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Fourth Committee

Summary record of the 10th meeting

Held at Headquarters, New York, on Tuesday, 10 October 2000, at 10 a.m.

Chairman: Ms. Grčič Polič (Vice-Chairman).....(Croatia)

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The meeting was called to order at 10.15 a.m.

Agenda item 82: Effects of atomic radiation (A/55/46, A/C.4/55/L.6)

- 1. **The Chairman** drew the attention of the Committee to the report of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) (A/55/46), the scientific annexes thereto (volumes I and II) and draft resolution A/C.4/55/L.6.
- 2. **Mr. Holm** (Chairman, United Nations Scientific Committee on the Effects of Atomic Radiation), introducing the Scientific Committee's report to the General Assembly for 2000 and its scientific annexes, said that the report summarized the developments in radiation science in the years leading up to the new millennium.
- 3. Exposure to background radiation varied around the world, and in many locations exceeded the average annual level by a factor of 10. In addition to background radiation, mankind was also subjected to radiation from the operation of nuclear power plants and other nuclear installations, and the use of radioactive materials in industry, agriculture, research and medicine. Radiation exposure also occurred as a result of occupational activities, especially among airline crews.
- 4. Radiation exposure had been associated with most forms of leukaemia and with cancers of many organs. The major source of information on the effects of radiation on exposed populations remained the survivors of the atomic bombing of Hiroshima and Nagasaki. UNSCEAR had reviewed epidemiological studies of cancer among patients exposed to radiation for medical reasons or in their work and to environmental radiation. Based on the available epidemiological data, it had concluded that there was no convincing evidence that cancer risk from radiation exposure disappeared at very low doses. Hereditary effects had still not been detected in human populations exposed to radiation. The Scientific Committee was preparing a comprehensive report on that subject to be published in 2001.
- 5. The accident at the Chernobyl nuclear power plant had been the most serious accident involving radiation exposure, resulting in widespread radioactive contamination in areas of Belarus, the Russian

- Federation and Ukraine. The Scientific Committee had assessed the average individual and population doses for the various regions and countries. A detailed review of the early health effects had been included in its 1988 report. With regard to late effects, the Scientific Committee had focused on thyroid cancer in children and leukaemia and other cancers in recovery operation workers and residents of contaminated areas. Most of the studies thus far were descriptive in nature, and individual dosimetry was generally not available. It was therefore difficult to determine whether the effects were radiation-related, and impossible to estimate cancer risks reliably.
- 6. There was no doubt about the relationship between the radioactive materials released in the Chernobyl accident and the high number of cases of thyroid cancers observed in the contaminated regions. At the same time, thyroid cancer rates among children conceived after the accident appeared to be similar to rates preceding the accident.
- 7. No other increases in overall cancer incidence or mortality had been observed that could be attributed to ionizing radiation. The risk of leukaemia did not appear to be elevated, even among the recovery operation workers. No somatic disorder immunological defect could be associated with ionizing radiation caused by the Chernobyl accident. Individuals living in the contaminated areas showed increased morbidity due to diseases of the endocrine, circulatory and digestive systems, as well as a higher rate of mental disorders, but it was difficult to interpret those results. Many individuals affected by the Chernobyl accident were convinced that radiation was the most likely cause of their poor health. The accident had had a significant long-term impact on psychological wellbeing, health-related quality of life and illness in the exposed population, although that could not be directly attributed to ionizing radiation.
- 8. It was important to continue to evaluate the consequences of the Chernobyl disaster. That might shed light on the late effects of protracted exposure but, given the low doses received by the majority of exposed individuals, any increase in cancer or mortality would probably be difficult to detect. The Scientific Committee intended to continue its work, in collaboration with scientists from Belarus, the Russian Federation and Ukraine.

