



UNSCEAR REPORTS

The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) was established by the General Assembly of the United Nations in 1955. Its mandate in the United Nations system is to assess and report levels and effects of exposure to ionizing radiation. Governments and organizations throughout the world rely on the Committee's estimates as the scientific basis for evaluating radiation risk and for establishing protective measures.

"This article contains the titles and summaries of various UNSCEAR reports "

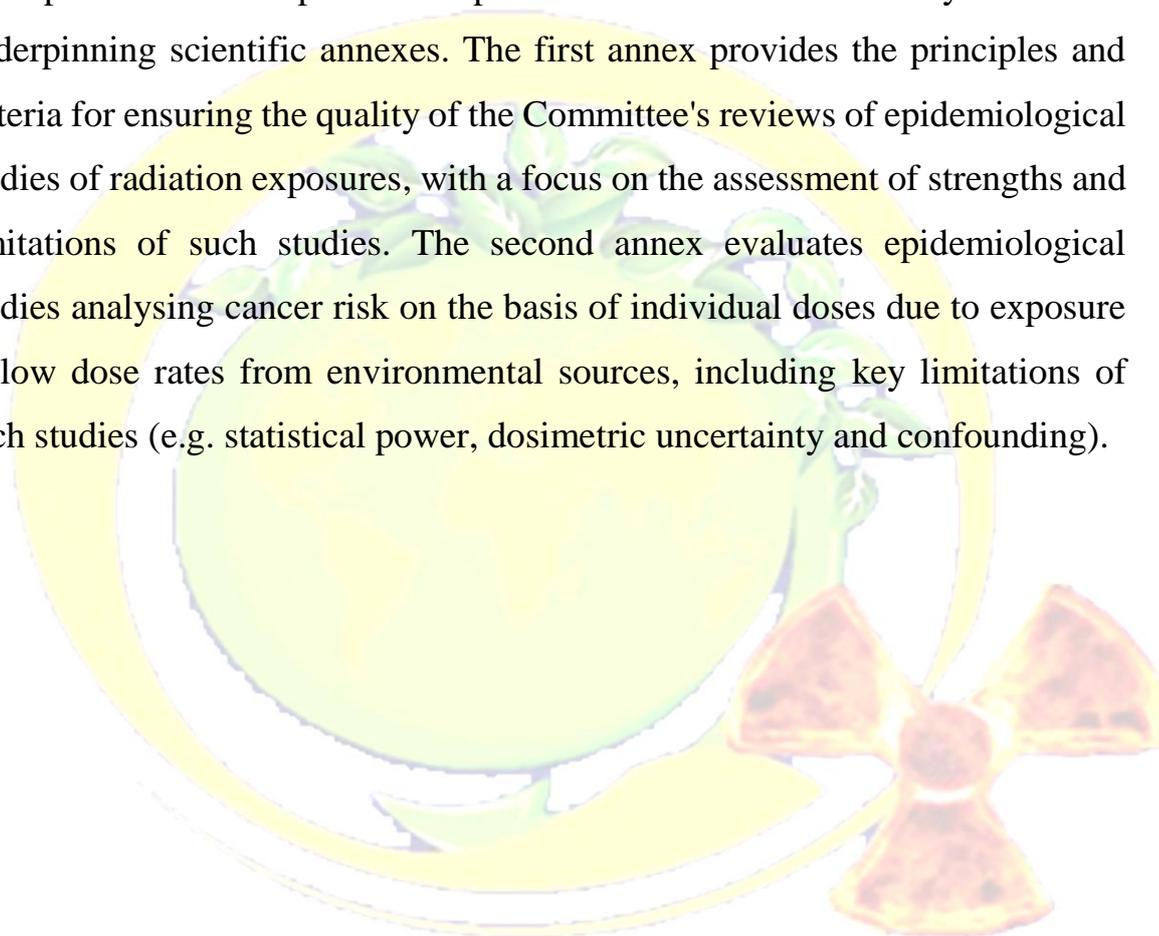
UNSCEAR 2017 REPORT

SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



Executive Summary

This publication comprises a report to the General Assembly with two underpinning scientific annexes. The first annex provides the principles and criteria for ensuring the quality of the Committee's reviews of epidemiological studies of radiation exposures, with a focus on the assessment of strengths and limitations of such studies. The second annex evaluates epidemiological studies analysing cancer risk on the basis of individual doses due to exposure to low dose rates from environmental sources, including key limitations of such studies (e.g. statistical power, dosimetric uncertainty and confounding).



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Fukushima 2017 White Paper

Developments since the 2013 UNSCEAR Report on the levels and effects of radiation exposure due to the nuclear accident following the great east-Japan earthquake and tsunami



Executive Summary

A 2017 White Paper to guide the Scientific Committee's future programme of work.

The third UNSCEAR White Paper on this subject continues the ongoing effort to systematically monitor and evaluate relevant, new scientific information that has emerged since the launch of the Committee's 2013 Report on the Fukushima Daiichi accident. Including the 2015 White Paper and the 2016 White Paper, more than 300 publications have been reviewed, from October 2012 onwards. The 2017 White Paper presents a sound analysis of the recent information, to identify whether it materially affected conclusions of the 2013 Report or if it addressed research needs that had been identified. The thematic areas covered: releases and dispersion for the atmosphere and marine environment; transfer of radionuclides in terrestrial and freshwater environments; evaluations of doses for the public and workers; health implications for the workers and the public; and doses and effects for non-human biota. The 2017 White Paper also summarizes major research projects/programmes which are currently ongoing in the Japanese research community. This is also elaborated in the electronic attachment.

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https://www.unscear.org/unscear/en/publications/Fukushima_WP2017.html

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UNSCEAR 2016 REPORT

SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



Executive Summary

The United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) assesses the levels and effects of exposure to ionizing radiation. UNSCEAR's scientific findings underpin radiation risk evaluation and international protection standards.

The scientific annexes provide the supporting scientific rationale for UNSCEAR's 2016 report to the General Assembly.

The annexes A and B provide the methodology for estimating public exposures due to radioactive discharges from electricity generation and compare the radiation exposure resulting from electricity generation including nuclear, coal, gas, oil, geothermal, solar and wind. The annexes C and D examine the biological effects of internal exposure to radiation resulting from selected internal emitters (tritium and uranium).

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UNSCEAR 2013 REPORT Vol. I

SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



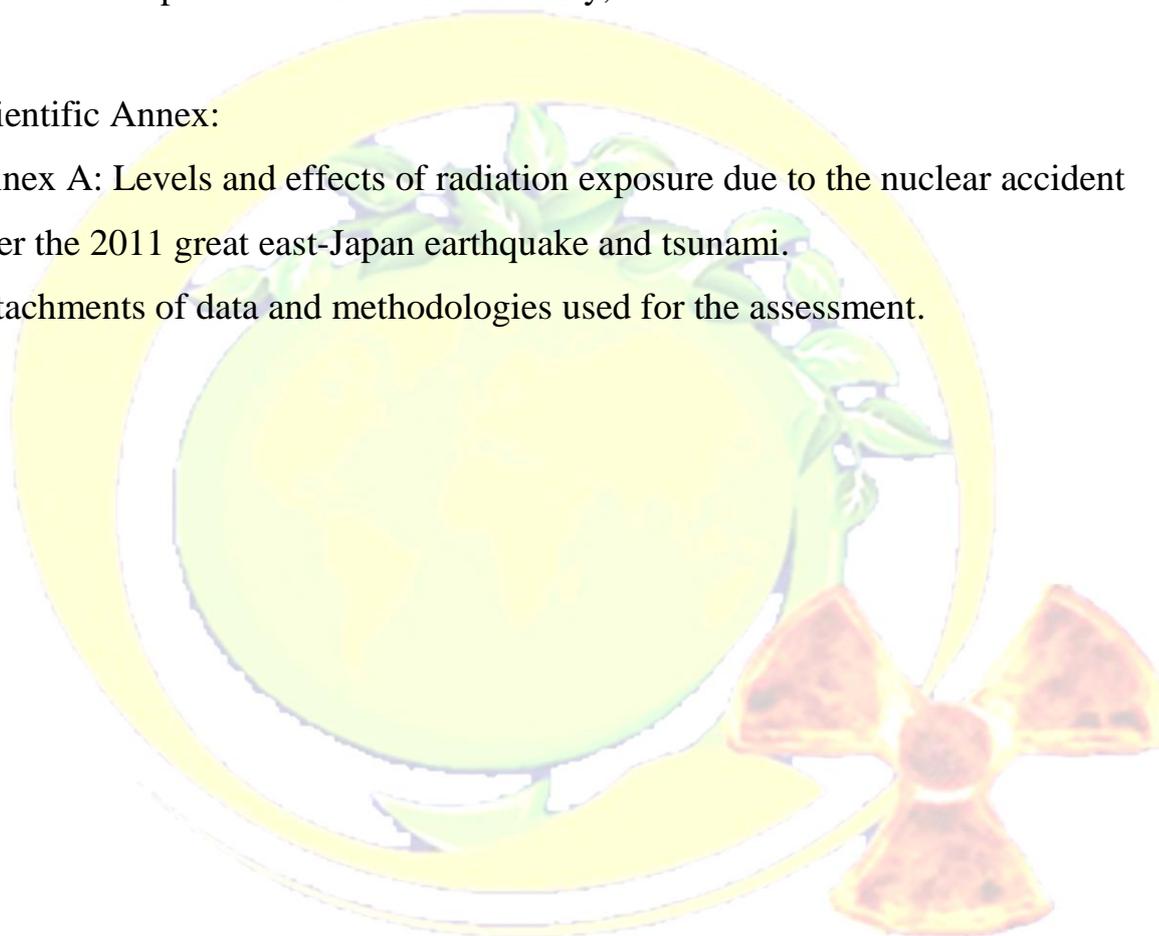
Executive Summary

Volume I: Report to the General Assembly, Scientific Annex A

Scientific Annex:

Annex A: Levels and effects of radiation exposure due to the nuclear accident after the 2011 great east-Japan earthquake and tsunami.

