



United Nations

**Update on the activities of
the United Nations Scientific
Committee on the Effects of
Atomic Radiation since its
sixty-sixth session**

**Note by the Chair of the United Nations
Scientific Committee on the Effects of
Atomic Radiation to the General Assembly**

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**Official Records
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Supplement No. 46**

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Note

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Chapter I

Introduction

1. The present note provides an overview of the actions and initiatives undertaken by the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) to implement resolution 74/81, on the effects of atomic radiation, and to report thereon to the General Assembly at its seventy-fifth session.
2. Since the establishment of the Scientific Committee by the General Assembly in its resolution 913 (X) of 3 December 1955, the mandate of the Committee has been to undertake broad assessments of the sources of ionizing radiation and its effects on human health and the environment.¹ In pursuit of its mandate, the Scientific Committee thoroughly reviews and evaluates global and regional exposure to radiation. The Committee also evaluates evidence of radiation-induced health effects in exposed groups and advances in the understanding of the biological mechanisms by which radiation-induced effects on human health or on non-human biota can occur. Those assessments provide the scientific foundation used, inter alia, by the relevant agencies of the United Nations system in formulating international standards for the protection of the general public, workers and patients against ionizing radiation;² those standards, in turn, are linked to important legal and regulatory instruments.
3. Exposure to ionizing radiation arises from naturally occurring sources (such as radiation from outer space and radon gas emanating from rocks in the Earth) and from sources with an artificial origin (such as medical diagnostic and therapeutic procedures; radioactive material resulting from nuclear weapons testing; energy generation, including by means of nuclear power; unplanned events such as the nuclear power plant accidents at Chernobyl in April 1986 and that following the great east-Japan earthquake and tsunami of March 2011; and workplaces where there may be increased exposure to artificial or naturally occurring sources of radiation).
4. The Scientific Committee agreed to hold its sixty-seventh session in Vienna from 13 to 17 July 2020, as noted in the Committee's report on its sixty-sixth session to the General Assembly (A/74/46). On 30 January 2020, the World Health Organization (WHO) declared a public health emergency of international concern in response to the global outbreak of the coronavirus disease (COVID-19), and on 11 March 2020, a pandemic was declared. As part of subsequent actions to stop the spread of the disease, travel restrictions were imposed and work and meeting places were closed in many countries. It became evident by late May 2020 that it would not be possible to hold the Scientific Committee's session scheduled for July 2020 in the

¹ The United Nations Scientific Committee on the Effects of Atomic Radiation was established by the General Assembly at its tenth session, in 1955. The terms of reference of the Committee are set out in resolution 913 (X). The Scientific Committee was originally composed of the following States Members of the United Nations: Argentina, Australia, Belgium, Brazil, Canada, Czechoslovakia (later succeeded by Slovakia), Egypt, France, India, Japan, Mexico, Sweden, Union of Soviet Socialist Republics (later succeeded by the Russian Federation), United Kingdom of Great Britain and Northern Ireland and United States of America. The membership of the Scientific Committee was subsequently enlarged by the Assembly in its resolution 3154 C (XXVIII) of 14 December 1973 to include the Federal Republic of Germany (later succeeded by Germany), Indonesia, Peru, Poland and the Sudan. By its resolution 41/62 B of 3 December 1986, the Assembly increased the membership of the Committee to 21 members and invited China to become a member. In its resolution 66/70, the Assembly further enlarged the membership of the Committee to 27 and invited Belarus, Finland, Pakistan, the Republic of Korea, Spain and Ukraine to become members.

² For example, the International Atomic Energy Agency (IAEA) safety standard entitled *Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards – General Safety Requirements Part 3*, jointly sponsored by the European Commission, the Food and Agriculture Organization of the United Nations, IAEA, the International Labour Organization, the Nuclear Energy Agency of the Organization for Economic Cooperation and Development, the Pan American Health Organization, the United Nations Environment Programme (UNEP) and the World Health Organization (WHO).

usual format and using the usual mode of operation. After careful evaluation of the international developments related to the COVID-19 pandemic, in particular with regard to safety, international travel logistics and other factors relevant for the organization of a session of the Committee, the Bureau and the secretariat decided to postpone the sixty-seventh session and hold it in Vienna from 2 to 6 November 2020, or, alternatively, as an online session during the same period. A note verbale communicating the new dates for the session, including a request to confirm earlier nominations or nominate new representatives, alternates and experts for the sixty-seventh session, was issued.³

5. In preparation for the sixty-seventh session, the secretariat had, on 4 May 2020, sent out three draft scientific annexes for review by the Scientific Committee. The annexes were proposed for approval for publication and it had been planned to discuss them in detail at its session to be held in July 2020. It was decided by the Bureau that it would be beneficial to continue to collect comments from the Committee as planned, and to arrange an online business meeting with representatives of the States members of the Committee during the week of 13 to 17 July 2020 to enable feedback to the scientific expert groups on any major issues regarding the three, well-advanced draft annexes. The Chair, secretariat and members of the Bureau would also provide updates on the activities since the sixty-sixth session, the activities related to the future programme of work for the period 2020–2024, and the Scientific Committee’s ongoing data collection activities.