- 9. The future programme of work of UNSCEAR would include an ongoing analysis of the survivors of the atomic bombs in Hiroshima and Nagasaki, workers at the Mayak nuclear facility in the Russian Federation, residents of the Semipalatinsk region, and the consequences of the Chernobyl accident and past radiological events in the former USSR. There was also a need for a comprehensive estimate of the radioactive residues remaining in the environment after, for example, the shutdown of nuclear facilities.
- 10. **Mr. Enio Cordeiro** (Brazil), speaking on behalf of the States members of the Southern Common Market (MERCOSUR) as well as the associated countries Bolivia and Chile, said that the members of MERCOSUR attached great importance to questions relating to the effects of atomic radiation and supported the work of the Scientific Committee.
- 11. Since its establishment in 1955, the Scientific Committee had made a valuable contribution to wider knowledge of the sources of ionizing radiation, permitting the elaboration of international radiation safety standards. The MERCOSUR members and associated countries hoped that the work of the Scientific Committee would improve understanding of the effects of atomic radiation on the environment and human beings and consequently limit those effects.
- 12. At its recent sessions, the Scientific Committee had helped to broaden knowledge of the consequences of the accident at the Chernobyl nuclear power plant. The international community should continue to devote very serious attention to mitigating the effects of that accident, and the competent international organizations and member States should continue to provide the assistance needed to overcome the social, economic, humanitarian and environmental consequences of the Chernobyl disaster.
- 13. The States members of MERCOSUR and the associated countries considered that the strictest safety requirements should be observed in the international maritime transport of radioactive waste and spent nuclear fuel, which posed great danger to the marine environment and the health of populations in affected areas. It should be recalled in that connection that, in accordance with the norms of international law, coastal States were entitled to take measures to protect the marine environment in their exclusive economic zones in order to prevent contamination.

- 14. It was vital to enhance the effectiveness of regulations governing the transport of radioactive materials, which should include guarantees for preventing contamination of the marine environment, exchange of information regarding routes selected, the obligation to inform coastal States of emergency plans, the obligation to eliminate radioactive waste in case of accidents on vessels and the payment of compensation for damage inflicted.
- 15. The States members of MERCOSUR wished to emphasize the importance of the work of the Scientific Committee in respect of the assessment of levels and risks of background radiation. The continued participation of the Scientific Committee in efforts to assess the effects on the environment of the disposal of radioactive materials was also commendable. The States members of MERCOSUR welcomed the finalization of the report of the Scientific Committee entitled "Sources and Effects of Ionizing Radiation" and hoped that the detailed information it contained would be used as a basis for elaborating radiation protection measures.
- 16. The States members of MERCOSUR endorsed the future programme of work of the Scientific Committee. In conclusion, they wished to affirm their commitment to the exclusively peaceful use of atomic energy, in the interests of social and economic development.
- 17. **Mr. Brunet** (France), speaking on behalf of the European Union was well as Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Norway, Poland, Romania, Slovakia, Slovenia and Turkey, said that the Scientific Committee was the primary international body dealing with atomic radiation and that its reports in many instances provided the basis for the elaboration of national and international standards for the protection of the population against harmful effects of radiation.
- 18. The European Union welcomed the publication of the report of the Scientific Committee, which included an overview of the state of knowledge on the subject at the beginning of the new millennium, including an inventory of the sources of irradiation. The European Union also welcomed the cooperation between the Scientific Committee and other international organizations and assured it of its full support.
- 19. Mr. Miyamoto (Japan) said that Japan fully supported the activities of the Scientific Committee

and endorsed the cooperative relationship it was pursuing with other relevant international organizations, such as the International Atomic Energy Agency (IAEA), the World Health Organization (WHO), the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO) and the Nuclear Energy Agency of the Organisation for Economic Cooperation Development (OECD).