Attachments of data and methodologies used for the assessment.



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UNSCEAR 2013 REPORT Vol. II

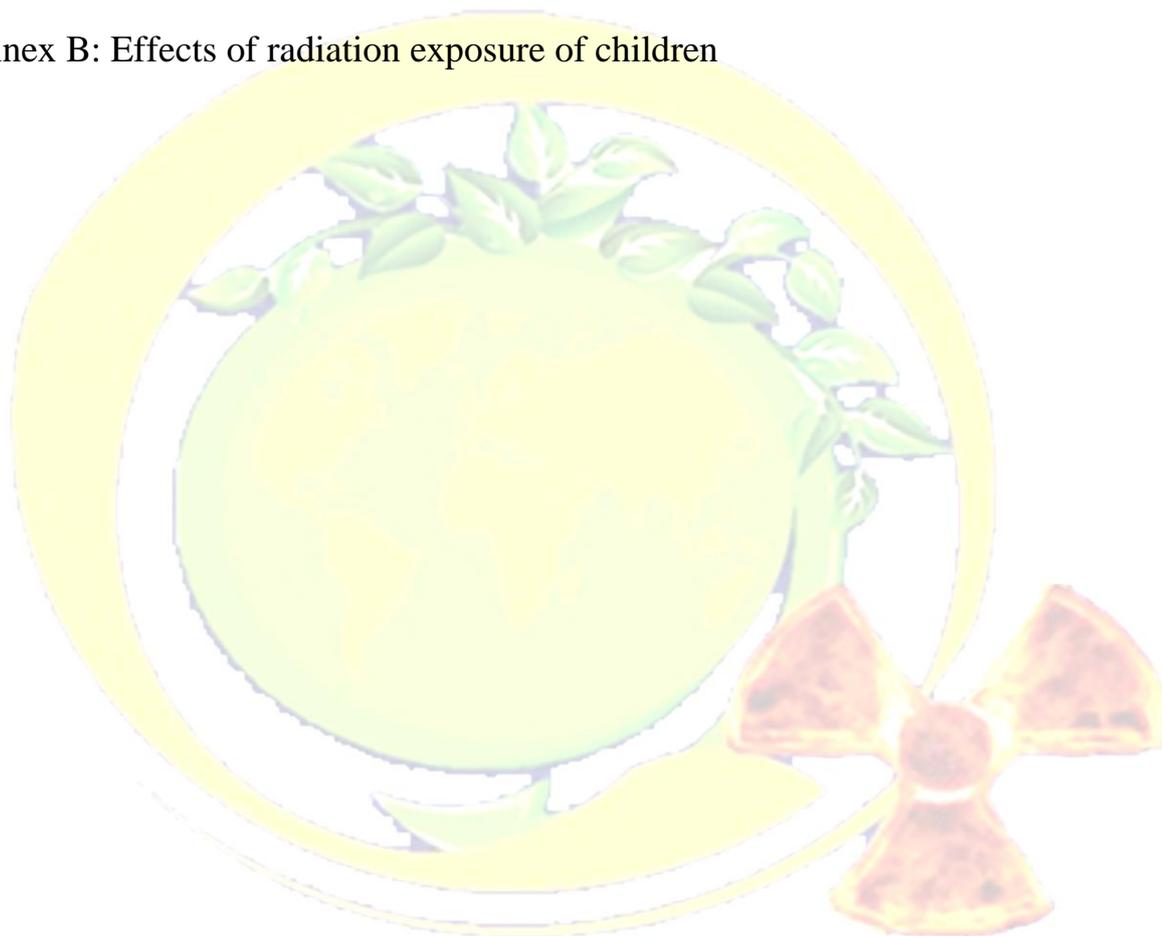
SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



Executive Summary

Volume II: Scientific Annex B

Annex B: Effects of radiation exposure of children



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UNSCEAR 2012 White Paper

BIOLOGICAL MECHANISMS OF RADIATION ACTIONS AT LOW DOSES



Executive Summary

A 2012 White Paper to guide the Scientific Committee's future programme of work.



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UNSCEAR 2012 REPORT

SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



Executive Summary

This publication comprises a report to the General Assembly with two underpinning scientific annexes. The first annex recapitulates and clarifies the philosophy of science as well as the scientific knowledge for attributing observed health effects in individuals and populations to radiation exposure, and distinguishes that from inferring risk to individuals and populations from an exposure. The second annex reviews the latest thinking and approaches to quantifying the uncertainties in assessments of risk from radiation exposure, and illustrates these approaches with application to examples that are highly pertinent to radiation protection. The report is a landmark publication in terms of our understanding of the confidence that can be attached to the attribution of health effects in individuals and populations, and to the estimation of risks inferred from exposure to ionizing radiation.

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UNSCEAR 2010 REPORT

SUMMARY OF LOW-DOSE RADIATION EFFECTS ON HEALTH



Executive Summary

Scientific Report in 6 languages.



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UNSCEAR 2008 REPORT Vol. I

SOURCES AND EFFECTS OF IONIZING RADIATION



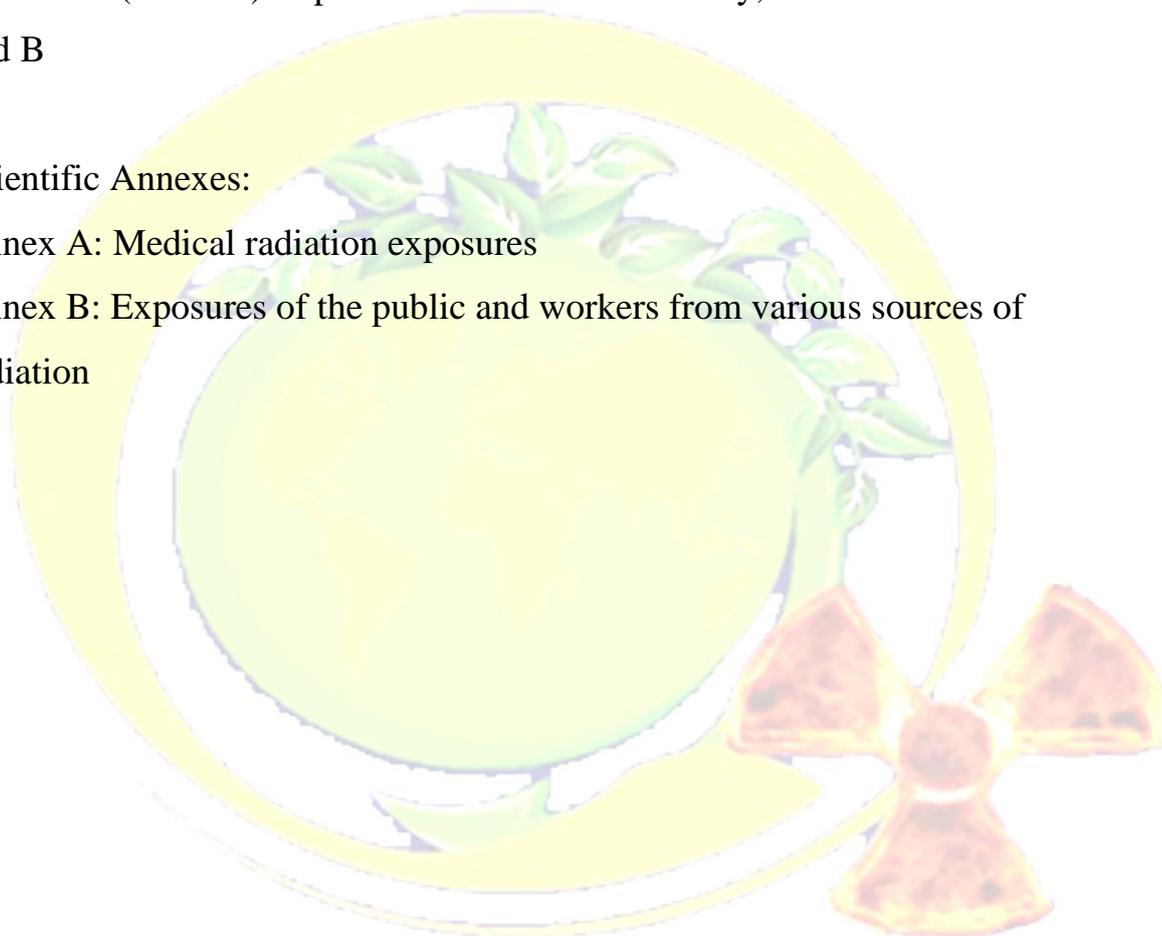
Executive Summary

Volume I: (Sources) Report to the General Assembly, Scientific Annexes A and B

Scientific Annexes:

Annex A: Medical radiation exposures

Annex B: Exposures of the public and workers from various sources of radiation



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UNSCEAR 2008 REPORT Vol. II

SOURCES AND EFFECTS OF IONIZING RADIATION



Executive Summary

Volume II: (Effects) Scientific Annexes C, D and E

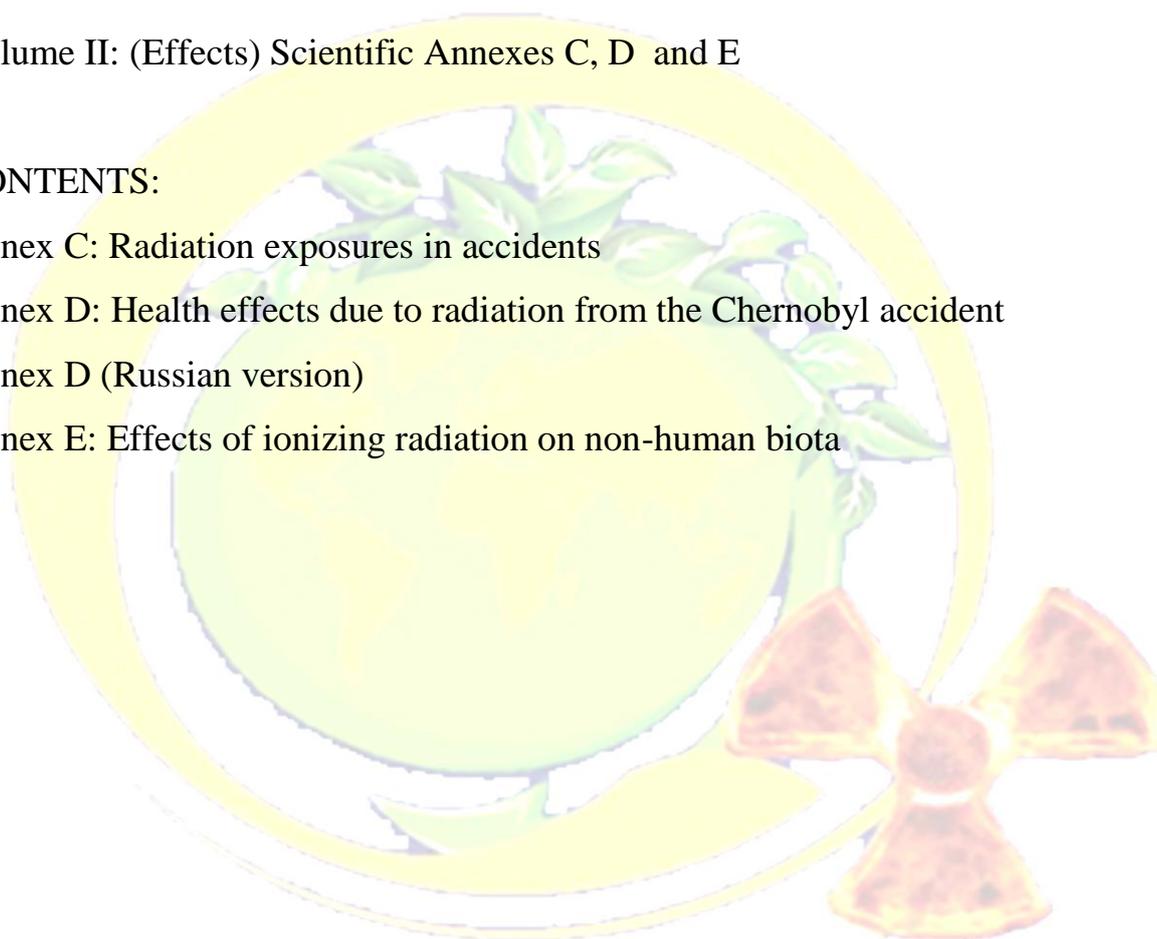
CONTENTS:

Annex C: Radiation exposures in accidents

Annex D: Health effects due to radiation from the Chernobyl accident

Annex D (Russian version)

Annex E: Effects of ionizing radiation on non-human biota



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UNSCEAR 2006 REPORT Vol. I

EFFECTS OF IONIZING RADIATION



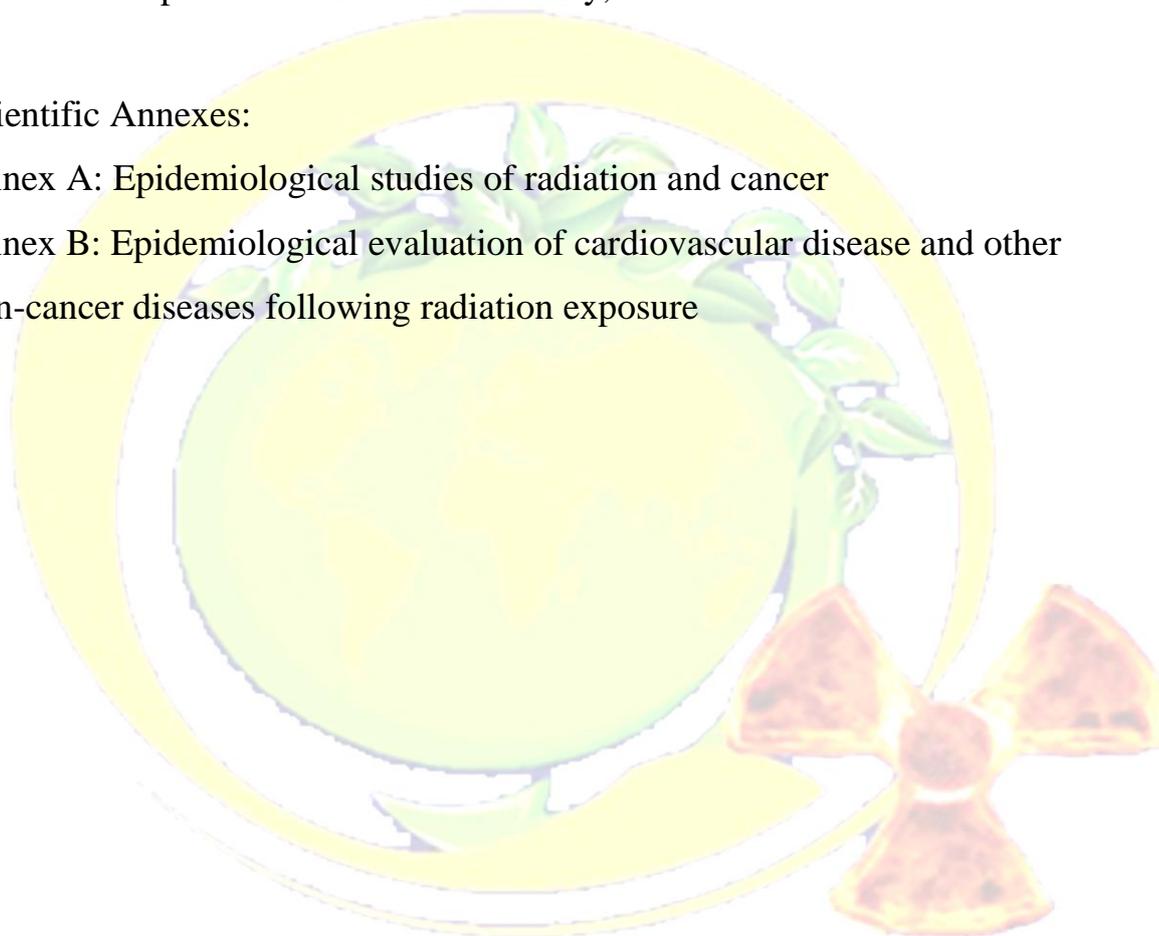
Executive Summary

Volume I: Report to the General Assembly, Scientific Annexes A and B

Scientific Annexes:

Annex A: Epidemiological studies of radiation and cancer

Annex B: Epidemiological evaluation of cardiovascular disease and other non-cancer diseases following radiation exposure



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EFFECTS OF IONIZING RADIATION