6. Since it would not be timely to report to the General Assembly after the planned sixty-seventh session in November 2020, it was decided to report on the intersessional activities by means of a note by the Chair of the Scientific Committee and an oral report before the conclusion of the seventy-fifth session of the General Assembly.

7. In the event that the sixty-seventh session of the Scientific Committee cannot be held, even in an online format, owing to any further restrictions related to COVID-19 or other reasons, it has been proposed that the sixty-seventh session would thus not be held until 21 to 25 June 2021 in Vienna, the dates already proposed for the sixty-eighth session.

³ Notes verbales dated 29 June 2020, on the postponement of the sixty-seventh session of the Scientific Committee, were sent to States members of the Committee and observers, respectively.

Chapter II

Deliberations of the United Nations Scientific Committee on the Effects of Atomic Radiation before its sixty-seventh session

8. Gillian Hirth (Australia), Chair; Jing Chen (Canada), Anna Friedl (Germany) and Jin Kyung Lee (Republic of Korea), Vice-Chairs; and Ingemar Lund (Sweden), Rapporteur, were elected in 2019 to serve as officers of the Scientific Committee at its sixty-sixth and sixty-seventh sessions.

A. Online business meeting with representatives of the States members of the Scientific Committee

9. Between 13 and 16 July 2020, an online business meeting was held with the representatives of the States members of the Scientific Committee and the Bureau.

1. Update on the activities of the Bureau

10. The Chair opened the meeting and provided an update on the activities of the Bureau since the sixty-sixth session of the Scientific Committee. She welcomed the representatives of States members of the Scientific Committee to the online meeting, made possible only by the enormous amount of work done by the secretariat and the expert groups in preparing the technical facilities and the documents. She especially welcomed the new representatives nominated for the sixty-seventh session, Takashi Nakano (Japan), Hong Suk Kim (Republic of Korea) and Einas Hamid Osman Bashier (Sudan).

11. The Bureau had met 10 times since the sixty-sixth session and the Chair gave a brief account of the issues discussed during those meetings, which had included secretariat staffing and resources, progress reports on all ongoing projects, including the Fukushima project, aimed at updating the UNSCEAR 2013 report, on the levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station, and the reports from the established ad hoc working groups, on effects and mechanisms, and sources and exposure, respectively. Other agenda items included the report to the General Assembly, preparations for the sixty-seventh session, interactions with other international bodies and, specific to the current year, the impact of the COVID-19 pandemic on the Scientific Committee's activities.

12. The Chair informed the Scientific Committee that the COVID-19 pandemic had resulted in a delay in the appointment of an officer to the position of Deputy Secretary of the Committee, as the United Nations had implemented a recruitment freeze, and she would continue to monitor the issue closely in order to avoid a new resource crisis and disruption in the secretariat, and would keep the representatives updated on the matter.

13. The Chair noted that the ad hoc working groups and the expert groups had continued to make good progress because online meetings had already been a regular feature of the normal work of those groups. The impact on the Fukushima project was, however, noticeable and the Chair explained that additional support was required until July 2021 in order to complete the project and planned outreach activities. As currently scheduled, the report would be considered for approval at the sixty-seventh session of the Committee, in November 2020, and subsequent outreach activities in Japan were envisaged for the period early March–July 2021, a delay of about six months. She noted that the outreach activities of the Scientific Committee in relation to the Fukushima project would be a priority, and that the secretariat, on behalf of the Committee, would coordinate with other international organizations, including the International Atomic Energy Agency (IAEA) and the International Commission on Radiological Protection, to acknowledge the 10 years since the Fukushima accident.

2. Update by the secretariat

14. The Secretary, Borislava Batandjieva-Metcalf, reported on the arrangements for the business meeting, the documents and schedule for the sixty-seventh session of the Scientific Committee, the outcome of the Committee's report on its sixty-sixth session to the General Assembly, public outreach activities, and administrative issues that had arisen since the sixty-sixth session.