- 20. Japan had co-sponsored the draft resolution before the Committee (A/C.4/55/L.6), since it was convinced that the Scientific Committee's activities of collecting, structuring and disseminating radiological information were most important in a world increasingly reliant on nuclear technology. He expressed the hope that the draft resolution would be adopted by consensus.
- 21. Japan attached great significance to safety issues in connection with the utilization of nuclear energy for peaceful purposes. The events of 30 September 1999, when an accident had occurred at the uranium processing plant in Tokai-mura, were still fresh in the minds of Japanese people. The Government of Japan remained grateful to the international community for its assistance in connection with that serious accident. Japan had introduced more stringent safety regulations and was making every effort to ensure that similar accidents would never recur.
- 22. Building on experience accumulated in the peaceful utilization of nuclear energy, the Government of Japan was currently finalizing work on its long-term plan for research, development and utilization of nuclear energy. Strictly observing the principles of peaceful use and safety, the Government of Japan remained committed to the advancement of nuclear power generation and the establishment of the nuclear fuel cycle. In that connection, Japan would continue to attach great importance to transparency in its nuclear activities.
- 23. Measures to ensure the safe disposal of nuclear waste were critically important. In that connection, it was worth noting the report of the IAEA Board of Governors (GOV/1999/46-GC(43)/10) of 17 August 1999, in which national authorities were encouraged to strength the effectiveness of measures to ensure the safety and security of radiation sources by, inter alia, installing radiation monitoring systems at airports and

seaports, at border crossings and at other locations where radiation sources might appear.

- 24. Japan attached particular importance to assisting the people affected by the accident at Chernobyl. In addition to contributing to the Chernobyl Shelter Fund, since it was currently chairing the G-7 Nuclear Safety Working Group, the Japanese Government had worked to coordinate the views of its members in such areas as development of alternative sources of electric power and employment opportunities in the wake of the closure of the Chernobyl plant. The people of the Semipalatinsk region of Kazakhstan were also a focus of concern. In 1999 the Japanese Government, together with the United Nations Development Programme (UNDP), had convened the Tokyo International Conference on Semipalatinsk, at which it had announced its intention to extend bilateral official development assistance (ODA) in the medical field. Under an agreement reached with the Government of Kazakhstan, it would provide medical equipment and technical cooperation to improve the health standards of the region's inhabitants. It had also decided, in conjunction with UNDP, to extend assistance for the economic rehabilitation of the region.
- 25. Mr. Ling (Belarus) said that, as nuclear energy had developed, the world had become exposed to a new, potentially dangerous environmental pollution hazard. The Republic of Belarus had always supported the activities of UNSCEAR as an independent international body, and had always counted on its objective and impartial assessment of the effects of nuclear radiation, including consideration of the radiological consequences of the Chernobyl accident. To the credit of the Scientific Committee, a considerable amount of data on the biological effects of radiation had so far been accumulated and analysed. Yet the methodology of presenting assessments and the randomness of the conclusions concerning the consequences of the Chernobyl disaster were a matter of serious concern to his delegation. That alarm was fully understandable in the light of the fact that two thirds of the radioactive fallout had landed on Belarus, leaving one fifth of its territory contaminated.
- 26. The report of the Scientific Committee referred to a seemingly minor indicator of the annual effective dose of radiation received as a result of the Chernobyl accident (0.002 mSv). Yet that figure was obtained using a conditional distribution of radioactive fallout from Chernobyl all over the globe, and on all of