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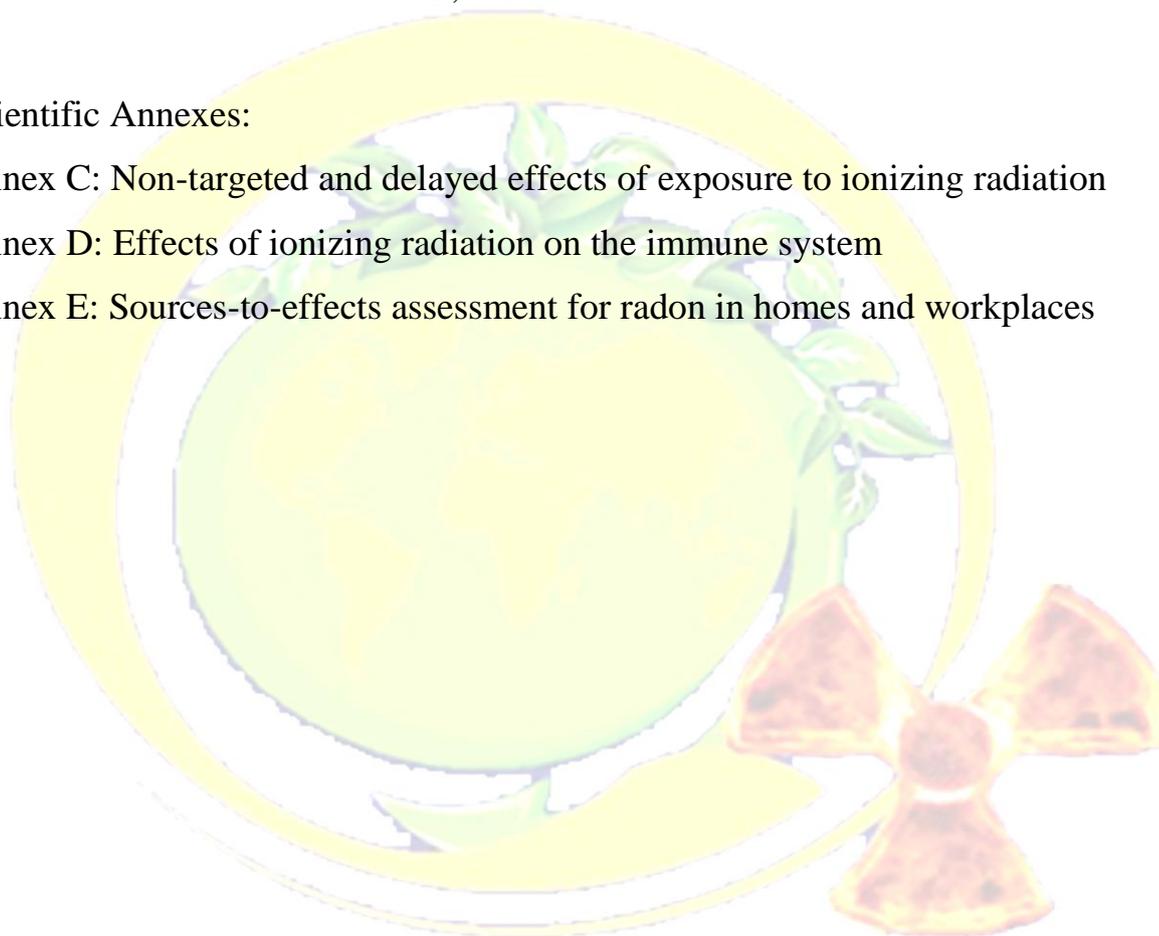
Volume II: Scientific Annexes C, D and E

Scientific Annexes:

Annex C: Non-targeted and delayed effects of exposure to ionizing radiation

Annex D: Effects of ionizing radiation on the immune system

Annex E: Sources-to-effects assessment for radon in homes and workplaces



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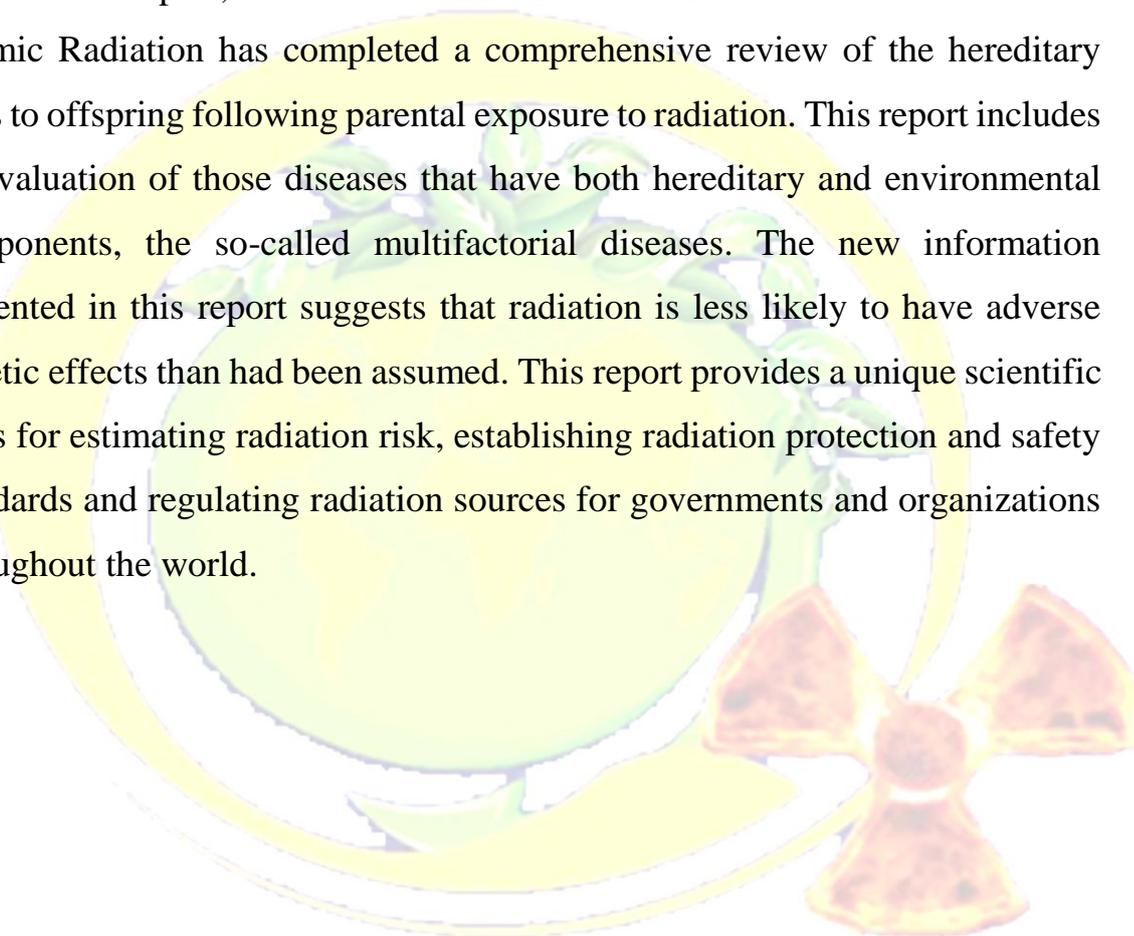
UNSCEAR 2001 Report

Hereditary Effects of Radiation



Executive Summary

In this 2001 Report, the United Nations Scientific Committee on the Effects of Atomic Radiation has completed a comprehensive review of the hereditary risks to offspring following parental exposure to radiation. This report includes an evaluation of those diseases that have both hereditary and environmental components, the so-called multifactorial diseases. The new information presented in this report suggests that radiation is less likely to have adverse genetic effects than had been assumed. This report provides a unique scientific basis for estimating radiation risk, establishing radiation protection and safety standards and regulating radiation sources for governments and organizations throughout the world.



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<https://www.unscear.org/unscear/en/publications/2001.html>

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UNSCEAR 2000 REPORT Vol. I

SOURCES AND EFFECTS OF IONIZING RADIATION



Executive Summary

Volume I: SOURCES

Scientific Annexes:

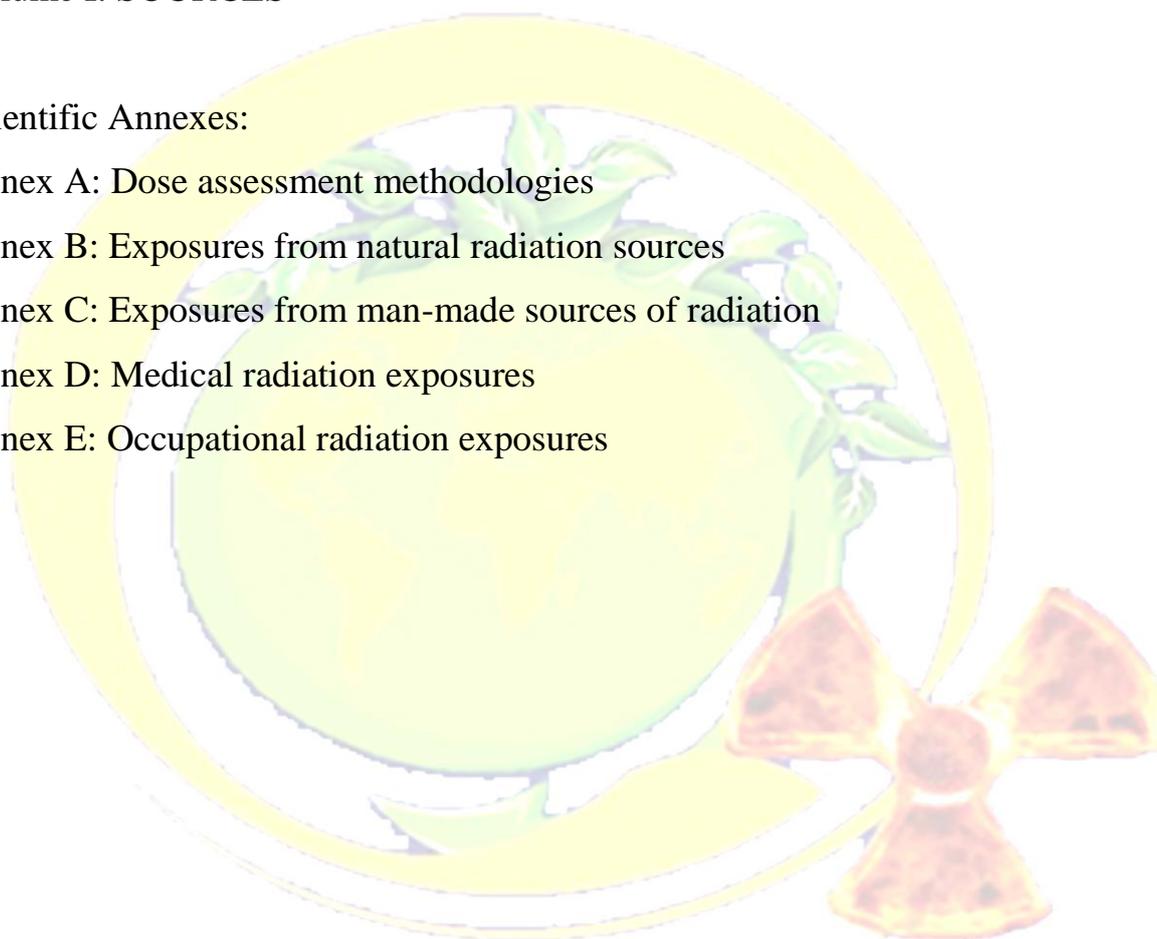
Annex A: Dose assessment methodologies

Annex B: Exposures from natural radiation sources

Annex C: Exposures from man-made sources of radiation

Annex D: Medical radiation exposures

Annex E: Occupational radiation exposures



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UNSCEAR 2000 REPORT Vol. II

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Executive Summary

Volume II: EFFECTS

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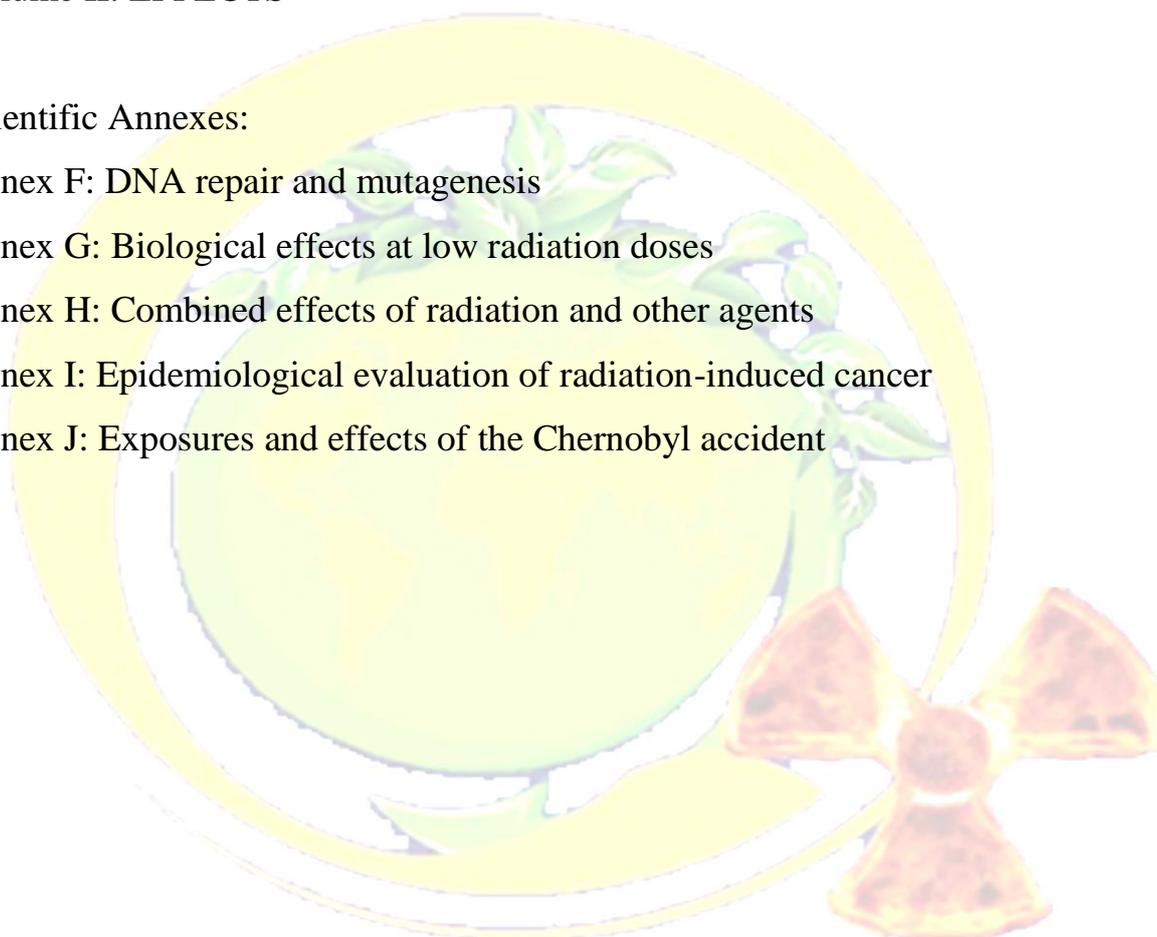
Annex F: DNA repair and mutagenesis

Annex G: Biological effects at low radiation doses

Annex H: Combined effects of radiation and other agents

Annex I: Epidemiological evaluation of radiation-induced cancer

Annex J: Exposures and effects of the Chernobyl accident



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UNSCEAR 1996 REPORT

SOURCES AND EFFECTS OF IONIZING RADIATION



Executive Summary

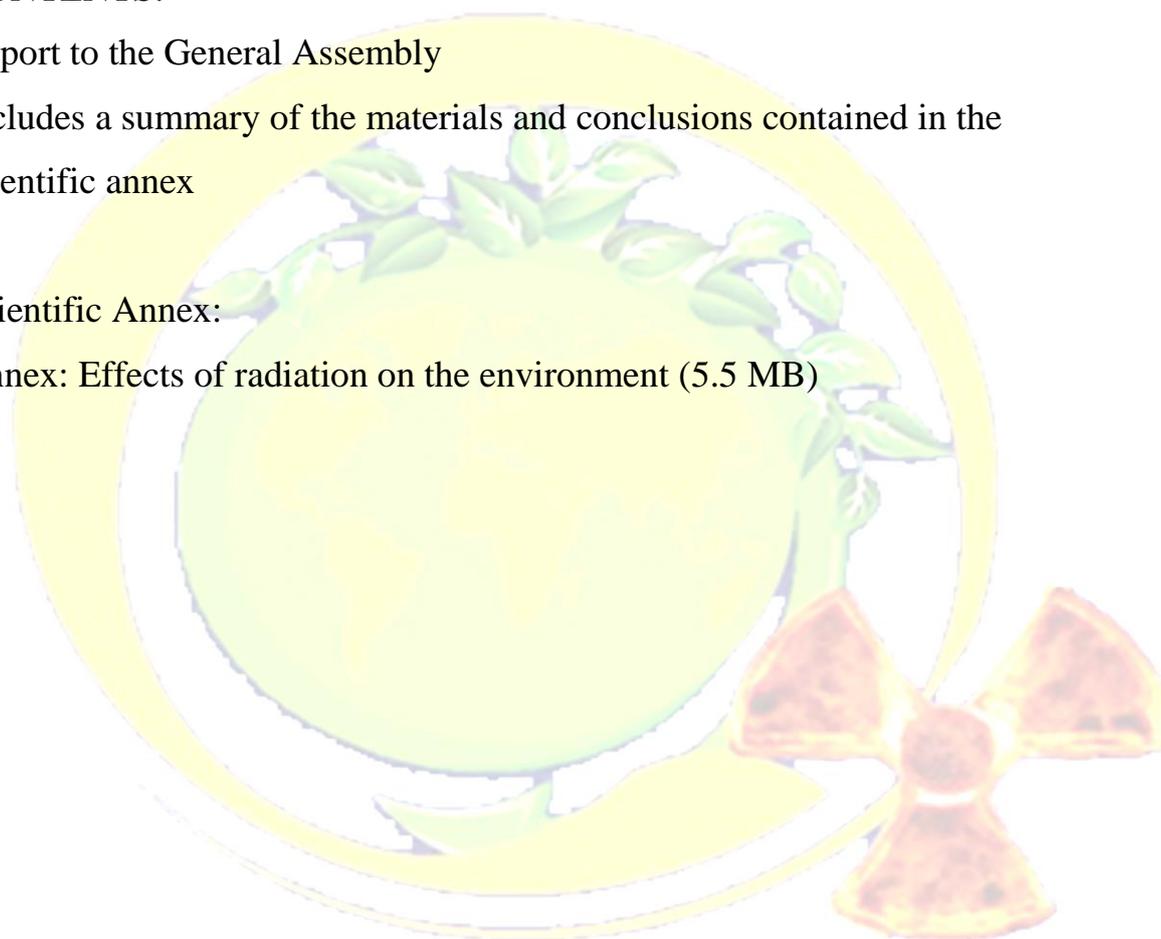
CONTENTS:

Report to the General Assembly

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Scientific Annex:

Annex: Effects of radiation on the environment (5.5 MB)



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UNSCEAR 1994 REPORT

SOURCES AND EFFECTS OF IONIZING RADIATION



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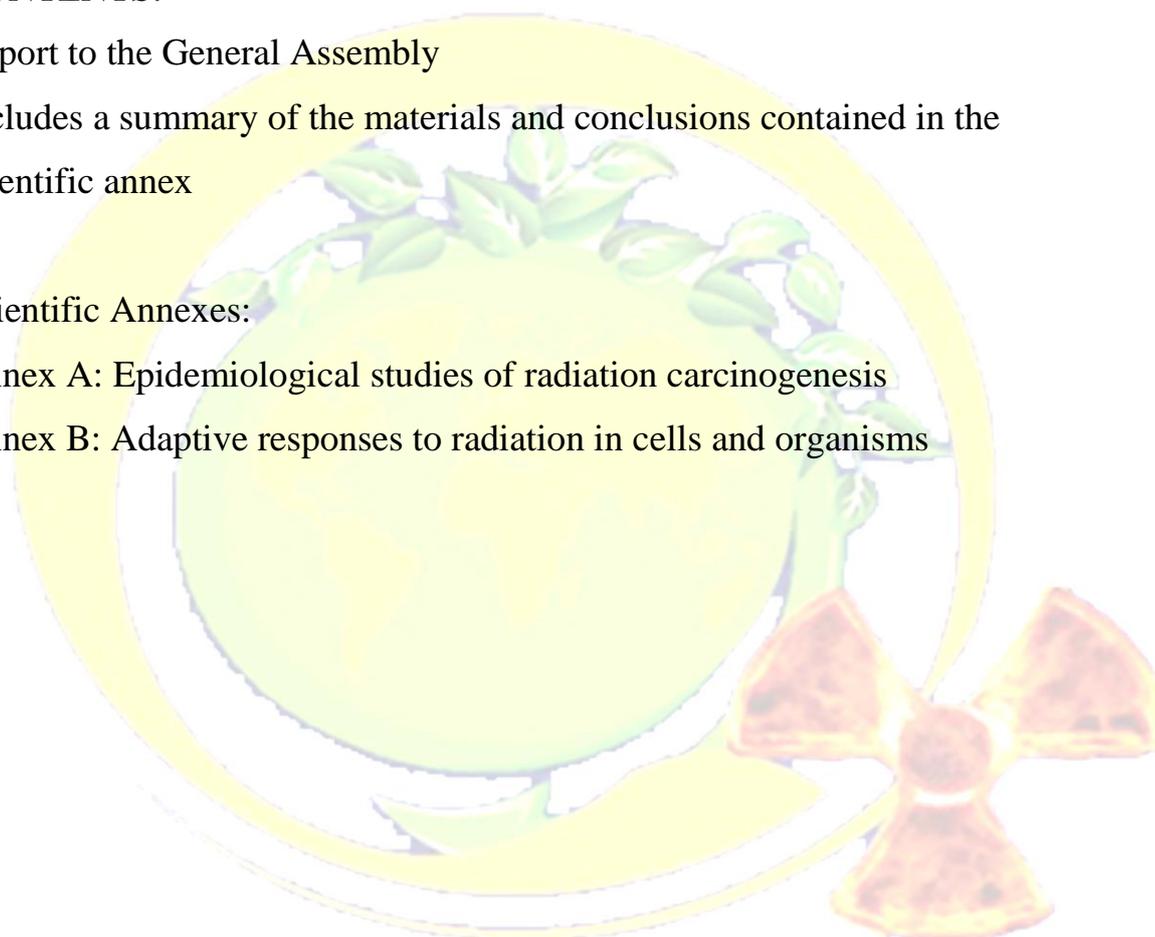
Report to the General Assembly

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Scientific Annexes:

Annex A: Epidemiological studies of radiation carcinogenesis

Annex B: Adaptive responses to radiation in cells and organisms



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UNSCEAR 1993 REPORT

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Includes a summary of the materials and conclusions contained in the scientific annex

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Annex B: Exposures from man-made sources of radiation

Annex C: Medical radiation exposures

Annex D: Occupational radiation exposures

Annex E: Mechanisms of radiation oncogenesis

Annex F: Influence of dose and dose rate on stochastic effects of radiation

Annex G: Hereditary effects of radiation

Annex H: Radiation effects on the developing human brain

Annex I: Late deterministic effects in children

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UNSCEAR 1988 REPORT

SOURCES, EFFECTS AND RISKS OF IONIZING RADIATION



Executive Summary

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Report to the General Assembly

Includes a summary of the materials and conclusions contained in the scientific annex

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Annex A: Exposures from natural sources of radiation

Annex B: Exposures from nuclear power production

Annex C: Exposures from medical uses of radiation

Annex D: Exposures from the Chernobyl accident

Annex E: Genetic hazards

Annex F: Radiation carcinogenesis in man

Annex G: Early effects in man of high doses of radiation

and Appendix: Acute radiation effects in victims of the Chernobyl nuclear power plant accident.

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UNSCEAR 1986 REPORT

GENETIC AND SOMATIC EFFECTS OF IONIZING RADIATION



Executive Summary

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Report to the General Assembly

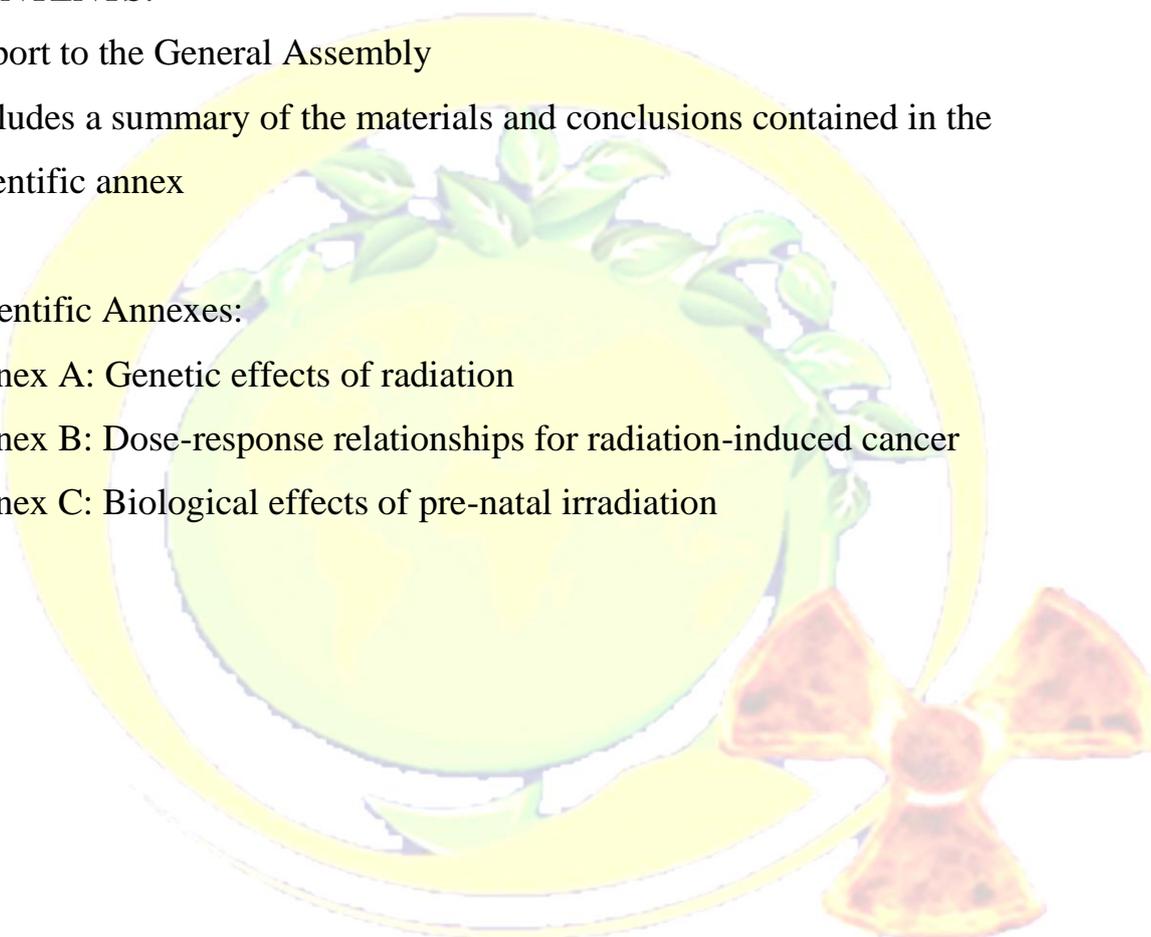
Includes a summary of the materials and conclusions contained in the scientific annex