15. Three draft reports were foreseen for approval as scientific annexes to the 2020 report to the General Assembly at the sixty-seventh session of the Committee. The Secretary acknowledged and thanked the Scientific Committee for the comments received on the draft annexes and noted that the response had been constructive and positive. She also noted that the planned future programme of work for the period 2020–2024 and the progress report on the implementation of the Committee's strategy to improve the collection, analysis and dissemination of data on radiation exposure would both be discussed during the business meeting.

16. The Secretary then recalled that, on 13 December 2019, the General Assembly had adopted resolution [74/81](#), on the effects of atomic radiation. In that resolution, the Assembly welcomed the two substantive scientific reports adopted by the Scientific Committee at its sixty-sixth session, on selected health effects and the inference of risk due to radiation exposure and on lung cancer from exposure to radon, and looked forward to the publication of supporting scientific annexes thereto, as their outcomes were relied upon by other international organizations.

17. The General Assembly welcomed the Scientific Committee's outreach strategy for the period 2020–2024, in particular the enhancement of the website of the Committee and the publication of information for the general public in all the official languages of the United Nations, continued to encourage the consideration of publishing the website in all of those languages, and noted that the dissemination of the Committee's findings and further enhancements of outreach activities would depend on the financial and human resources made available to the secretariat.

18. The General Assembly recalled the strategy of the Scientific Committee to improve data collection, encouraged, in that regard, Member States, the organizations of the United Nations system and non-governmental organizations concerned to provide further relevant data on levels, effects and risks of radiation exposure from various sources, which would greatly help in the preparation of future reports of the Committee to the General Assembly, and encouraged IAEA, WHO, the International Labour Organization and other relevant organizations to further collaborate with the secretariat on arrangements for the collection, analysis and dissemination of data on radiation exposure of patients, workers and the public.

19. The General Assembly welcomed the appointment of a new Secretary of the Scientific Committee by the United Nations Environment Programme (UNEP), and urged UNEP to ensure that future recruitment processes would be conducted in an efficient, effective, timely and transparent manner. The Assembly also welcomed the establishment of the post of Deputy Secretary, which replaced the previous post of Scientific Officer, allowed for the Deputy Secretary to be deputized as Secretary, as appropriate, and helped to avoid disruptions in staffing.

20. The General Assembly requested the Secretary-General to strengthen support for the Scientific Committee within existing resources, particularly with regard to the increase of operational costs in the case of a further increase in membership, and to report to the General Assembly at its seventy-fifth session on those issues. The General Assembly requested UNEP to continue, within existing resources, to service the Committee and to disseminate its findings to Member States, the scientific community and the public and to ensure that the administrative measures in place are appropriate, including clear roles and responsibilities of the various actors, so that the secretariat is able to adequately and efficiently service the Committee in a predictable and sustainable manner and effectively facilitate the use of the invaluable expertise offered to the Committee by its members in order that the Committee may discharge

the responsibilities and mandate entrusted to it by the General Assembly. Furthermore, the General Assembly encouraged Member States in a position to do so to make voluntary contributions to the UNSCEAR General Trust Fund established by the Executive Director of UNEP and also to make contributions in kind, in order to support the work of the Committee, and the dissemination of its findings, in a sustainable manner.

21. The Secretary summarized the status of ongoing and planned projects and noted the increased participation of experts, which had almost doubled since 2017. Three new scientific evaluations had been initiated since the sixty-sixth session, on second primary cancer after radiotherapy, epidemiological studies of radiation and cancer, and public exposure due to ionizing radiation from natural and man-made sources of ionizing radiation including quality criteria, respectively.

22. The Secretary summarized the public outreach activities of the Scientific Committee planned for 2021 and addressed agreements recently signed with international organizations. The Secretary also noted the forthcoming sixty-fifth anniversary of the Committee's establishment by the General Assembly in 1955, to be commemorated at the sixty-eighth session of the Committee, in 2021.

3. The Chair's expectations and preparations for the sixty-seventh session

23. The Chair outlined the expectations for the online business meeting and emphasized the importance of the Scientific Committee's guidance and feedback to expert groups, supporting the finalization of the draft annexes (see section B.1 below) to be prepared for approval by the Committee at its sixty-seventh session.

24. The Chair outlined the plans for the rescheduled sixty-seventh session in November 2020 and the alternative options if the pandemic continued to impact the Scientific Committee's ability to meet in person in Vienna. She explained that a final decision on whether to proceed with plans to hold the sixty-seventh session in Vienna in a face-to-face format would be taken by 4 September 2020, and the Scientific Committee would be advised on the matter shortly thereafter.

