WHO/AMRO will continue to pay attention to the further development of national policy in the field of radiation protection in hospitals, training and education in preparedness and response to radiation emergency. Particular emphasis is being paid to prevention of radiological accidents in radiotherapy departments through the development of quality assurance programmes.

WHO/IARC planned activities include epidemiological investigations of cancer morbidity and mortality in the Chernobyl accident recovery workers and other risk groups of population exposed to radiation.

4. Discussion on cooperation in the areas of radiation protection

The following topics were considered:

- Current and planned activities of common interest
- Lessons from the emergency situation in Costa Rica
- Communication links between WHO and IAEA in normal and emergency conditions
- Radiation Emergency Funds

4.1 Current and planned activities of common interest

Participants of the meeting expressed the common interest to participate jointly in the development of International Requirements for Emergency Response Preparedness for practices involving ionizing radiation; revision of WHO/EURO Guidelines on Iodine Prophylaxis in order to give them a status for global use; and preparation of a Report on the radiological accident in Georgia. WHO/IARC expressed the willingness to participate in the preparation of the WHO "Health Effects of Low doses of ionizing radiation" which will be based on the outcome of the Seville Conference. It was also confirmed by both Organizations to participate further in the Inter-Agency Committees on Radiation Protection and Radiation Safety and other relevant Boards and arrangements initiated by any one of the Organizations. The WHO/HQ planned activities for 1998-1999 were given to the IAEA for further consideration and possible participation in their implementation. Guideline levels for radionuclides in foods following accidental nuclear contamination for use in international trade were adopted by the FAO/WHO Codex Alimentarius Commission in 1989 to provide guidance to Member States in the aftermath of the Chernobyl accident. The guidelines were developed by WHO and other organizations, most notably IAEA, which not only provided expertise, but also much of the data used in the calculation of derived intervention levels. Future collaboration in this area should be discussed in more detail at the technical level. It was noted that human exposure to radionuclides through food was an important route of exposure. The United Nations Commission on Sustainable Development has included four radionuclides (Sr-90, I-131, Cs-137 and Pu-239) on its list of food contaminants for which monitoring capabilities are considered essential. These radionuclides in food were suggested by the Global Environment Monitoring System/Food Contamination Monitoring and Assessment Programme (GEMS/Food) based on the need for countries to be able to rapidly respond to incidents involving the accidental release of radionuclides into the environment.

WHO expressed concern in carrying out activities within the GERMON framework due to restricted funds in the Organization. These activities have not been supported financially by UNEP as was done before.

At present there are several international and regional networks of laboratories for the monitoring of radioactivity in the environment. Sometimes this provides a duplication of activities and the participation of the same laboratory in several networks. Thus, in addition to the UNEP/WHO GERMON there is a system for International Surveillance of Atmospheric Radioactivity (ISAR) which has been established for the Comprehensive Test Ban Treaty Organization (CTBTO). At present about 80 automatic stations are included in this system. Three years ago WHO discussed the possible involvement of WHO/GERMON in ISAR.

However, there were no official agreements on cooperation. Participants of the Consultation noted the necessity of further evaluating all possibilities relating to the development of activities on global environmental radiation monitoring. The Special Representative of WHO in Vienna will explore the possibilities of collaboration with CTBTO on this matter.

The needs of WHO Regions in training of specialists in the field of radiation protection were discussed. This discussion was based on WHO/Regional Offices' comments on the IAEA plan for training and education in radiation protection and nuclear safety for 1996-2000. The IAEA noted the importance of this information. It was agreed that the new IAEA perspective plan for training would be sent by IAEA to WHO for distribution among WHO/Regional Offices. Concerning training in radiation protection in hospitals, WHO has established a good cooperation with the relevant department of IAEA over many years.

4.2 Lessons from the emergency situation in Costa Rica related to overexposure of cancer patients during radiotherapy

The patient overexposure that occurred in Costa Rica between September and October 1996 was reviewed. The misunderstandings that had occurred between the IAEA and PAHO when providing the requested technical cooperation to different government agencies were discussed and clarified. To avoid misunderstandings in the future it was emphasized that a better communication link between WHO/HQ, IAEA and PAHO is required. This should be applied to both normal and radiological emergency conditions.

4.3 Communication links between WHO and IAEA

It was agreed that the line of communication between WHO and IAEA on policy matters in the field of radiation protection should go through the HQs of both Organizations, as focal points, in any situation. This is in compliance with a policy for cooperation between members of the UN system. HQs then communicate with Regional Offices. This line of communication should also be in operation within the framework of the Convention on Early Notification of a Nuclear Accident and Convention on Assistance in the case of a nuclear accident or radiological emergency. Technical cooperation can be arranged directly at one level keeping the WHO Headquarters and the Director-General's Special Representative in Vienna informed.