Scientific Annexes:

Annex A: Genetic effects of radiation

Annex B: Dose-response relationships for radiation-induced cancer

Annex C: Biological effects of pre-natal irradiation



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UNSCEAR 1982 REPORT

IONIZING RADIATION: SOURCES AND BIOLOGICAL EFFECTS



Executive Summary

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Annex B: Exposures to natural radiation sources

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Annex I: Genetic effects of radiation

Annex J: Non-stochastic effects of irradiation

Annex K: Radiation-induced life shortening

Annex L: Biological effects of radiation in combination with other physical, chemical or biological agents

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SOURCES AND EFFECTS OF IONIZING RADIATION



Executive Summary

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Report to the General Assembly

Includes a summary of the materials and conclusions contained in the scientific annex

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Annex A: Concepts and quantities in the assessment of human exposures

Annex B: Natural sources of radiation

Annex C: Radioactive contamination due to nuclear explosions

Annex D: Radioactive contamination due to nuclear power production

Annex E: Doses from occupational exposure

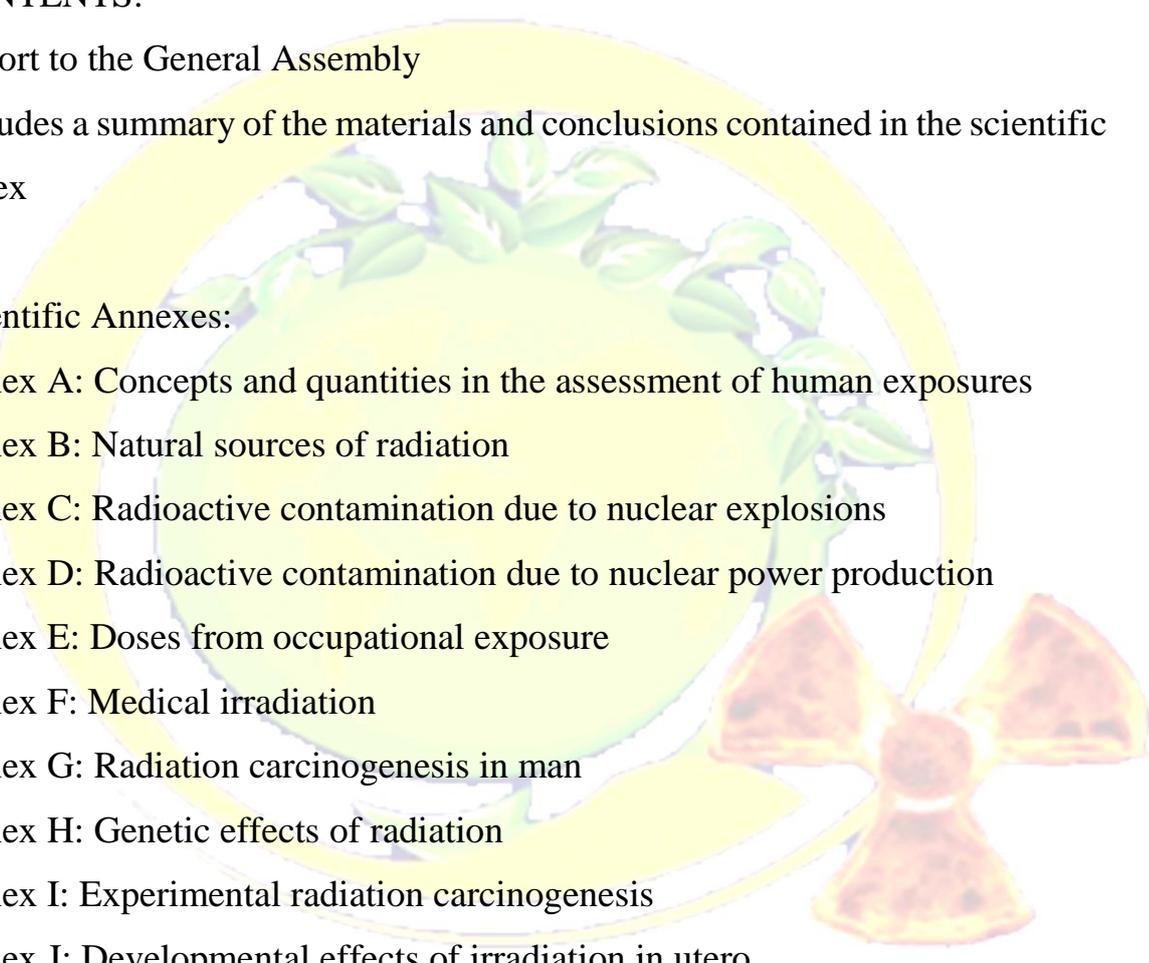
Annex F: Medical irradiation

Annex G: Radiation carcinogenesis in man

Annex H: Genetic effects of radiation

Annex I: Experimental radiation carcinogenesis

Annex J: Developmental effects of irradiation in utero



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UNSCEAR 1972 REPORT

IONIZING RADIATION: LEVELS AND EFFECTS



Executive Summary

Volume I: Report to the General Assembly, Scientific Annexes A-D

Volume II: Scientific Annexes E-H

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Annex B: Doses from medical irradiation

Annex C: Doses from occupational exposure

Annex D: Miscellaneous sources of ionizing radiation

Annex E: Genetic effects of ionizing radiation

Annex F: Effects of radiation on the immune response

Annex G: Experimental induction of neoplasms by radiation

Annex H: Radiation carcinogenesis in man

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Includes a summary of the materials and conclusions contained in the scientific annex

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Annex A: Radioactive contamination of the environment by nuclear tests

Annex B: Effects of ionizing radiation on the nervous system

Annex C: Radiation-induced chromosome aberrations in human cells

Annex D: Lists of reports received by the Committee

Annex E: Letter sent at the request of the Committee by its Secretary to States Members of the United Nations and members of the specialized agencies and of the International Atomic Energy Agency on 30 April 1968

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UNSCEAR 1966 REPORT



Executive Summary

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Report to the General Assembly

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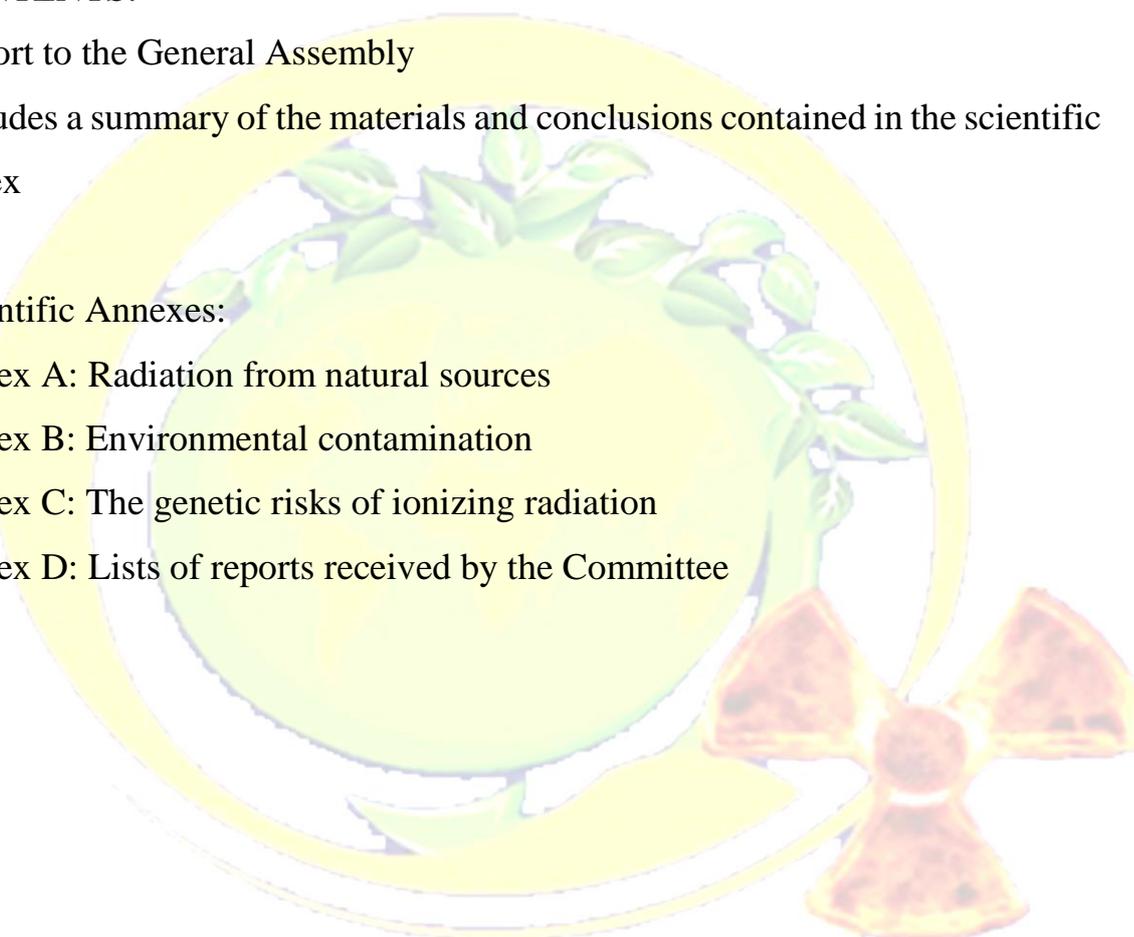
Scientific Annexes:

Annex A: Radiation from natural sources

Annex B: Environmental contamination

Annex C: The genetic risks of ionizing radiation

Annex D: Lists of reports received by the Committee



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Report to the General Assembly

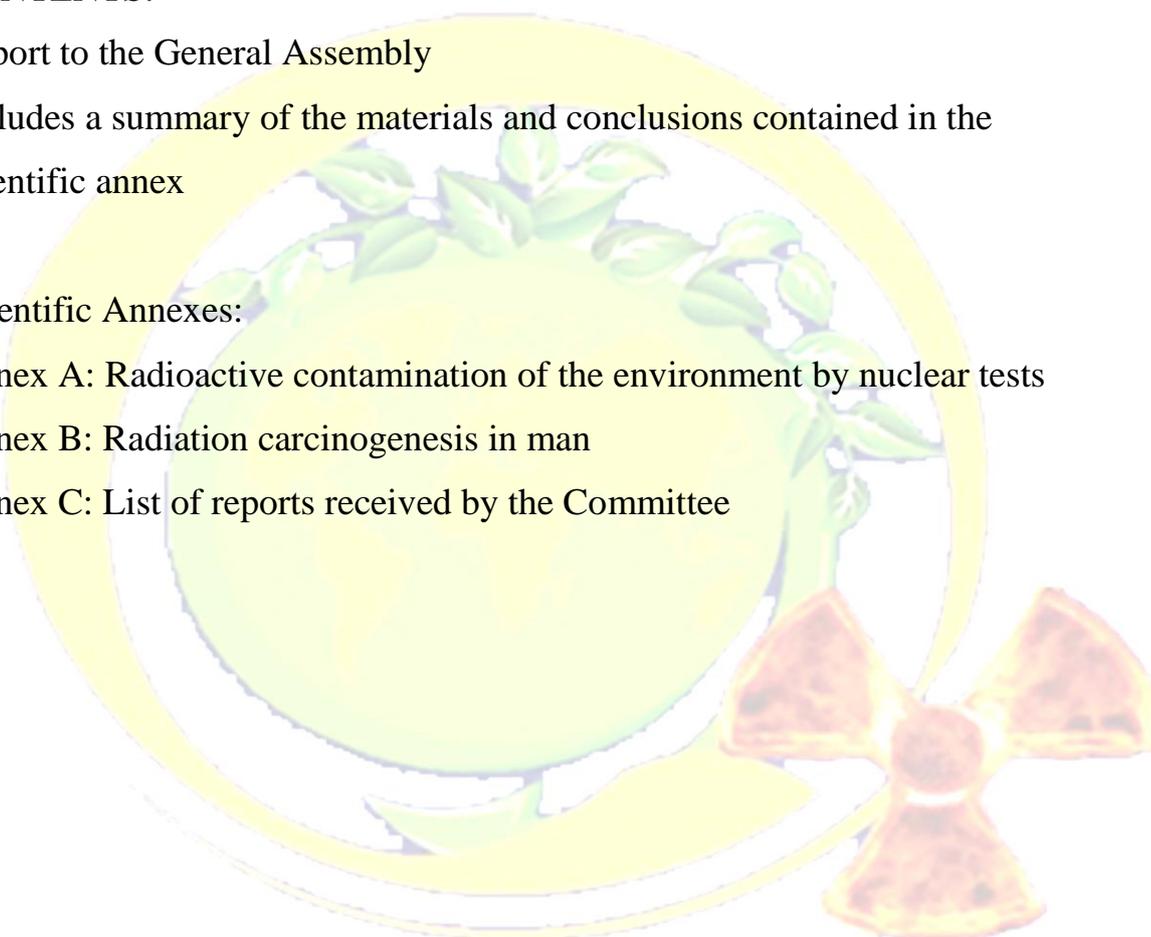
Includes a summary of the materials and conclusions contained in the scientific annex

Scientific Annexes:

Annex A: Radioactive contamination of the environment by nuclear tests

Annex B: Radiation carcinogenesis in man

Annex C: List of reports received by the Committee



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UNSCEAR 1962 REPORT



Executive Summary

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Report to the General Assembly

Includes a summary of the materials and conclusions contained in the scientific annex

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Annex A: Definition of quantities, units and symbols

Annex B: Fundamental radiobiology

Annex C: The hereditary effects of radiation

Annex D: Somatic effects of radiation

Annex E: Radiation from natural sources

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Annex G: Medical, occupational and other exposures

Annex H: Comparison of doses and estimates of risks

Annex I: List of offers to assist with measurements of samples

Annex J: List of reports submitted to the Committee

Annex K: Letter sent at the request of the Committee by its Secretary to States Members of the United Nations and members of the specialized agencies and of the IAEA on 7 April 1960.

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UNSCEAR 1958 REPORT



Executive Summary

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Report to the General Assembly

Includes a summary of the materials and conclusions contained in the scientific annex

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Annex A-E:

Annex A: Definitions of Quantities, Units and Symbols

Annex B: Radiation from Natural Sources

Annex C: Man-made Sources

Annex D: Environmental Contamination

Annex E: Methods of Measurement

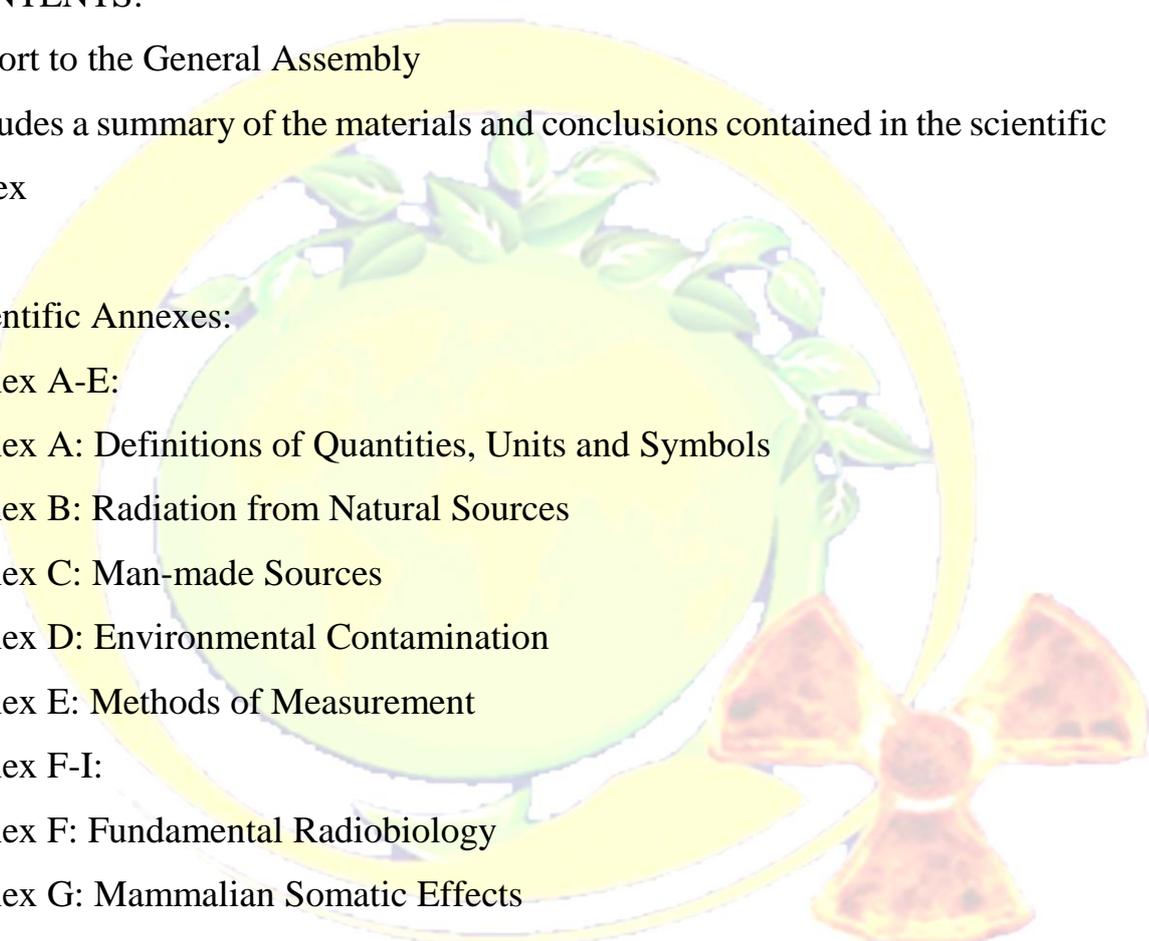
Annex F-I:

Annex F: Fundamental Radiobiology

Annex G: Mammalian Somatic Effects

Annex H: The Genetic Effects of Radiation

Annex I: List of reports submitted to the Committee



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