25. If it was not possible to conduct an ordinary session in Vienna, arrangements for holding the sixty-seventh session in an official, online format would be made, as it was important for the Scientific Committee to continue its work and finalize projects, including, as a priority, the Fukushima report. Discussions on other draft annexes would proceed if manageable within prevailing constraints. The Committee's future programme of work also needed to be considered a priority, so that the work for the period 2020–2024 would be clearly defined. The representatives of the States members of the Committee agreed in principle with the proposed alternative arrangements to be made in the event that the meeting could not proceed in Vienna.

B. Ongoing programme of work of the Scientific Committee

1. Scientific evaluations nearing approval for publication

26. The representatives of the States members of the Scientific Committee, at the online business meeting held in July 2020, discussed the general content of, and major comments on, the three draft annexes, entitled, respectively, "Levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station: implications of information published since the UNSCEAR 2013 report", "Evaluation of medical exposure to ionizing radiation", and "Biological mechanisms relevant for the inference of cancer risks from low-dose radiation", with a view to the adopting of those scientific reports by the Committee at its sixty-seventh session. The Committee acknowledged the excellent work of all three expert groups that had prepared the draft annexes and congratulated them on the high quality of the draft annexes. No major issues were identified, and it was anticipated that all three draft annexes would be suitable for approval for publication at the sixty-seventh session.

(a) Biological mechanisms relevant for the inference of cancer risks from low-dose radiation

27. At its sixty-third session, in 2016, the Scientific Committee decided to compile an up-to-date overview of current knowledge about the biological mechanisms by which radiation influences the development of disease, in particular at low incremental doses and dose rates; and the relevance for the inference of cancer risks. After the sixty-sixth session, a scientific annex on biological mechanisms relevant for the inference of cancer risks from low-dose radiation was drafted. A comprehensive evaluation of biological mechanisms that are considered to contribute to or modulate carcinogenesis following radiation exposure, in particular low levels of exposure (100 mGy and below, in the case of low linear energy transfer radiations), has been undertaken. An appendix that considers principles and criteria for ensuring the quality of the Committee's reviews of epidemiological studies of radiation exposure has been included in the report, complementing the previous principles and criteria for reviews of epidemiological studies of radiation exposure.⁴

28. The Chair of the expert group on biological mechanisms relevant for the inference of cancer risks from low-dose radiation, Simon Bouffler (United Kingdom of Great Britain and Northern Ireland), provided a summary of the comments and key issues arising from consultations on the draft annex undertaken with the representatives of the States members of the Scientific Committee. Some minor alterations, such as the inclusion of results from studies in areas with high natural background radiation, were discussed and proposed to be addressed by the expert group in preparation for the sixty-seventh session of the Committee.

(b) Levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station: implications of information published since the UNSCEAR 2013 report

29. The Scientific Committee reported to the General Assembly at its sixty-eighth session, in 2013, on its assessment of levels and effects of radiation exposure due to the nuclear accident after the 2011 great east-Japan earthquake and tsunami.⁵ The Committee concluded that, in general, estimated radiation doses were low and, therefore, associated risks to the public and workers were expected to be low. The Committee made arrangements for follow-up activities to enable it to keep abreast of additional relevant information as it was published, and at its sixty-fifth session, in 2018, it was decided to update the UNSCEAR 2013 report.

30. It was reported that, in preparation for the sixty-seventh session, a draft scientific annex entitled "Levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station: implications of information published since the UNSCEAR 2013 report" had been prepared. More information had been made available on the occurrence of radionuclides in the environment, in particular on concentrations of released radionuclides in the air as a function of time and their physico-chemical forms. That had enabled earlier estimates of incurred public radiation doses to be improved and uncertainties to be reduced and better understood.

31. The project manager and Chair of the expert group on levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station, Neale Kelly (United Kingdom), provided a summary of the comments and key issues arising where guidance from the representatives of the States members of the Scientific Committee had been sought. Topics of significance among the comments included the efficacy of remediation actions in the evacuated zones, the effect of

⁴ *Sources, Effects and Risks of Ionizing Radiation: United Nations Scientific Committee on the Effects of Atomic Radiation 2017 Report to the General Assembly*, annex A (United Nations publication, Sales No. E.18.IX.1).

⁵ *Sources, Effects and Risks of Ionizing Radiation: United Nations Scientific Committee on the Effects of Atomic Radiation 2013 Report to the General Assembly*, vol. I, annex A (United Nations publication, Sales No. E.14.IX.1).

high-precision screening on the frequency of paediatric thyroid cancer, protection of non-human biota, and the collective dose estimates from the accident. The representatives of the States members of the Scientific Committee acknowledged their desire and overall expectation to finalize the report for approval by the Committee at its planned sixty-seventh session and publish it before the marking of the tenth year since the accident, in March 2021.

