

**Speech on behalf of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) to the Fukushima Ministerial Conference on Nuclear Safety, 15 – 17 December 2012, Fukushima, Japan**

delivered by Wolfgang Weiss  
Chair of the Committee (fifty-eighth and fifty-ninth sessions)

President, Excellencies, Ladies and Gentlemen,

This statement on behalf of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) focuses on the Committee's assessment of radiation exposures to populations inside and outside of Japan resulting from the nuclear accident of March 2011.

UNSCEAR is a Committee of world-renowned scientists from 27 United Nations Member States designated by the General Assembly to conduct evaluations of the levels of exposure from all sources of ionizing radiation and the associated health and environmental effects. Its secretariat is provided by the United Nations Environment Programme.

The Committee's aims include the identification of emerging trends and issues that can prompt policy action. Its findings are fundamental to the international radiation safety regime: the follow-up of the survivors of the bombings at Hiroshima and Nagasaki and of studies of other exposed populations allow risk factors for cancer and other effects to be derived. These are used by national governments and by international organizations developing international standards for radiation. The IAEA General Conference has urged its secretariat to continue to use the estimates of UNSCEAR for the development of the safety standards. This is a right separation of functions. It clearly important to separate independent interpretation of the data by highly qualified scientists from the ethical and political debate on protection and policy. Nevertheless, the interaction between science and standard-setting warrants strengthening in any discussions on the future of the Safety Regime.

Since the IAEA Ministerial Conference on 20-24 June 2011 in Vienna the Scientific Committee has developed a scientific report on "attributing health effects to radiation exposure and inferring risks" that the General Assembly of the United Nations had requested and a report on "uncertainties in risk estimates for cancer due to exposure to ionizing radiation". The major findings are: Because of the great uncertainties in risk estimates at very

low doses, UNSCEAR does not recommend multiplying very low doses by large numbers of individuals to estimate numbers of radiation-induced health effects within a population exposed to incremental doses at levels equivalent to or lower than natural background levels. Those organizations performing activities related to the Fukushima accident might benefit from the findings of these reports.

At its fifty-eighth session in May 2011, the Scientific Committee considered the implications of the nuclear power plant accident of March 2011, as far as radiation levels and effects were concerned. The Committee has extensive experience in the appropriate scientific methodologies for exposure assessment of accidental releases. It has recently published reports on the current scientific knowledge of radiation-related health effects (including those at low doses and dose rates). These can serve as a basis for the assessment of the radiation levels and effects attributable to the accident.

The Committee decided in May 2011 to carry out a full assessment of the levels of exposure and radiation risks attributable to the accident. Over 80 experts were offered as contributions-in-kind; their attendance at meetings and work is cost-free to the UN.

Contributions of quality-assured data of International Organizations such as the CTBTO, FAO, IAEA, WHO, WMO as well as by scientists from Japan and other countries have been received. A preliminary document has been considered by the Committee at its fifty-ninth session in May 2012. The preliminary findings are: No radiation health effects have been observed among public or workers; six workers received doses above 250 mSv; 170 received doses above 100 mSv; thyroid doses being estimated; six workers died in first year – not due to radiation; as a result of thyroid monitoring of 1,080 children the maximum dose reported was 35 mSv; and the highest exposures of wildlife are observed in the marine environment. A more complete report will be submitted to the Committee for the sixtieth session of in 2013.

The experience from both the Chernobyl and Fukushima accidents has clearly demonstrated the importance of distress and anxiety among the public and the workers, and concerns about the long-term implications of the accident. The work of UNSCEAR will be very important to provide an independent authoritative assessment of the long-term implications of radiation exposure from the radionuclides in the environment. I believe that UNSCEAR can contribute much to providing better background information to help improve understanding of the public and decision-makers about radiation and its effects. The effects of long-lived

radioactive material in the environment will likely continue to be of concern long after the physical recovery from the tsunami is complete. the global community will need to respond in a coordinated and thoughtful manner in the coming years.

Thank you.