- mankind. That was tantamount to taking the average temperature of patients in a hospital. The report begged the question of how much radiation was being received annually by the populations of Belarus, the Russian Federation and Ukraine living in the contaminated territory near the site of the accident.
- 27. Attempts in the report of the Scientific Committee to address the most urgent questions related to the medical consequences of the Chernobyl accident included numerous unconvincing phrases such as "maybe" and "most likely". For example, in paragraph 89 the use of the expression "most likely" cast doubt on the indisputable causal relationship between the increase in the number of people suffering from thyroid cancer and the radiation resulting from the Chernobyl accident, despite the existence of WHO data pointing to the occurrence of thyroid cancer in Belarus as a radiation-related pathology. The information in the report was flawed by a lack of scientific analysis and research on the existence or absence of a link between radiation and the numerous disorders observed in the population's health.
- 28. The delegation of Belarus therefore strongly urged the scientists and experts of the Member States represented on the Scientific Committee to cooperate and work together with the scientists and radiological specialists of Belarus, the Russian Federation and Ukraine in researching the medical and environmental consequences of the radiation resulting from the Chernobyl accident.
- 29. In the interests of objectivity and impartiality, the delegations of Belarus and Ukraine had submitted amendments to draft resolution A/C.4/55/L.6, and invited all Member States to review the proposed amendments carefully and constructively, with a view to drawing up a balanced and mutually acceptable draft resolution on that extremely important subject.
- 30. Mr. Krokhmal (Ukraine) noted that, since its establishment in 1955, the Scientific Committee had successfully conducted a broad review of substantial problems in the field of radiation and had played an important role in informing Member States about its effects and impact on humans and the environment. The Scientific Committee's conclusions had helped the General Assembly to make recommendations concerning international cooperation in the fields of health, sustainable development and, to some extent, international peace and security.

- 31. Ukraine had consistently supported the efforts of the Scientific Committee related to research and the collection of information on nuclear and ionizing radiation and the analysis of their effects. The activities of the Scientific Committee had taken on special importance for Ukraine, as the Committee had undertaken a case study of the consequences of the accident at Chernobyl. That had, to a significant extent, drawn the attention of the international community to the problem.
- 32. The report of the Scientific Committee for the current year also offered a detailed assessment of the sources and effects of ionizing radiation, with a specific evaluation of the exposure resulting from the Chernobyl disaster and of its consequences for the population's health. While the Scientific Committee had done significant work, its report did not reflect sufficiently the current health status of the population exposed to the effects of ionizing radiation as a result of the Chernobyl accident, and some of its conclusions lacked scientific accuracy and objectivity. The data available and research findings in Ukraine did indeed indicate that, in the 14 years since the Chernobyl accident, the radiation had had significant medical and psychological consequences.
- 33. The problems resulting from the Chernobyl accident continued to be of crucial importance for Ukraine. The special focus on Chernobyl in the report of the Scientific Committee demonstrated that the international community was as interested as ever in mitigating the consequences of the Chernobyl accident.
- 34. The 200 tonnes of nuclear fuel in the destroyed fourth reactor still represented a radiation hazard which could have disastrous consequences. The Shelter project had been designed to eliminate that hazard by ensuring the integrity of the sarcophagus built over the remains of the destroyed Chernobyl reactor. The Berlin donors' conference held in June 2000 had made it possible to mobilize contributions of \$718 million to that end. Those pledges had made it possible to begin large-scale works. His delegation expressed its gratitude to the donors for that assistance.
- 35. Notwithstanding the significant achievements of scientists from all over the world in analysing the consequences of the Chernobyl disaster, there was a need for further review of the problem using all available scientific information and a systematic compilation of national survey data. Studies of

radiation effects should embrace not only the impact of radiation but also other aspects such as the social particularly consequences of radiation, and psychological stress. In its future work, the Scientific Committee should pay more attention to the results of the studies carried out by Ukrainian scientists and their colleagues from neighbouring countries on the longterm effects of exposure, and it was noteworthy in that connection that Ukraine had established a unique database containing a detailed record of all those who had been exposed to increased doses of ionizing radiation.