(c) Evaluation of medical exposure to ionizing radiation

32. At its sixty-first session, in 2014, the Scientific Committee had welcomed the progress on the UNSCEAR Global Survey on Medical Exposure by developing the UNSCEAR online platform for data collection and establishing an expert group on medical exposure. It was reported that the draft annex on evaluation of medical exposure to ionizing radiation, taking into account data from 58 States Members of the United Nations as of the end of 2019,⁶ had been prepared for the Committee's review and comments. Medical exposure remained, as previously, by far the largest human-made source of radiation exposure of the population.⁷

33. The Chair of the expert group on evaluation of medical exposure to ionizing radiation, Peter Thomas (Australia), provided an overview on the final outcome of the data collection and the methodology used in the final analysis, followed by a summary of the comments and key issues arising where guidance from the representatives of the States members of the Scientific Committee had been sought. The representatives noted the issues encountered by the expert group with regard to data collection and agreed that efforts would be needed to encourage all United Nations Member States to improve their data collection for future reports, thereby reducing the uncertainty of global estimates. The representatives also noted that the evaluation focused on levels, not on effects, and therefore, in the report, a clear distinction between therapeutic and diagnostic applications of medical radiation should be made, and, where radiation protection units (i.e., collective dose) are used in comparisons and for the identification of trends, a clear explanation of how such information may be interpreted and applied should be provided.

2. Additional scientific evaluations and data collection

(a) Evaluation of occupational exposure to ionizing radiation

34. The Scientific Committee's evaluations of worldwide occupational exposure to ionizing radiation provide information relevant for policy and decision makers, as well as regulators and licence holders, regarding the use and management of radiation in workplaces. The evaluations assist in identifying emerging issues and may indicate situations that should be subjected to more attention and scrutiny. At its sixty-third session, in 2016, the Committee established an expert group on occupational exposure and endorsed the draft project plan for the expert group with a view to supplementing and updating its most recent review on the topic, entitled "Exposures of the public and workers from various sources of radiation", contained in annex B to the UNSCEAR 2008 report.

35. The Scientific Committee has conducted evaluations of worldwide occupational exposure and trends on the basis of two sources: (a) data from the UNSCEAR Global Survey of Occupational Radiation Exposures; and (b) reviews of analyses conducted and published by others. With respect to the first source, as at 30 September 2019, 56 United Nations Member States had submitted data on occupational exposure.⁸ The work of the expert group has been delayed by at least one year, owing to both the insufficient data provided by Member States and the extended quality checks and

⁶ Compared with 53 Member States that had submitted data on medical exposure as at 30 April 2019.

⁷ *Sources and Effects of Ionizing Radiation: United Nations Scientific Committee on the Effects of Atomic Radiation 2008 Report to the General Assembly*, vol. I, annex A (United Nations publication, Sales No. E.10.XI.3).

⁸ Compared with 50 Member States that had done so as at 30 April 2019.

corrections of available data. A progress report on the work of the expert group will be presented to the Committee at its sixty-seventh session and the report on evaluation of occupational exposure to ionizing radiation is envisaged to be prepared for approval for publication at its sixty-eighth session, in June 2021.

(b) Public exposure due to ionizing radiation

36. The Scientific Committee regularly conducts surveys of United Nations Member States on radiation exposure of patients, workers and the public, and, at its sixty-sixth session, in June 2019, decided to commence a new evaluation of public exposure due to ionizing radiation from natural and human-made sources. An expert group was established in 2020 for that purpose and a draft project plan and an outline of the report have been prepared. The aim of the new UNSCEAR public exposure survey, scheduled to be launched at the end of 2020, is to collect the latest available data, with a view to updating the UNSCEAR 2008 report. The work will be carried out with the support of WHO, IAEA and other relevant international organizations and is intended to be completed in 2024. In a note verbale dated 29 June 2020, Governments of Member States were invited to confirm⁹ their existing national contact persons or designate new ones before 1 September 2020. A progress report on the subject will be presented to the Committee at its sixty-seventh session.

(c) Second primary cancer after radiotherapy

37. At its sixty-fifth session, in 2018, the Scientific Committee decided on a project plan to evaluate second primary cancer after radiotherapy, emphasizing that, although the project was a priority, the work could not be started until after the appointment of the new Secretary of the Committee. Subsequently, at its sixty-sixth session, the Committee took note of actions taken by the secretariat to establish an expert group, which subsequently commenced work in 2019.