In order to avoid contrary advice in radiation protection on requests from national authorities in normal conditions or in a case of radiation emergency, WHO and IAEA should follow strictly the International Basic Safety Standards (1996) developed by these Organizations in cooperation with FAO, ILO, NEA/OECD

and WHO/PAHO. It is concerned, in particular, with recommendations on intervention levels in emergency situations for iodine prophylaxis which is defined in BSS as 100 mGy of avertable committed absorbed dose to the thyroid due to radiodine.

4.4 Radiation Emergency Funds

The recent radiological accident in Georgia where 11 persons were overexposed to radiation from Cs - 137 source, has clearly shown that in order to provide prompt assistance to national health authorities for treatment of radiation victims there should be available international radiation emergency funds WHO/REMPAN is not in a position to react quickly to a request for financial assistance in a radiological emergency because it does not have an emergency fund. This subject was discussed at the REMPAN meeting held in Rio-de-Janeiro, Brazil, November 1997. The meeting recommended to WHO or IAEA to establish an emergency fund. Participants of the Consultation recognized the importance of this matter and agreed that all possibilities related to this subject should be explored.

5. Follow-up of the IAEA/WHO International Conference "Low doses of ionizing radiation: Biological Effects and Regulatory Control". Seville, 17-21 November 1997

It was noted that the Conference which involved about 500 scientists and specialists in radiation protection, was successful. There was common agreement in all discussed fields.

The Conference confirmed that the current regulatory control for ionizing radiation in practices and interventions is based on the results of advanced fundamental radiobiological investigations. However the necessity to develop dosimetry support for epidemiological and radiobiological studies, in particular, those which are aimed at the investigation of thyroid cancer in persons exposed to radiation in low doses was emphasised. In general, there was a good collaboration between WHO and IAEA during the whole period of the preparation of the Conference and during the Conference. Nevertheless some lessons in organizing such joint ventures were discussed. The report of this Conference will be cleared by WHO/IAEA before publication.

It was agreed that scientific and policy outcomes of important meetings mutually supported by IAEA and WHO should not be changed or amended unless both agencies agree on the changes explicitly.

6. Conclusion

6.1 WHO and IAEA confirmed mutual interest in cooperating in the field of radiation protection and defined the following areas as potential collaboration areas.

- Radiation Emergency Medical Preparedness and Assistance
- Follow-up of population overexposed to radiation
- Dosimetry support for assessment of radiation risks
- Training in radiation protection
- Development of radiation protection standards

6.2 Both organizations agreed to collaborate in the development of the following documents:

- International Requirements for Emergency Response Preparedness for practices involving ionizing radiation
- Guidelines on Iodine Prophylaxis
- Report on the radiological accident in Georgia

6.3 It was agreed that the line of communication between WHO and IAEA in the field of radiation protection should go through the Headquarters of both Organizations as focal points.

6.4 Both Organizations will explore possibilities to establish a radiation emergency fund.

The Consultation achieved its objectives and its recommendations will help both Organizations to strengthen cooperation and avoid duplication in activities related to radiation protection.

WHO/IAEA CONSULTATION ON AREAS OF COLLABORATION IN THE FIELD OF RADIATION PROTECTION
Friday 5 December 1997, Salle M 205, Geneva

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AGENDA

0900-0930	Opening and general discussion on proposed agenda	Dr W. Kreisel Mr Z. Domaratszki
0930-1000	Current IAEA activities and planned activities for 1998-1999 in the field of radiation protection	IAEA representative
1000-1030	Current WHO/IARC activities and planned activities for 1998-1999 in the field of radiation protection	WHO and IARC representatives Dr G. Souchkevitch Dr E. Cardis Dr C. Borrás
1030-1100	Coffee-tea	
1100-1230	Discussion on co-operation in the areas of radiation protection - Radiation Emergency Preparedness and Assistance - Chernobyl follow-up	
1230-1400	Lunch	
1400-1530	Continuation of discussion on co-operation - Global Environmental Radiation Monitoring - Joint training activities	
1530-1600	Coffee-tea	
1600-1630	Other joint activities and topics of common interest, eg follow-up of the Conference in Seville, Spain on "Biological effects of low doses of radiation" which was held from 17 to 21 November 1997	
1630-1700	Adoption of a common conclusion	
1700-1715	Adoption of the plan of collaborative activities and closing of the meeting	