- 36. Ukraine was very interested in the continuation of the Scientific Committee's work to review the levels, doses, effects and risks of ionizing radiation, with particular emphasis on the medical, psychological and environmental consequences of the Chernobyl disaster. In that context, the delegation of Ukraine recommended that the Scientific Committee should create a mechanism of consultation with interested Member States in order to ensure maximum transparency and objectivity of the results achieved. The delegation of Ukraine also believed that timely submission to Member States of plans for future reviews would significantly assist the coordination of efforts between the Scientific Committee and the General Assembly.
- 37. It was to be hoped that those proposals would be reflected in the draft resolution to be adopted as an outcome of the discussion.
- 38. In conclusion, he strongly supported the amendments proposed by the delegation of Belarus: their adoption would help to achieve consensus in respect of the proposed draft resolution, with which Ukraine was pleased to associate itself.
- 39. Mr. Vasiliev (Russian Federation) said that his delegation supported the activities of the Scientific Committee. Russian scientists took an active part in its work, particularly in the preparation of its report. He was pleased to note that the Scientific Committee was devoting considerable attention to the study of questions of concern to the Russian Federation, such as the situation in the areas of the Chernobyl accident and the Semipalatinsk nuclear test site. It was important for the Scientific Committee to continue its work in those regions, placing reliance on the views of local scientists and taking cognizance of the information they supplied.

- 40. The Russian Federation was ready to join the list of sponsors of the draft resolution on the effects of atomic radiation and would continue to work with the Belarusian and Ukrainian delegations, which had raised questions about the draft resolution, with the aim of reaching a consensus.
- 41. **Ms. Kronhoffer** (Sweden) said that at the current session Sweden, as the country chairing the Scientific Committee, had the honour of introducing the draft resolution on the effects of atomic radiation.
- 42. As everyone knew, the Scientific Committee had been established by the General Assembly in 1955 in recognition of the widespread concerns of countries about possible radioactive fall-out from nuclear weapon tests and in view of the need to collect and evaluate information on the effects of ionizing radiation on people and the environment. New challenges on the global levels of radiation exposure continued to arise and new biological information was becoming available on the effects of such exposure. Moreover, the potential danger from low-level radiation exposure, i.e. radiation whose level was comparable to that of natural background radiation, was becoming the subject of lively debate. Better understanding of the mechanism of cell damage could increase knowledge about the risk of radiation exposure.
- 43. For the past 45 years, the Scientific Committee's work and high-quality reports had made an important contribution to ensuring radiation safety. It had become the primary international scientific body reviewing and assessing the levels of ionizing radiation from various sources, as well as the health risks of radiation exposure. Its estimates were used by major international organizations, such as the International Commission on Radiological Protection, and agencies under the auspices of the United Nations.
- 44. The Scientific Committee's mandate included review of published scientific reports and technical documents with the aim of assessing regional and global levels of human exposure to radiation and its potential harmful effects. At its forty-ninth session the Scientific Committee had adopted its report to the General Assembly, which contained 10 scientific annexes on the most diverse subjects.
- 45. The text of the draft resolution before the Fourth Committee largely followed the wording of the previous year's resolution, with the exception of a new

paragraph 2 which reflected the completion of work on the thirteenth comprehensive report of the Committee entitled "Sources and Effects of Ionizing Radiation". She thanked all the co-sponsors of the draft resolution for their support, suggested that other delegations add their names to the list of sponsors and expressed the hope that as in previous years the draft resolution would be adopted by consensus.

46. **Mr. Popov** (Belarus), speaking also on behalf of the delegation of Ukraine, formally submitted amendments to draft resolution A/C.4/55/L.6 and proposed that delegations consider them in a constructive spirit with the aim of reaching a consensus.

Organization of work

- 47. **The Chairman** informed the Committee that she had received a letter from the Chairman of the Special Committee to Investigate Israeli Practices Affecting the Human Rights of the Palestinian People and Other Arabs of the Occupied Territories, in which he announced that the Special Committee could not complete its report in time because of circumstances beyond its control. For that reason, he requested that consideration of item 85 of the agenda should be postponed until a later stage in the work of the Fourth Committee. In accordance with established practice and taking account of the wishes of interested delegations that agenda items 84 and 85 be considered together, she suggested that the request should be granted, which would require that consideration of agenda item 87 also be postponed.
- 48. It was so decided.
- 49. **The Chairman** drew the Committee's attention to the fact that the revised text of the combined draft resolution on small Non-Self-Governing Territories had been issued (A/C.4/55/L.5).

The meeting rose at 11.30 a.m.