38. The evaluation will summarize the current state of knowledge regarding second primary cancer frequency and risk, considering out-of-field dosimetry and epidemiological findings, as well as genomic and molecular sciences. The annex will include a summary addressed to members of the public. The expert group will provide a progress report, including a first selection of evaluated literature and an updated schedule, for consideration by the Scientific Committee at its sixty-seventh session.

(d) Epidemiological studies of radiation and cancer

39. At its sixty-third session in 2016, the Scientific Committee discussed a preliminary plan to provide a comprehensive scientific review of epidemiological studies of radiation and cancer with a view to updating annex A to the UNSCEAR 2006 report.¹⁰ At its sixty-sixth session, in 2019, the Committee approved the project, the results of which will provide experts, decision makers, the scientific community, civil society and national and international organizations with up-to-date scientific information on cancer risk following exposure to ionizing radiation. The final version of the annex will include a summary addressed to members of the public.

40. The expert group started its work in the third quarter of 2019 by reviewing the available literature on cancer risks from radiation exposure, applying the principles and quality criteria as contained in annex A to the UNSCEAR 2017 report and applied in the literature review process established by the secretariat. The expert group will provide a progress report, including a first selection of literature and an updated timetable for the work, at the sixty-seventh session of the Scientific Committee.

⁹ The list of national contact persons nominated to serve until 2019 is available at www.unece.org/unscear/en/about_us/surveys.html.

¹⁰ *Effects of Ionizing Radiation: United Nations Scientific Committee on the Effects of Atomic Radiation 2006 Report to the General Assembly*, vol. I, annex A (United Nations publication, Sales No. E.08.IX.6).

(e) Implementation of the Committee's strategy to improve collection, analysis and dissemination of data on radiation exposure

41. In several resolutions,¹¹ the General Assembly encouraged the Scientific Committee to work towards implementing its strategy for optimizing the working arrangements for its scientific evaluations, including by establishing working groups with specific tasks. At its sixty-sixth session, in June 2019, the Committee agreed to establish an ad hoc working group on sources and exposure, to support the Committee's evaluation of medical, occupational and public exposures. The ad hoc working group had noticed some progress in the data collection on medical and occupational exposure, but at the same time had noted challenges in that regard and had therefore proposed further actions to: (a) improve the data collection, including the expansion of the network of UNSCEAR national contact persons from 88 out of the total of 193 United Nations Member States, and its maintenance; and (b) facilitate the collection of data from, and its submission by, Member States on a more regular basis.

42. The Scientific Committee, through the ad hoc working group on sources and exposure, had evaluated progress made since the Committee's 2010 strategy on improving data collection, analysis and dissemination and had used a survey to collect feedback from national contact persons from 48 Member States designated to collect data and submit them to the secretariat. The findings from the survey, along with lessons learned from previous surveys, had been used to develop key recommendations on ways to improve future data collection and analysis. The findings will be reported to the Committee at its sixty-seventh session, in the document entitled "Implementation of the Committee's strategy to improve collection, analysis and dissemination of data on radiation exposure". Among the key recommendations emanating from the findings are the following:

- Improve the geographic coverage of data primarily by strongly encouraging United Nations Member States and, in particular, States members of the Committee and observers to participate and provide relevant data, and by conducting preliminary surveys of data availability in the five most populous countries in each region.
- Build on the existing robust procedure for literature review and encourage the increased solicitation and review of reports and publications in languages other than English.
- Optimize the UNSCEAR online platform and survey questionnaires to maximize participation by United Nations Member States with varying capacities and availability for data collection.
- Maintain frequent and regular outreach to, and coordination with, national contact persons, promoting more direct interaction with national contact persons to resolve issues regarding the collection, interpretation and extrapolation of data.

43. At its sixty-seventh session, the Scientific Committee will be invited to extend the mandate of the ad hoc working group on sources and exposure for one year, until the sixty-eighth session of the Committee, in 2021, to support the implementation of the developed recommendations, monitor and support the progress made in the current project on occupational exposure and the new survey on public exposure to radiation from natural and human-made sources, and help to maintain and further improve the ongoing data collection between evaluations. Furthermore, the Committee will be invited to expand the scope of the ad hoc working group to include the evaluation of approaches to data analysis and the making of recommendations to the Committee. The implementation of the proposed work related to data collection will be based on the assumption that the secretariat will have access, on an in-kind

¹¹ Resolutions 71/89, 72/76, 73/261 and 74/81.

basis, to experts working on implementing the Committee's future programme of work for the period 2020–2024 in the area of sources and exposure.

44. The Scientific Committee will also be invited to acknowledge the secretariat's need to make use of the UNSCEAR General Trust Fund contributions for additional scientific expertise, outreach and administrative tasks related to the implementation of the Committee's programme of work. This will be particularly relevant in view of the need to maintain and improve the existing system and network for collecting data on medical and occupational exposure, and the new system for collecting data on public exposure to ionizing radiation.

45. The progress report entitled "Implementation of the Committee's strategy to improve collection, analysis and dissemination of data on radiation exposure" was presented by the Vice-Chair (Canada) at the online business meeting of the representatives of the States members of the Committee. Presenting the work of the ad hoc working group, its recommendations and planned future work, she noted that a better response to the Scientific Committee's data collection efforts, especially from the seven most populous countries in the world, representing about half of the world's population, would be essential to ensure truly global, albeit not geographical, coverage. The representatives thanked the Vice-Chair (Canada) for the presentation and the very good work of the working group. The importance of data sharing by Member States and their response to the UNSCEAR global surveys to enable the Committee to develop up-to-date and high-quality evaluations in the future was highlighted. Several representatives expressed their support for the conclusions and recommendations of the ad hoc working group and proposed that the mandate of the working group be extended at the sixty-seventh session of the Committee.

C. Future programme of work

46. At its sixty-seventh session, the Scientific Committee will be invited to review the revised draft future programme of work for the period 2020–2024 and agree that priority should be given to evaluations that have already been initiated or that are planned to be started in 2020. In order to achieve a more balanced workload for the Committee and its secretariat, it will be proposed that the Committee adopt a general principle whereby only one evaluation is initiated each year. Consequently, the planned, new project on circulatory diseases would only be initiated after the sixty-seventh session.

47. The Scientific Committee will also be invited to initiate, in 2021, the evaluation on radiation effects on the nervous system and, in 2022, the evaluation on eye lens opacities from radiation exposure. To ensure thematic consistency with the evaluation on radiation effects on the immune system, the Committee will further be invited to start, in 2023, an overarching evaluation on non-cancer effects, which is to include the following topics: acute radiation syndrome, respiratory disease, endocrine disease, transgenerational effects, and relevant other non-cancer effects.

48. The deliberations on the future programme of work for the period 2020–2024 were led by the Vice-Chair (Germany) at the online business meeting of the representatives of the States members of the Scientific Committee. She presented the revised, provisional time schedule, as described above, for the period 2020–2024, for performing analyses and preparing documents relating to the Scientific Committee's scientific priority areas. The expert group had, by re-analysing the available published literature and through an earlier prioritization process, largely confirmed the plans already discussed at the sixty-sixth session of the Committee. The Vice-Chair noted that the implementation of the tentative schedule would depend on the number of ongoing projects, the financial and personnel resources in the secretariat and the general distribution of the workload. She recapitulated the tasks of the ad hoc working group on effects and mechanisms, which were to be undertaken provided that the mandate would be extended at the sixty-seventh session. During the discussions that followed, the importance of and interest in the evaluation of the late effects after high

radiation exposure was reiterated. Other issues mentioned were the use of terminology (glossary) and the possible use of unpublished, peer-reviewed data, so-called “grey literature”. The representatives of the States members of the Committee presented their views on the programme, thanked the Vice-Chair (Germany) for the presentation and congratulated the ad hoc working group for their fine work and the good programme proposal.

49. The timely and effective implementation of the programme of work for the period 2020–2024 will depend on the availability of sufficient financial and human resources in the secretariat. The Scientific Committee, at its sixty-seventh session, will be invited to acknowledge a request made by the Executive Director of UNEP for support in the form of financial contributions to the UNSCEAR General Trust Fund. Furthermore, the Committee will be invited to encourage Member States to strengthen the secretariat’s capacity by making regular voluntary contributions to the General Trust Fund and/or in-kind contributions.¹²

50. The Scientific Committee has emphasized the secretariat’s need for additional financial contributions and for additional scientific expertise related to outreach and administrative tasks to implement the Committee’s programme of work. This is particularly relevant in view of the forthcoming sixty-fifth anniversary of the Committee, in 2021, and the presentation of the outcomes of the Committee’s evaluations.

51. Bearing in mind the high quality and importance of the work carried out by the ad hoc working group on effects and mechanisms in developing the Scientific Committee’s future programme of work for the period 2020–2024, the Committee will be invited, at its sixty-seventh session, to extend the mandate of the ad hoc working group for one year to enable the working group to support and monitor the progress made in the implementation of the programme of work and to evaluate new scientific developments relevant to the Committee and report on them to the Committee at its sixty-eighth session, in 2021.

D. Outreach activities

52. The outreach activities of the Scientific Committee are an integrated and important part of the work of the Committee’s secretariat. At its sixty-sixth session, the Committee endorsed a new strategy on outreach activities for the period 2020–2024. The strategy complements the planned outreach activities on the nearly completed update of annex A to the UNSCEAR 2013 report, on the levels and effects of radiation exposure due to the accident at the Fukushima Daiichi nuclear power station. Owing to the COVID-19 pandemic and the uncertainty of plans for the period 2020–2021, most of the outreach activities will be subject to rescheduling.

53. The General Assembly has been encouraging the secretariat to continue to disseminate its findings and reports to the public. The report on radon and lung cancer that was accepted for publication at the sixty-sixth session of the Scientific Committee has already attracted much interest. In December 2019, the secretariat organized an informal briefing for permanent missions in Vienna, and it is planned to hold a similar event in December 2020. Some of the ongoing evaluations, for example, the evaluation on epidemiological studies of radiation and cancer, will also include a summary of the results written in language intended to be understood by the general public.

54. Many of the Scientific Committee’s reports are frequently downloaded from the Committee’s website. There has been particular interest in the reports on the effects of the nuclear accidents in Chernobyl and Fukushima, as well as in follow-ups to those reports, however, the broad-ranging reports on sources, effects and risks of ionizing radiation are also requested and used. In 2020, the secretariat commenced

¹² For example, the provision of experts as United Nations Volunteers or Junior Professional Officers, or on a non-reimbursable loan basis.

work on enhancing and updating the website in all the official languages of the United Nations. In February 2020, the Committee published online the first issue of its newsletter.¹³

55. The Scientific Committee previously welcomed the publication of the UNEP booklet entitled *Radiation: Effects and Sources*, which is based on the major scientific evaluations published by the Committee in the past 25 years. It is available for download in all the official languages of the United Nations, as well as in five other languages. Future updates and translations into additional languages are foreseen. As noted in resolution 74/81, on the effects of atomic radiation, the dissemination of the Committee's findings and further enhancements to its website will depend on the financial and human resources made available to the secretariat.

E. Administrative issues

56. The Scientific Committee, at its sixty-seventh session, will be invited to take note of and discuss resolution 74/81, on the effects of atomic radiation.

57. Since the sixty-sixth session of the Committee, in 2019, the recruitment processes for one editorial assistant and one temporary assistant have been completed. The selection process for the post of Deputy Secretary of the Committee was put on hold as a result of the COVID-19 pandemic and the subsequent freeze on all recruitments to United Nations posts financed through the regular budget. The Scientific Committee has encouraged the finalization of that selection process as soon as possible, to ensure continuity in the secretariat.

58. The Scientific Committee noted the trend towards reduction of the regular budget, which, if not stabilized in the near future, was expected to affect the implementation of the programme of work for the period 2020–2024.

59. To support the evaluation of public exposure due to ionizing radiation, a recruitment process through the United Nations Volunteers programme, with the support of extrabudgetary funds, has been initiated. Another expert available on an in-kind basis will also be needed to support the work of the Scientific Committee on the ongoing evaluations on second primary cancer after radiotherapy and on epidemiological studies of radiation and cancer.

60. The programme for the UNSCEAR General Trust Fund for the period 2019–2021 was prepared and a note verbale in that regard was sent to the Member States. In response to the request for extrabudgetary funds, three Member States have so far pledged or provided support.

61. The Scientific Committee plans to celebrate and acknowledge the sixty-fifth anniversary of its establishment by the General Assembly in 1955 at the sixty-eighth session of the Committee, in 2021.¹⁴ It is of prime importance to ensure the independent and high-quality evaluations of the Committee in the future and, in this respect, to ensure sufficient and adequate financial resources for the activities of the Committee and its secretariat. This is particularly relevant in view of the consideration for new membership in the Committee in 2022 of the four Member States that are presently invited to designate one scientist to attend the sessions of the Committee as an observer.

62. The Scientific Committee is updating and reviewing its existing arrangements and agreements, and working towards the establishment of stable, long-term framework agreements with relevant international organizations. The secretariat signed a new agreement with the Information System on Occupational Exposure in 2020 and is working on similar agreements with other international organizations.

¹³ Available at www.unece.org/docs/media/ISSUED_UNSCHEAR_newsletter_20200228.pdf.

¹⁴ The first session of the Scientific Committee was held in New York from 14 to 23 March 1956.

63. The sixty-eighth session of the Scientific Committee is scheduled to be held in Vienna from 21 to 25 June 2021.